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Engineering News-Record

Design of a
Large Steam-Electric
Power Station

How to Inspect
Asphalt Paving Mixtures
at the Plant

Maintenance Engineering
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From Job and Office—
Short Articles on
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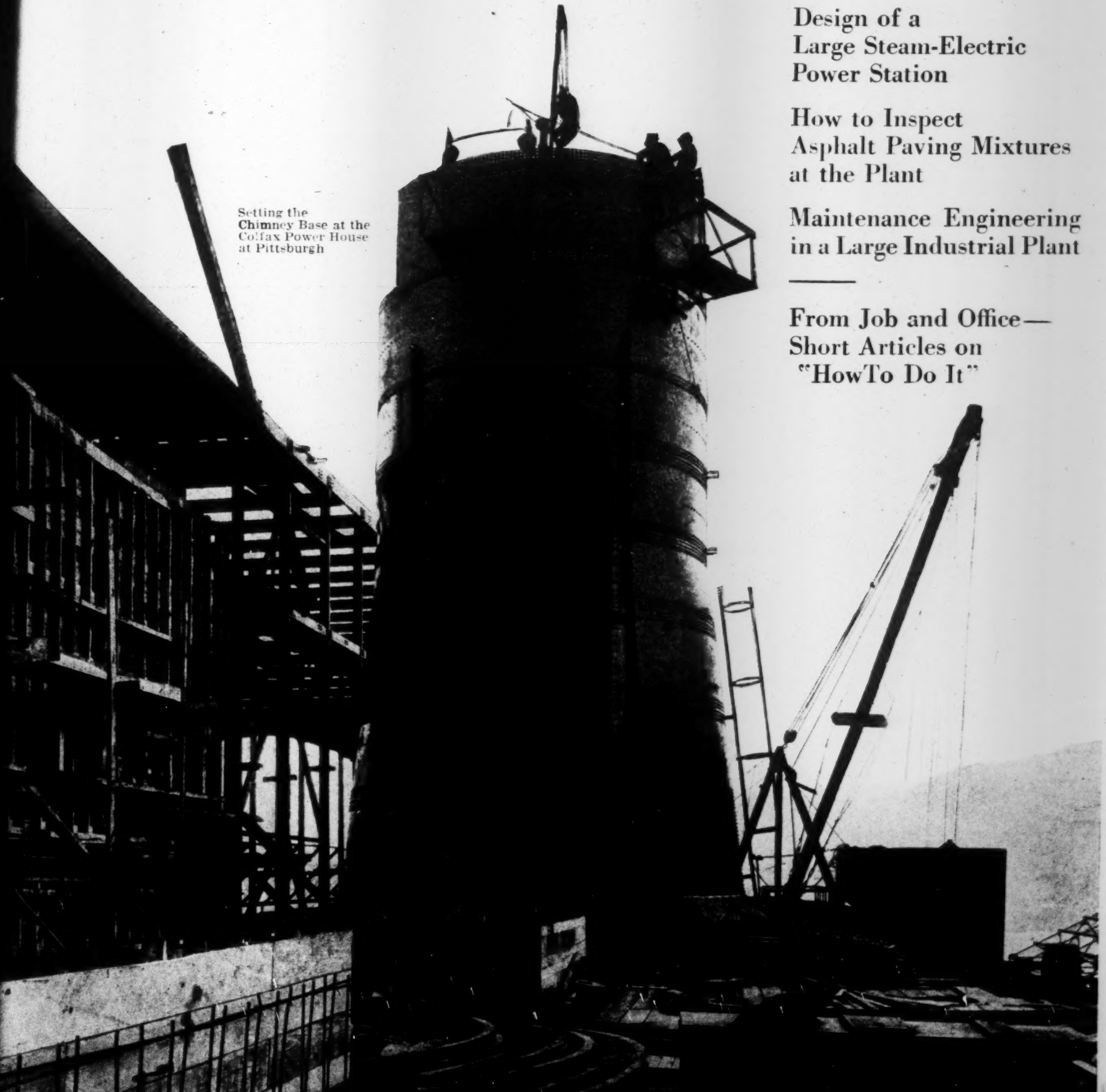

Setting the
Chimney Base at the
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at Pittsburgh

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ENGINEERING NEWS-RECORD

DEVOTED TO CIVIL ENGINEERING
AND CONTRACTING

E. J. MEHREN
Editor

Volume 89 NEW YORK, DECEMBER 28, 1922 Number 26

Personal Liability

ADVANCE is being made, steady if slow, towards establishing the doctrine of personal liability for preventable accident. During the past year or two several cities have been added to the small list of those which place the cost of firefighting on the person whose negligence caused the fire, and about a dozen communities now follow this practice. The doctrine is quite general, however. It applies to other forms of accident than fire, to railroad operation and to building, for instance, and we trust that in no too far distant time it may be made practically effective here, by the joint force of statute, popular conviction and judicial interpretation. It tends to build up, in place of our well-recognized national tendency to neglect and carelessness, the habit of taking care. The forest fire, the broken arm and the train wrecked by a rotted tie will all be less common when that habit has become established.

Unique Sewage-Pump Bids

CAPITAL charges as well as operating expense are less frequently taken into account than they should be in comparing the cost of several ways of accomplishing the same end in municipal work. A notable instance of taking both into account is afforded by the recent electric-driven sewage-pump contract letting at Syracuse. The comparison was not between electric and other active power for the pumps but to determine which of two types of electric motor equipment—slip-ring and brush-shifting—would be most economical. Itemized bids were invited for the various units of each class of equipment. To reduce the bids to a comparative basis, amortization charges were figured on the equipment and to the total for each type was added the annual charge for current, based on the contractor's guarantee as to amount of current and the unit cost of the current to the city. More common use of such refinements in bidding may be expected with progress in engineering and in municipal government.

Better Equipment Maintenance

MAKERS and users of construction equipment and materials are both striving toward the common objective of securing for their machinery the maximum service on the job. Some contractors, after they have purchased their plant, make the mistake of paying little or no attention to it until a serious breakdown occurs. Then the job may have to be shut down until repairs can be made, resulting in idleness of at least a part of the working force and a setback to progress schedules. Oftentimes this result is due to the lack of an inexpensive repair part which, if it had been kept in stock or ordered in advance, could have saved its actual cost many fold. When repair parts are needed they are generally needed badly and the contractor sends in the usual "rush" order to manufacturers of equipment for replacements. Time and again shipments of this sort are delayed because the individual sending in the order fails to be specific as to what is wanted. The manufacturer puzzles over the meager information he receives and often has to wire back for more detailed instructions. There is an opportunity for a great deal more co-operation than now exists between makers and users of construction machinery. In the hope that a recital of actual experiences may eliminate some of the difficulties *Engineering News-Record* started in its department "From the Manufacturer's Point of View" in the Dec. 14 issue a discussion in which the equipment makers tell of some of the actual conditions governing the supply of repair parts. Both contractors and engineers should follow the discussion, which continues this week. It will point out some of the things that equipment users do that should not be done and may indicate some of the things they might do in the interests of better service. This general subject of equipment maintenance, long neglected, is coming to the front, as was indicated at the recent joint conference, in Detroit, between representatives of the manufacturers and the Associated General Contractors of America. The discussion above referred to tells the story from the manufacturer's point of view. At a later date it may be desirable to hear the contractor's side of the case. Any one with anything to say on this general subject, whether he be manufacturer, contractor or engineer, is invited to participate. A thorough airing of the views of all parties concerned cannot help but improve present conditions.

Broadcasting Practice

IN OUR issue of Dec. 14, we criticised the repeated announcement of the names of the Radio Corporation of America and the Westinghouse Electric and Manufacturing Co. during the broadcasting of a meeting of the American Society of Mechanical Engineers. We suggested that it might have been possible that the broadcasting companies required these repeated announcements of their names as one of the conditions of broadcasting the meeting. The Westinghouse company informs us that it lays down no such condition, but that it suggests, for the information of the hearers, that the code designation of the transmitting station be repeated at convenient intervals. Broadcasting experience has indicated the desirability of such practice.

Asphalt Inspection

ASPHALT plant inspection methods are outlined in rather remarkable detail in an article by Prof. W. J. Emmons in this issue. It is not often perhaps that so close control as is here demanded is found in practice. Indeed it is often contended that more than general watchfulness is not warranted when, as is commonly the case, a maintenance guarantee clause is written into the contract. With a clause of this kind in force the contractor naturally resents exacting control of plant operation. Indeed, to regulate his mixtures and then demand that he guarantee their behavior and life over a term of years is unqualifiedly unfair. Retention of the maintenance guarantee clause in paving contracts precludes as a matter of mere justice plant inspection so detailed and exacting. In respect to the relative scientific merit of the two practices there would seem to be little doubt. Good plant inspection and control is a far more scientific and sure way of securing good asphalt mixtures than is any guarantee clause that can be enforced in practice. Another advantage is that it gives the engineer records with which he can do something to interpret service failures. On the whole, probably the cost of plant inspection is no greater than the charge which the contractor makes for risk in signing a maintenance guarantee. Whatever it may reasonably cost, it is worth the price as the only sure way of obtaining what the engineer specifies and the public pays for.

Optimism at Indianapolis

OPTIMISM prevails in the editorial sanctum of the Indianapolis *Commercial*. The burden of an editorial head "Public Service" printed Dec. 17 is that both the city officials of Indianapolis and the members of the State Legislature are being confronted by a demand from the public for better results than are now being given for their tax dollars. "Sooner or later," says the *Commercial*, "the inefficient public servant will be turned out. Officials with their ear to the ground—or in more euphemistic terms 'the wise public official' who wishes to continue in office—will not overlook the fact that more and more the tax-paying public is demanding for every dollar expended an honest dollar of return." Although this does not credit public servants with high ideals yet basically the *Commercial* is sound. If better public service comes it will be because of an insistent, persistent and intelligent demand from citizens and tax-payers. This alone is not enough. The public must show its willingness, once its needs have been formulated and agreed, to entrust the planning and execution of its work to technically trained men, reasonably paid, free from political interference and sure of their positions during good behavior and efficient service.

One Element of Progress

AS REFLECTIONS on engineering progress come upon the mind at the turn of the year, the large achievements engage attention, and the progress made in better utilization of materials and effort is overlooked. It is that element of progress which is found in routine activities and is therefore unobtrusive. Yet it is the principal, ever-present objective of the engineer and of those who work with him, though doubtless subconscious and unrecognized in most of us. In seeking continually for elimination of waste and truer adaptation of material to service, he carries his art forward to that perfection on which new creative achievement can be based. This tendency is found in all branches of the constructive arts; in production, by the seeking for greater uniformity or better controlled diversity of product; in marketing and standardization, where culling is transformed into grading and new uses are found for the remnants which existing markets do not absorb; and in engineering design.

What Is a "Sales Engineer"?

AMONG the letters published in this issue is a protest against the term "sales engineer". Our correspondent contends that it is an anomaly, that the ethics of selling and of engineering practice are incompatible, and that those engineers who perpetuate the term to describe the salesman who has engineering training or who sells an engineering product are performing a disservice to their profession.

We sympathize with Mr. Bedell. And if we limit the correct use of the word "engineer," as he has done, to describing those whose occupation is to supply disinterested technical knowledge and skill for the service of others, the soundness of his contention is obvious. He is correct again when he ascribes the growth of the practice largely to the manufacturers' efforts to capitalize the general respect for the term "engineer" and to invest with a certain prestige the men he sends out to sell his goods. And it is just this promiscuous appropriation of the name that is largely responsible for the difficulty in setting up and maintaining high professional standards in engineering practice.

In seconding Mr. Bedell's plea that use of the term "sales engineer" should be discouraged by engineers and their professional societies, we are not unmindful of certain related circumstances which have contributed to the growth of the practice and which must be remembered when we try to check it. One of these is the traditionally loose application of the word "engineer" which unfortunately has not enjoyed the limitation Mr. Bedell has placed upon it. Often it is used less to define a vocation than to describe a type of training. Then again, specialization both in training and in vocation has brought about the use of many qualifying adjectives; and this may have had something to do with the readiness of engineers themselves to accept "sales engineers" as just another variety. But neither of these circumstances can justify the use of the name "engineer" to describe any vocation in which an engineering graduate may happen to find himself.

Furthermore, it is true that not all manufacturers who employ "sales engineers" do it for the sake of window dressing. Some sales engineers are in fact not salesmen at all in the sense of booking orders. Some of them are employed to advise prospective or actual customers as to technical questions involved in a sale or to present technical considerations that may influence a sale. The value of such advice is not in question here—the prospect or the customer knows with whom he is dealing and can use it as he may see fit. This, to be sure, is not a professional relationship, but it is a technical relationship and can scarcely be included under the head of salesmanship. Perhaps a title other than "sales engineer" may fit more accurately; but when the individual is an engineer by training and engaged in a technical activity, it is easy to understand how this practice could have grown up without intention to mislead or to exploit the engineer's title. Frequently, indeed, it is the engineer employed on such work who is most insistent upon a title that will retain him in the ranks of the engineers despite the commercial flavor of his work.

Into Mr. Bedell's comment on sales and professional ethics no invidious comparison should be read. He assumes no "holier-than-thou" attitude. He simply states a fact. The salesman is frankly an advocate. The engineer—in the restricted sense—must be more of a judge. The advocate, in whatever sphere, has a code of ethics by which the worthy are guided. The judicial officer likewise has his code. Each must be judged by his loyalty to his own code, and to judge either by the code of the other would be decidely unfair. There is no question as to one being better or higher; they are based upon radically different relationships.

In the interest of higher professional standards in engineering, the whole broad question opened up by Mr. Bedell deserves discussion. The principle involved is not confined to the "sales engineer." What of the "contracting engineer"? Is it not involved here also? Several material questions leap to mind; doubtless there are others. What do most of the so-called sales engineers actually do? Do they render technical advice; or do they sell or promote sales? Is the term frequently applied to salesmen of little or no engineering training? Will not discouragement of the practice help us toward a more clear-cut definition of what we mean by "engineer"? Most pertinent of all perhaps: How do the professional engineering societies now rate experience as a "sales engineer" when estimating a candidate's qualification for membership?

Building for Permanence

LOOKING back over the changes in our practical arts during the past three or four decades one may discern a slow but continuous movement toward assuring longer life of their products. The civil engineer's art is no exception; it is affected just as are the others. We build, or try to build, more lasting works than in the pioneer days. The spirit of the frontier railroad, of the mining camp, of the aspiring young metropolis, is fast disappearing—even today but little is left—and its disappearance denotes a change in the purposes that control constructional planning. Standards of merit have been modified; our valuation of what the builder produces has been rearranged to accord a recognized place to permanence.

The causes of the change are obvious. The important thing to note is that our altered attitude concerns almost everything that the civil engineer plans and constructs. Some generations ago, none but the water-supply engineer thought it worth while to plan far into the future; one may suspect that the general excellence of the country's water service traces back to this early perception of long-time values. On the other hand, the men who planned roads, railroads, bridges and buildings hardly looked beyond their present. They could not afford to plan more farseeingly, perhaps, or they were too busy with the task of building quickly.

Much waste followed in the train of these old-time practices. Loss by fire, by decay and by many kinds of obsolescence has borne heavily upon us and has taught us much. We have been learning step by step that it is not profitable to continue to do as we did in the years of mushroom growth. The present-day demand is unmistakably for permanence.

But the situation is in a way characterized by the term "demand." Permanence is a commercial demand, not an ideal that serves the planner's inspiration and therefore embodied in his work. The market asks for substantial, reasonably long-lived results, and the builder adjusts his planning to suit this demand. He endeavors to provide permanence by computing and designing—and in a measure, he succeeds—but he does not raise permanence to the rank of a controlling ideal, co-ordinate with suitability and service-excellence. Under these conditions can permanence have its full and proper influence upon our art?

To make the change in view more tangible, we may take bridge practice of thirty or forty years ago, which typified the mushroom-growth stage, and then take the present-day practice, when bridge money is spent almost lavishly. In the earlier period bridges were bought for the day's usefulness only, with price as the highest consideration and with vision bounded by the term of office of the town or county commissioners. There has been a revolution since then. The revolution in traffic conditions has brought it about. But whether there has been essential change in the bridge-builder's own spirit of working is open to grave doubt. To a great extent we still build bridges for the need of the day only—let tomorrow take care of itself!

Changes in building construction are of similar meaning. Mercantile building has advanced far toward being established on a standard of permanence, largely, however, through the dictates of fire protection rather than the thought of planning for permanence. We are not yet prepared to think of buildings remaining in service and being truly serviceable for many generations. And so, while we have built many structures of substantial materials, they were planned for short-time service and in time will clutter up our cities with antiquated buildings, monumental they may be, but hindrances to progress. There is steady advance however, in this field of commercial buildings and gradually there grows a conscious conception of the ideal of permanence.

Not so in the field of dwellings. We have grown out of the shack-town period of the Chicago conflagration, but we do not yet strive for permanence in the fullest sense. Nowhere are houses planned and built to be lived in as homes for long decades. The zoning movement may operate to improve the conditions responsible for this fact, but its influence can not yet be forecast. As matters stand today, our dwelling-house construction remains poor and ephemeral, as much so in the case of the planned house of the well-to-do as in that of the carpentered homes of the masses. Therefore we rebuild and will continue to rebuild every twenty-five years, until a more conscientious spirit comes into control and the planner strives to make each brick and each joist a thing that will serve its full purpose far on into the indefinite future.

In utilitarian engineering construction the conditions of past, present and future are quite parallel to those outlined. Examination of any individual field will illustrate the transition from building for a decade to building for a quarter century or so, and the steady movement toward building for the unlimited future. In each field, too, it may be seen that planning of enduring worth is more likely to result if the planner is inspired with a profound belief that his construction will and must endure. The great bridge cannot spring from a brain filled with the thought that thirty or forty or forty-five years will see the end of its life. It will be great only if there is wrought into every detail the belief that it will serve forever.

This is the coming spirit of all the engineering arts. The engineers of the pioneer era built well, no doubt. for their day of uncertain and speculative development but the conditions of those days have disappeared Future needs will be met truly only if permanence becomes the ideal of all planning and building.

Foundation and Framing Design of Colfax Power Station

Structure Characterized by Simplicity—Concrete Mat Foundation on Gravel—Column Loads Distributed by Reinforced-Concrete Walls—Special Retaining Wall and Sea Wall Held by Ties—Stack Towers

By M. E. Thomas
Structural Engineer, Dwight P. Robinson & Co., Inc.

Colfax Station, recently completed, is a mine-mouth superpower plant situated on the Allegheny River about 15 miles from the center of Pittsburgh and only one mile from the Harwick coal mine, which supplies it. It is the most recent addition to the "Duquesne Ring," a 66,000-volt loop which encircles Pittsburgh. The ultimate capacity of the station is 300,000 kw., made up of five 60,000-kw. units. The size is limited only by the supply of condensing water available from the Allegheny River. While there are no radical departures from general practice, the methods of construction and general layout represent a combination of some of the best ideas in power-plant engineering.

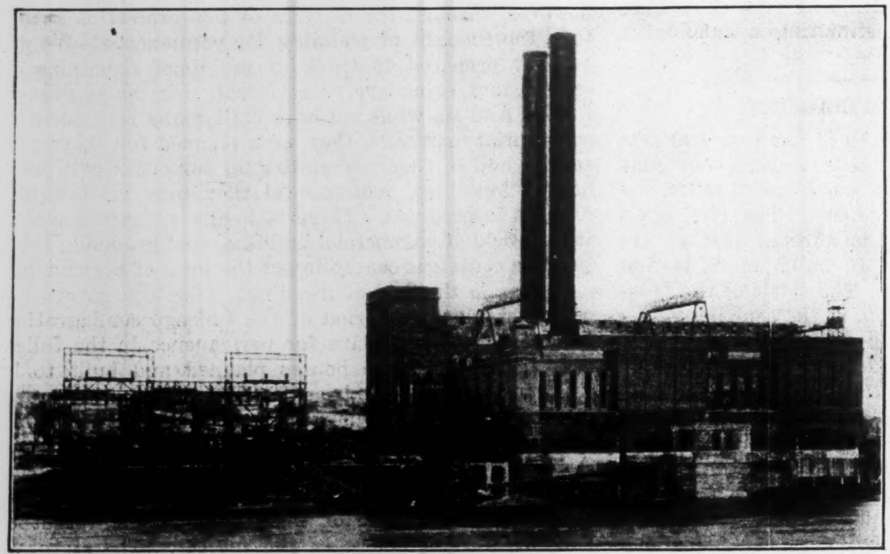


FIG. 1—LOOKING NORTH AT COMPLETED COLFAX STATION

Outdoor switching station at left. Intake screen well at middle of sea wall. Ultimate station capacity is 300,000 kw., half of which is provided for by the present building. The right-hand end wall is removable, for future extension.

The structural features, in common with other details of the plant, are interesting because of the simplicity with which they have been worked out. The framework of the station is steel. The foundation is of box type, in which the basement walls serve as distributing girders to distribute the column loads to the footings, these latter being either continuous mats or spread wall footings, according to local requirements. The general profile of the foundation was controlled largely by the depth to firm bearing soil, a compact sand and gravel stratum.

Boiler Room Foundation—The load from the boiler room columns is distributed by continuous transverse reinforced-concrete walls reinforced as beams, extending from the north side of the building to the wall adjoining the turbine room. These walls are 3 ft. thick and vary in depth from 10 ft. 3 in. at the north side to 25 ft. at the south side. The variations in depth, made in horizontal steps, bring the foundations down to the underlying gravel and sand, which slopes from the north side of the property down to the river bed. The wall load is distributed to the soil by reinforced-concrete footings, which in common with other parts of the station foundation were proportioned for a soil loading of 3 to 4 tons per square foot. On the north side all of the transverse foundation walls are tied together by a deep reinforced-concrete beam which forms the foundation for the exterior wall. On the south side they are similarly connected by the longitudinal wall under the columns between the boiler and turbine rooms; this wall is 4 ft. thick and is about 30 ft. high above top of turbine-room basement mat.

A reinforced-concrete slab construction supported on top of the foundations forms the boiler-room basement floor at El. 754.

Turbine Room Foundation—The turbine room basement is 253 ft. 6 in. long, 80 ft. wide and 29 ft. 3 in. deep, and is designed to contain the foundations, condensers, etc., for the two turbine generator units. Its north and south walls, each 4 ft. thick and 30 ft. high, distribute the crane and roof column loads to the foundation mat, which forms the floor of the basement. The east and west ends are closed by retaining walls which also form the foundations for the walls of the building. The east wall, to provide for future extension, was constructed of vertical I-beams with brick arches between, tied back to deadmen to take the earth pressure.

The turbine room basement floor being below the pool level of the river is designed to resist the upward hydrostatic head of about 30 ft. (extreme low water is about El. 721, while maximum high water is 754) and is waterproofed over the entire area including part of the side walls. The basement floor therefore consists of a reinforced-concrete mat generally 6 ft. thick, except over the area adjacent to the turbine foundations, where it is increased to 8 ft. 9 in. to accommodate air ducts and tanks.

On the south side the main wall is carried in its full thickness of 4 ft. down to a depth of 14 ft. 7 in. below the bottom of the concrete mat. This wall forms the south side of the intake tunnel, 14 ft. 9 in. wide and 13 ft. 1 in. deep, which runs longitudinally under

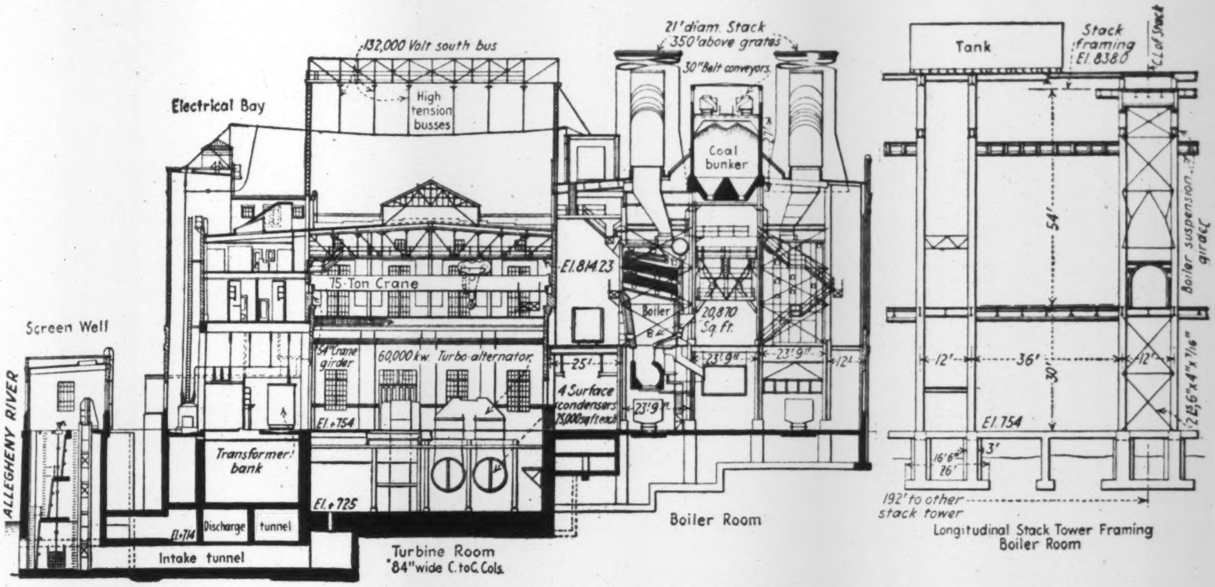

132,000 Volt south bus
Electrical Bay
High tension busses
Screen Well
ALLEGHENY RIVER
75-Ton Crane
El. 814.23
54" Crane girder
60,000 kw. Turbo-alternator
25'
4 Surface condensers 15,000 sq.ft. each
El. + 754
Transformer bank
El. + 725
El. + 714
Discharge tunnel
Intake tunnel
Turbine Room
84" wide C. to C. Cols.
21' diam. Stack 350' above grates
30" Belt conveyors
Coal bunker
Boiler
20,870 Sq. ft.
23' 9"
23' 9"
12'
23' 9"
Boiler Room
Tank
Stack framing El. 838.0
C.L. of Stack
54'
Boiler suspension girder
12'
36'
12'
30'
2 Ls 6"x4"x 7/16"
El. 754
16' 6"
26'
3'
192' to other stack tower
Longitudinal Stack Tower Framing
Boiler Room

FIG. 2—TYPICAL CROSS-SECTION OF STATION, ALLEGHENY RIVER AT LEFT (SOUTH)

the turbine-room mat. The tunnel is 210 ft. long and is divided by a wall near the center, each part supplying the circulating water to the condensers of one unit by means of three suction pipes through the roof of the tunnel, and each part connected by a transverse tunnel under the discharge tunnel to the screen well.

Electrical Bay Foundations—Under the entire electrical bay is placed the discharge tunnel, designed for a capacity to provide for the future extensions, since it connects with the discharge to the river at its west end. This tunnel, 12 ft. deep by 45 ft. wide, is divided by two longitudinal concrete walls provided with openings at intervals to cross-connect. Its roof forms the floor of the electrical bay basement.

From the west end of the building the discharge tunnel is continued at an angle of about 45 deg. to the axis of the building to a point back of the harbor line, where it discharges into the river. Provision has been made for the future extension of the discharge tunnel, back of and parallel with a future sea wall at the harbor line, and to discharge into the river several hundred feet farther downstream.

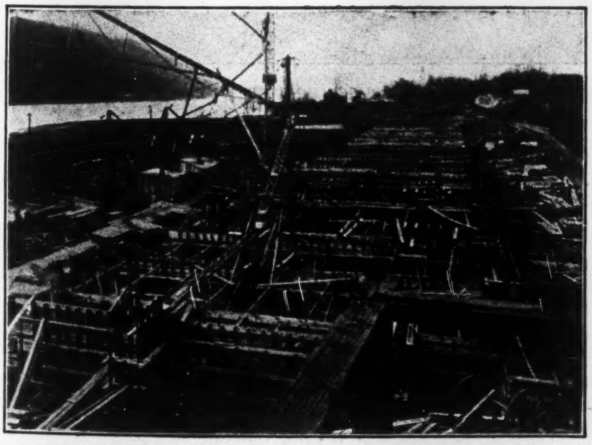


FIG. 3—FORMS FOR BOILER-ROOM FOUNDATION
Cross-walls distribute column loads to mat foundation.

The transformer-room floor consists of heavy reinforced-concrete beams, running transversely and spanning between the longitudinal foundation walls, with reinforced-concrete floor slabs.

Screen Well—The screen well is placed with the south side on the harbor line at about the center of the present electrical bay. It is 44 ft. long and 32 ft. 8 in. wide, and is divided by a transverse vertical concrete wall into two independent units, each supplying the circulating water for one turbine unit. On the north side it connects with the intake tunnels by means of two transverse concrete tunnels, each 8 ft. x 12 ft. 6 in., passing under the discharge tunnels. On the south side the two wells are connected with the river by four openings each 7 ft. 3 in. wide and 10 ft. high, whose lower edge is flush with the bottom of the well.

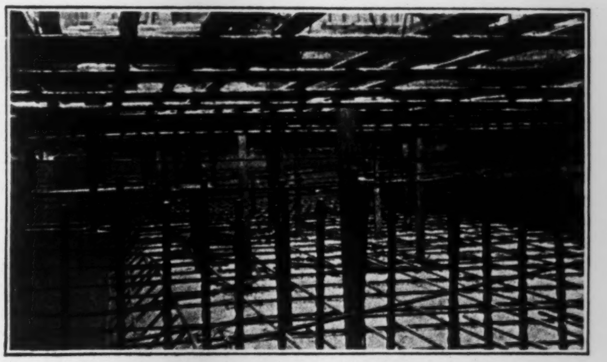


FIG. 4—REINFORCING OF MAT UNDER TURBINE ROOM

Two 8 x 12½-ft. transverse tunnels connected with the discharge tunnels are placed directly over the two transverse intake tunnels, the four tunnels forming one construction. These two tunnels run under the electrical bay to the back of the screen well and are connected with the screen well back of the trash racks by openings 5 ft. square controlled by a valve to bypass the discharge water into the intake.

Sea Wall—A sea wall about 50 ft. high extends along the harbor line, flush with the south side of the screen well. It is of reinforced concrete, 3 ft. 6 in. thick at ground surface and about 6 ft. thick at the bottom, where it rests on a concrete foundation 10 ft. wide and from 5 to 8 ft. deep. The lateral thrust from the earth pressure is taken by reinforced-concrete ties from the sea wall to the building, an upper row near the top and a lower row about one-third of the height from the bottom. The ties are spaced horizontally about 12 ft. apart. Considerable economy results from this type of construction as compared with a self-supporting wall of the same height.

Superstructure—The superstructure generally is a self-supporting structural steel frame with steel girders and beams supporting reinforced-concrete slabs for all floors and roof. The walls are generally of brick, except some special walls of reinforced concrete and the east (extension) end wall, which is of hollow tile construction.

The boiler room is about 350 ft. x 108 ft. between column centers and 87 ft. high from the basement floor level to the low point of the roof.

Between each group of four boilers on both the north and south sides the four columns are braced together from top to bottom with diagonal bracing, forming four braced towers, 12 ft. x 23 ft. 9 in., which support the stacks and carry the wind stresses to the foundation. The lower sections of most of these stack columns carry a load of over 1,500,000 lb. Steel I-beam grillages distribute the column loads to the concrete foundation walls. Anchorage is provided by four 2¾-in. anchor bolts 4½ ft. long.

Eighty-four feet above the basement floor the base of the steel stacks are supported by the stack base framing. A system of girders forms approximately two squares, one within the other, between which 24-in. I-beams are framed at distances of 2 to 3 ft., the space between being filled with concrete. This forms a steel and concrete mat upon which the steel stack rests. The interior square is floored with a reinforced-concrete slab. The stack is anchored to the mat by means of twenty-eight 2¾-in. bolts passing through pipe sleeves in the concrete to pairs of 10-in. channels which distribute the upward load to the bottom flanges of the 24-in. beams.

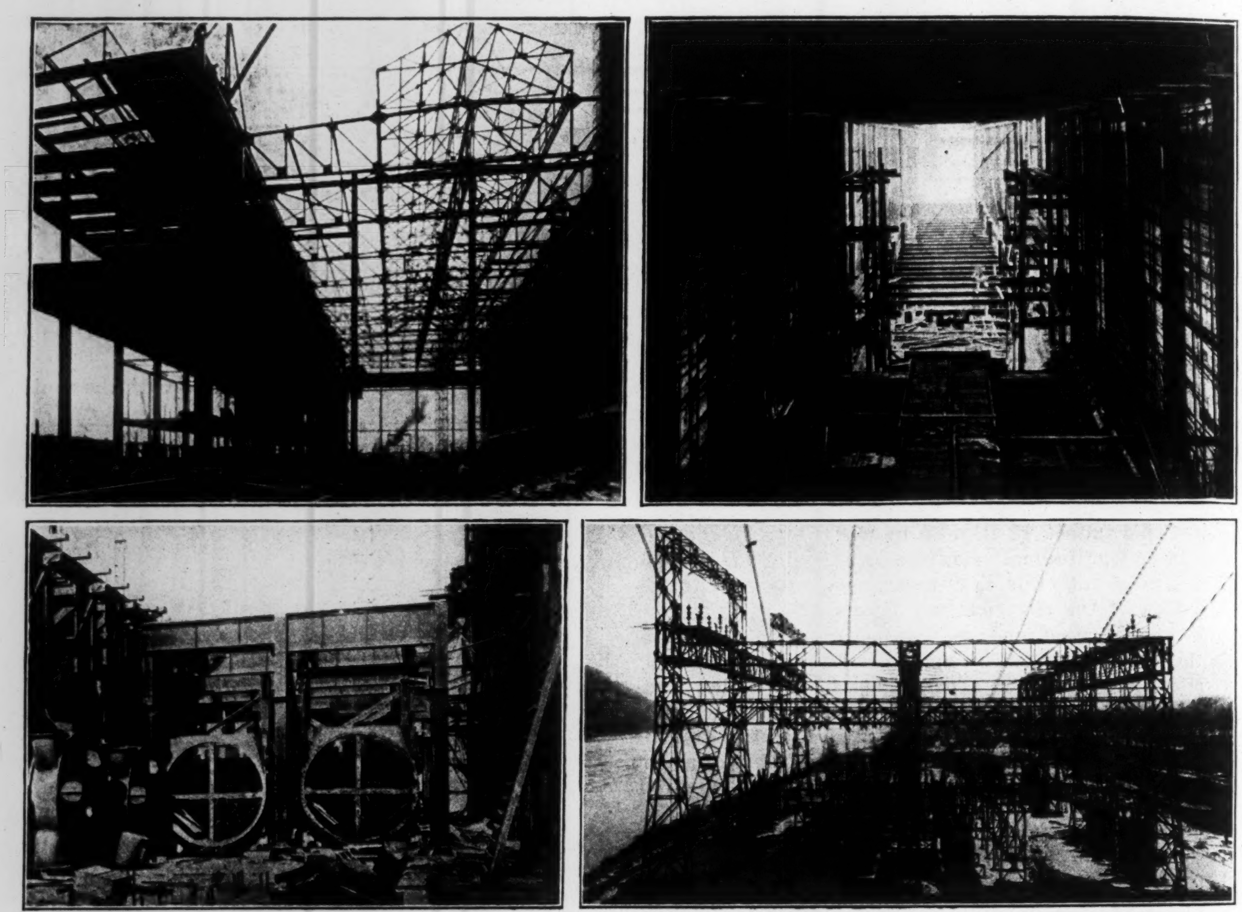


FIG. 5—FRAMING FEATURES OF COLFAX STATION, A MINE-MOUTH POWER HOUSE

Upper left, turbine room frame, boiler room at right.
Lower left, steel foundation for 60,000-kw. turbine unit.
Upper right, reinforcement and forms of coal bunker.
Lower right, outdoor switching station.

Stacks—The stacks are self-supporting brick-lined steel stacks, 21 ft. 9 in. in diameter inside of the shell and 271 ft. high from the base, or 355 ft. high above the ground. From 30 ft. above the base the stack flares out to a diameter of 28 ft. at the base, where heavy angle seats and stiffeners provide connections for the anchor bolts. The breeching connections for the flues are on opposite sides of the stack. The lining consists of 4½-in. hollow firebrick blocks supported by horizontal angles

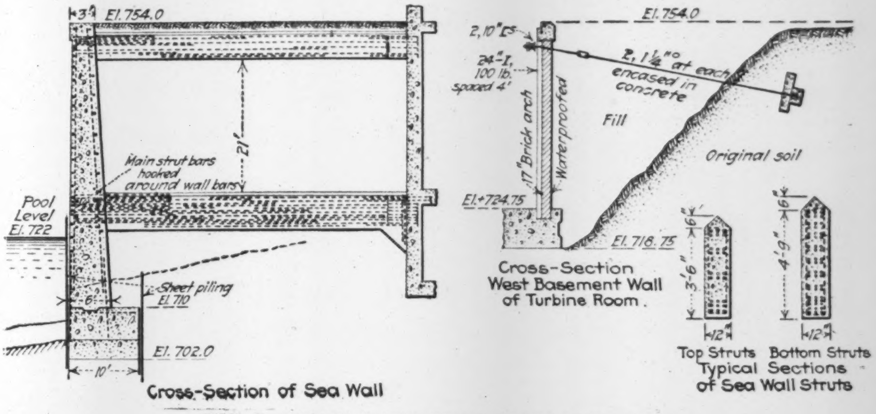


FIG. 7—SPECIAL SEA-WALL CONSTRUCTION

riveted to the shell at intervals of about 10 ft.

Coal Bunkers—The main coal bunker, over the boiler room, is of reinforced concrete and is 22 ft. 9 in. wide and 28 ft. 9 in. deep inside from top of conveyor floor. Its capacity is 10 tons per lineal foot. The 12-in. side walls embed vertical 8-in. beams, and are designed to act as girders to carry the entire weight of the bunker and coal to the steel columns without the aid of the structural steel. The side walls also take the lateral thrust of the coal and are tied together by reinforced-concrete beams. The reinforced-concrete bottom is of suspended type. Cinder-concrete crickets form pockets to the coal spouts.

At the west end of the boiler room is a coal tower, whose main floor, on the level of the boiler room floor, is connected with the coal trestle and carries track stringers and rails continuous with those of the trestle. Directly under these tracks are two reinforced-concrete coal hoppers of 150 tons capacity each. The upper part of the tower contains employees' quarters and conveying machinery.

Turbine Room—The turbine room is about 254 x 84 ft. wide center to center of columns, and is roofed with steel trusses 60 ft. above the floor. A monitor and skylight 34 ft. wide run the length of the turbine room.

The turbines are supported on structural steel foundations extending to the turbine room floor level, El. 754. The turbine room floor consists of a concrete slab covered with 9 x 9-in. Welsh quarry tile, supported by a steel frame resting on steel columns and the concrete foundation walls. Except for the space between the high and low pressure turbines, where the floor is supported by the turbine foundation, the entire floor is kept free from the turbine so as to prevent transmission of the vibration of the turbines to the floor. Between the main units an open well about 25 x 50 ft. in the floor provides for lowering transformers and heavy machinery parts to the basement floor for repairs.

The interior side walls for a distance of 9 ft. above the floor are faced with white and gray speckled enameled brick with bull nose brick at corners, and a 10-in. black slate base above the tile cove. Above the enameled brick the walls are light buff Kittanning face brick.

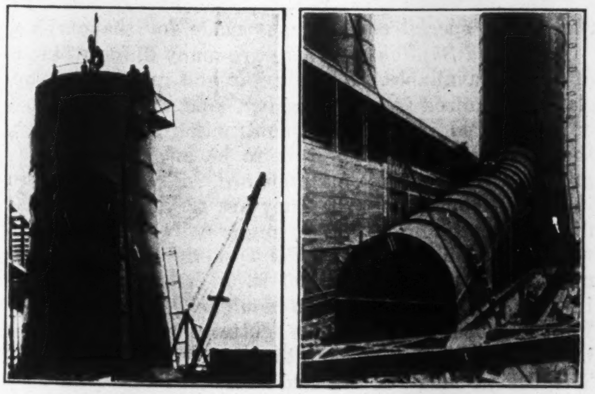


FIG. 6—22-FT. DIAMETER STACK, WITH SMOKE FLUE

The electrical bay is of steel-frame construction, with concrete floor slabs made thick enough to enclose the numerous electrical conduits embedded therein. The exterior walls and most of the interior walls are of brick, but concrete interior walls were used where it was necessary to carry conduits.

On the south side of each high tension bay, a group of six high tension brick shafts 12 ft. square extends from the turbine room floor level to a distance of 23 ft. above the electrical bay roof, where the conductors connect to the bus-bar structure on the roof.

The station was designed and built for the Duquesne Light Co. by Dwight P. Robinson & Co., Inc.

Belated Settlement of an Old Aqueduct

By Frederic I. Winslow
Division Engineer, Metropolitan District Commission, Framingham, Mass.

IN OCTOBER, 1920, a considerable settlement occurred in the principal thoroughfare leading from Natick to South Natick, Mass. At first it was supposed to be an ordinary settlement, caused by a leaky water main, which in this case happened to be a 10-in. cement-lined pipe and one likely to cause trouble, especially as there was a trolley car track in the street, with a fair amount of traffic.

After being filled in, and a further settlement occurring within a few days, it was ascertained that the settlement had occurred directly over the Badger Hill tunnel of the Sudbury Aqueduct, built in 1875. The extrados at this point were about 28 ft. from the surface of the street, and the point of settlement turned out to be 50 ft. from the beginning of the tunnel. As the water in the aqueduct appeared slightly discolored when sampled about 2,000 ft. away, the aqueduct was drawn down and entered. It was found that the settlement was directly over a number of "weepers" placed on the side of the aqueduct to prevent undue pressure from water from the hill. In all, about 50 cu.yd. of material, mainly gravel, were placed in the cavity. No further settlement has occurred.

Apparently the timbering used nearly fifty years ago had so decayed as to cause the dropping of the earth above, as there was probably a large amount of timber at this point.

Maintenance Engineering in Large Industrial Plants

Organization and Work of Department for Inspection and Upkeep of Buildings, Equipment, Yards, Tracks and Roadways

BY SAMUEL E. BIRD
Manager, Construction Department, Sears, Roebuck & Co., Chicago

MAINTENANCE AND REPAIR of buildings and other property at large industrial and manufacturing plants and public institutions is a continuous work which involves a great number of varied details and must be carried out systematically under expert management in order to keep the several structures in condition for economic service and for the safety and comfort of the employees or occupants. To detect and remedy troubles, solve problems, select materials and plan and supervise the work is truly within the field of the engineer. It is the purpose of this paper to show the scope and importance of the maintenance department rather than to give a technical discussion of the various classes and items of the work.

As examples of the problems which come to the engineer of plant maintenance the following may be mentioned: (1) The best materials for tuck-pointing settlement cracks in walls and at window joints, as well as the best time of the year and conditions for this work; (2) preventing dry rot; (3) preventing steel corrosion; (4) the installation of various kinds of expansion joints to take care of settlement, expansion and contraction, this applying especially in connection with concrete work and roads; (5) methods of waterproofing skylights, parapets and fire-walls; (6) the preparation of report forms covering building and machinery maintenance, the latter including elevators and motor trucks.

In large industrial plants and public institutions it is customary to have building superintendents or construction departments. Even in smaller plants, someone is detailed to look after the maintenance of buildings and to take care of repairs and replacements. Where a department has charge of building (architectural) as well as machinery (mechanical) maintenance, it should have as its head a man with training in architectural construction as well as with some knowledge of mechanical construction. A college education along mechanical or architectural engineering lines is a great help, as the theoretical knowledge enables the practical side of the work to be more easily grasped. On the other hand, some of the best construction maintenance men have been educated in the building field.

Much useful information may be gained from the study of catalogs, pamphlets and other literature sent out by manufacturers of equipment and building materials, but the maintenance engineer must be able to analyze and make proper selection. Any practical experience obtained from handling building operations in the field will prove valuable to a man taking charge of the maintenance of either large or small plants.

Building Inspection—Maintenance should include building inspections at regular intervals, with the findings tabulated and recorded on uniform blanks having divisions covering all parts of the structures; such as roofs, skylights, floors, columns, windows, stairs, foundations and outside walls. These blanks should have suitable file headings and should be kept in a filing cabinet, so that when repairs are made the items may be checked from the inspection records. The form of inspection blank will be determined largely by the type of building, whether of fireproof, semi-fireproof, steel, concrete, heavy mill construction or ordinary lumber construction.

In large cities such buildings are also subject to an annual inspection by the city, usually under the building department and subject to the building commissioner's approval. Among many other items this city inspection takes particular note of sanitation, light, fire and floor load conditions.

When new buildings or alterations or additions are under consideration the maintenance engineer has an opportunity to point out the type of construction most suitable for the purpose. He should have in mind the maintenance required for the various types, considering also the overhead, first cost and annual depreciation. If the operation to be carried on in the building is one demanding constant changes, especially in floor construction (as in the case of rearrangement of machinery of various types) this item should be given close attention. For both existing and new buildings the maintenance engineer must study their preservation, whether they are of concrete, wood or steel construction or a combination of the three.

Floors—The market is full of preparations for hardening cement floors and making them dustless. The maintenance engineer should analyze and study these; he must try them out and find the best adapted for his particular needs. Keeping concrete floors well surfaced is another problem. Where the traffic is light a good application of cement paint will overcome ordinary difficulties and prevent wear as well as dust. Where such floors are subject to heavy traffic, it may be necessary to give them a hardening or wax treatment, or if the traffic is too heavy for these treatments the difficulty of excessive wear may have to be overcome by the installation of an asphalt mastic aisle or other space where the wear is greatest.

In the cleaning of floors, care must be taken that no solutions containing a large amount of lye or other injurious materials are used. A good soap will usually serve for cement floors, but if this is not effective a proper solution must be devised for removing the dirt without injury to the floor. The patching of worn cement floors has been a difficult task and an interesting one, in which good results have been obtained by the use of special compositions made for the purpose.

Roofs and Skylights—There are many different kinds of roofing available. Asphalt, tar and gravel, built-up, slate, galvanized iron, tin, copper, zinc, etc. Each must be considered in regard to contraction and expansion, the conditions to which it is to be subjected and the probable charges for maintenance. Skylights are an important consideration. They are of various designs: flat, sawtooth, hipped, etc.; many with stationary as well as movable portions. Some skylights are of enormous size, running over 500 ft. in length and 100 ft. in width. These must be equipped with expansion joints, proper condensation gutters, conductors, etc., if a large amount of maintenance is to be overcome. The design must be selected also with due regard to the requirements for light, ventilation and heating.

One of the greatest problems is in keeping the skylights waterproof, since their leaking is one source of great damage to property in course of manufacture or in storage. Regular inspections of the expansion joint sections, calking the glass with elastic roofing cement under the cap sheets, and keeping the condensation gutters and drain gutters clean and well painted will overcome most of the trouble. Much of the difficulty with metal gutters at the base of skylights has been overcome by covering the metal with an elastic coating applied on a suitable membrane, such as burlap. This coating allows for the expansion of the gutters but also holds any seam tight which may be strained under expansion or contraction.

Paint and Preservatives—For preservation of building surfaces, paint when rightly applied is one of the best materials. When wrongly applied it may result in loss of time, money and energy. In this day of substitutions, some of which are very good and some not so good, it is advisable to study and analyze the various materials offered before applying them. For wood preservatives much information is obtainable from current literature and the catalogs of various marketed materials. The application of varnish and other wall decorative coatings is an item in maintenance of office sections, taking into consideration conditions of dust and smoke before adopting the various coatings. All such work should be done under careful specifications.

Timber Columns—In large buildings of mill construction, a problem of maintenance as well as a hazard exists in taking care of badly checked or warped wooden columns. In some older buildings such columns have had bolts put through them, but the bolt holes weaken the columns and in many instances under the writer's notice they have aided rather than prevented the checking. A much better method is to reinforce the columns by means of strong steel bands having a snug fit. Before the bands are applied, the cracked portion of the column should be pulled together with a clamping device. Wood screws with countersunk heads hold the bands in place in case of shrinkage of the timber. This construction avoids the objectionable feature of projecting bolts or screws.

Railway and Trucking Facilities—In enlargement or revision of plants the maintenance engineer must consider the convenient handling of materials and their delivery and shipment by rail or truck. This must provide for future expansion and will include the arrangement of tracks, driveways and platforms and the provision of cranes or other handling devices. At large plants he may have charge not only of buildings and machinery equipment, but of grounds and exterior parts of the property, such as roads, sidewalks, railroad tracks and switch tracks. He must be familiar with paving materials and be able to select good contractors and obtain proper bids for construction. In selecting the material, whether asphalt, brick, macadam or concrete, he must keep in mind the initial cost and the maintenance charge. Railroad maintenance in large yards is a task in itself.

Platforms and runways afford many problems. In small plants these structures are floored usually with plank. If exposed to the weather this planking should be laid with open spaces to afford ventilation. Where the traffic on the platforms is very heavy and where they are not exposed to the weather, wood blocks have been used to advantage. But with wood flooring exposed to the weather and having steel plates fastened to the blocks to facilitate trucking or reduce wear, there has been extended dry rot, resulting in heavy maintenance expense. A better flooring for such exposed platforms carrying heavy traffic would be asphaltic mastic of such composition as to meet the local conditions of weather and loads. Copper flashing will eliminate the chance of leakage due to shrinkage where this asphalt coating comes in contact with buildings.

Mechanical Handling of Materials—Machinery and appliances for the conveying, hoisting and handling of material may come under the supervision of the maintenance engineer. This equipment may include elevators, chain or belt conveyors, chain hoists, and inclined or spiral chutes. The maintenance item is greatly reduced if this equipment is made of standardized parts of simple design and if the manufacturer is easily accessible for repairs. In connection with material handling, the plant layout must be considered from the standpoint of continuous handling of raw materials to the finished stock, as well as the handling of materials received or shipped by railway, highway or waterway. Where large numbers of motor trucks are operated there must be a system of reports and records of service, mileage and maintenance and repair work.

Maintenance of elevators, machinery equipment and motor trucks should be handled as carefully and systematically as that of the buildings. The maintenance department usually has charge of the design of machinery guards, and in the last few years no movement has progressed faster than the safety idea. Closely allied to this is the work in regard to sanitation, comfort facilities, lighting and ventilation.

Plant Fixtures—Another branch of work taken care of by most maintenance and construction departments is the provision of merchandise fixtures, such as racks and bins. These may be of steel or wood, permanent or temporary, and stationary or collapsible. They must accommodate the merchandise conveniently without loss of space or undue overloading.

Insurance—Building insurance is sometimes carried and kept record of by the building department, which thus tries to keep the buildings and plant in such shape as to obtain the lowest possible insurance rates. Many concerns carry special kinds of insurance such as that on plate glass. In plants where fire prevention work is not handled by a special department it affords another activity for the maintenance engineer. Much information as to this line of work may be obtained from the local fire insurance companies, city fire departments or board of underwriters.

The elimination of waste must not be overlooked. By proper management much material from alterations and additions can be utilized, but to secure its best use there must be a systematic record covering such material, and sorting and storing facilities must be provided.

Care of Leased Buildings—Many plants find it necessary to rent additional buildings for storage space. The maintenance engineer should be consulted before the leases are closed, as the maintenance of rented buildings becomes a very expensive item where the tenant maintains the building during the life of the lease. An inspection of the premises should also be made at the time the lease is made, this inspection being covered by written reports showing the exact conditions or being written into the lease so that no misunderstanding will arise at a later date relative to these maintenance items.

Contract and Force Account Work—In a department having charge of maintenance there should be a division to handle estimates, bids or proposals, as well as the letting of contracts. For keeping records this division should have filing equipment of the inclosed drawer type, with indexes and tickler system. Provision should be made for the filing of orders under construction, as well as for files for all completed orders carrying with them guarantees or important data.

Contracts carrying guarantees, as in the case of roofing, should be kept in the file until after the guarantee expires, the date of expiration being kept in a tickler. The contract should be filed also under the contractor's name, so that proper inspections and examinations can be made before the guarantee expires. Where it is hard to obtain outside labor for repairs and alterations a special department may be organized embracing the various trades, such as carpenters, painters, machinists, millwrights and sheet metal workers. It is customary for the construction department to hire these men, directly or through the employment department.

A drafting department is essential in connection with maintenance work. In most establishments this need not be large, but it should have the proper organization to produce results without loss of time or waste of energy. There should be equipment for filing drawings and making blueprints. In this department should be kept records of the various sewer, water, gas and other piping and conduit systems. A catalog file should be included in the office equipment, for which a sectional bookcase will be convenient. For this department the judgment of the engineer is needed in selecting the draftsmen and managing the work.

Column Strength of Single Angles

Tests of 170 Struts at Bureau of Standards—End Fixation Factors Ranged From 1.1 to 1.9 for Various Connections

COMPRESSION tests of single-angle steel struts made in 1917 by the Bureau of Standards but not reported until now (Technologic Paper 218) give new data on the strength of columns over an exceptionally wide range of slenderness—from length-ratio 50 to 350. The series included 170 separate angles, of sizes ranging from 1¼ x 1¼ x ⅛ in. to 6 x 6 x ¾ in., with over-all lengths ranging up to 23 ft. 3½ in. No effect of size of angle on column strength per square inch is noted in the report, but the tabulated results show a rather large range at all length-ratios, apparently due to variations in the grade of the steel. Thus, in one series of tests (Fig. 1) the range of maximum load for columns of length 100 was from 36,800 lb. per square inch for a 3 x 3 x $\frac{3}{16}$-in. angle to 27,900 lb. per square inch for a 6 x 6 x ½-in. angle, although mill test reports gave practically identical properties for the two heats from which these angles were rolled.

Plots of the test results are shown in Figs. 1 and 2.

Fig. 1 gives the individual test results for a series in which both legs of the angle were attached to end fittings by means of two or more bolts at each end. The heavy line is drawn through the average results at the several length ratios represented. The dot and dash curve at the right represents the Euler formula computed for a "fixation factor" of 1.5. This factor represents the ratio of actual length of strut to the length of the equivalent round-end column as estimated from the test results. This particular series extended only to length-ratio 200. Throughout the range it exhibits a variation in strength of 7,000 to 10,000 lb. per square inch, or 28 to 45 per cent of average strength.

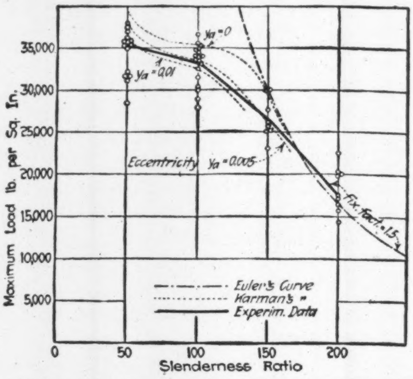


FIG. 1—RESULTS OF ONE SERIES OF SINGLE-ANGLE COLUMN TESTS

Angles 3 x 3 x $\frac{3}{16}$ in. to 6 x 6 x ¾ in., 3 ft. 2 in. to 20 ft. 3 in. long over all; ends connected by two or more bolts in each leg.

All the 170 tests are brought together in Fig. 2, but here only averages are plotted. The upper heavy curve represents angles with flat (square) ends, not fastened. The next lower curve represents angles attached by both legs to end fittings, with two or more bolts in each leg at each end. The next pair is for angles connected to end fittings by one bolt in each leg or by two bolts in one leg, the results differing inappreciably. The two lower curves are for angles attached by only one bolt at each end; in the tests represented by the left-hand curve the ends were "folded," that is, one leg was flattened down upon the other and the bolt passed through the double thickness. The fixation factors, noted on the curves, 1.9 to 1.1, are deduced by the authors of the report, A. H. Stang and L. R. Strickenberg, as being the proper ones for the several conditions of ends tested, according to the agreement of the result with theoretical curves for these factors.

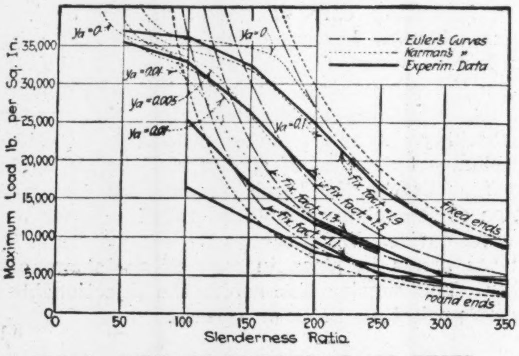


FIG. 2. AVERAGE RESULTS OF ALL TESTS

Total number of tests 170; angles 1¼ x 1¼ x ⅛ in. to 6 x 6 x ¾ in., tested in lengths up to 23 ft. 3½ in. over all. Strength of steel by mill test coupons 58,000 to 65,000 ultimate, 36,000 to 39,000 yield point (one result 47,000), 26 to 30 per cent elongation, 50 to 59% reduction of area. Upper heavy curve, test with flat ends; next lower curve, connection by two or more bolts in each leg at each end; next pair of curves, connection by two bolts at each end; lowest curves, one-bolt connection at each end.

It is stated that formulas of the Rankine type do not fit the results, while the Karman formula (represented by the various dotted curves in Figs. 1 and 2 but not quoted) fits well.

Comparison of the relative strengths of the struts and their relative initial eccentricities, which latter were inferred from the midpoint deflections at 4/9 of the Euler load, are presented in tabular form as a study of the effect of initial eccentricity. The authors state that in nearly every case the struts with the larger eccentricity showed the lower strength.

Miami Conservancy Work Completed

Dams and River Improvement Work Are Completed and Enterprise Is Being Changed Over to a Maintenance Basis

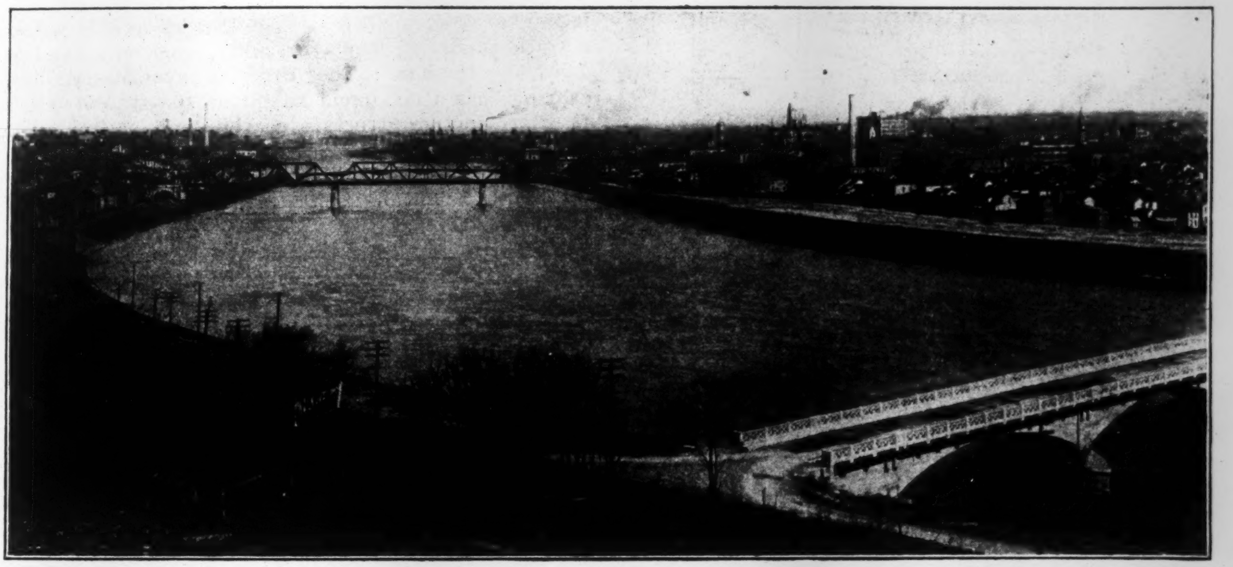
THE $30,000,000 flood control project of the Miami Conservancy District is at the point of completion, according to a recent report from Charles H. Paul, chief engineer. All five of the dams are in the hands of caretakers and are being operated on a maintenance basis. River improvement and levee work at the nine cities and towns throughout the valley is either entirely completed or nearly so. In fact the only uncompleted construction jobs are the channel work at Hamilton, which will be entirely finished soon after the first of the year; the completion of a highway bridge at Troy, which will be open to traffic about Jan. 1; a small amount of levee construction at Piqua, which will be finished about the same time; and the construction of a water-works and electric light plant at Tippecanoe City, necessitated by the fact that the present plant comes within the limits of one of the retarding basins.

A large part of the extensive construction plant has been released, and is being overhauled and sold. As practically all of the work was done by the District's own forces, there is a large amount of plant and equipment to be disposed of, and this is one of the active features of the District's work at present.

As the whole job will soon be on a maintenance basis, the organization of the maintenance forces is now proceeding rapidly. Caretakers and patrolmen are being appointed, for duty at all points where the flood control works have been constructed, and a plan for systematic inspection and reports is being worked out, with the idea of keeping the works up to 100 per cent efficiency at all times, ready for a flood whenever one may occur.

An unusual problem is presented here, in that the floods against which these works will be of most benefit are not of annual occurrence but may occur only once or twice in a lifetime, and it is necessary to keep alive and up to the mark a project that may not be called upon for maximum service for many years to come. The matter of keeping tuned up, under such conditions, is much more difficult than where a real test occurs at least as often as once a year.

The accompanying photograph shows the result of some of the river improvement work. At Dayton more than 2,000,000 cu.yd. of material have been removed from the river channel. The safe capacity formerly was about 75,000 sec.-ft. and has been increased to 120,000 sec.-ft. At Hamilton the channel excavation, which amounted to about the same quantity, together with some raising and strengthening of levees and extensive paving of slopes gives a safe channel capacity of 200,000 sec.-ft. Formerly it was below 100,000 sec.ft.



MIAMI RIVER AT HAMILTON AS IMPROVED—ORIGINAL CHANNEL CAPACITY DOUBLED BY REGULATION

Amount of Lumber Used for Boxes

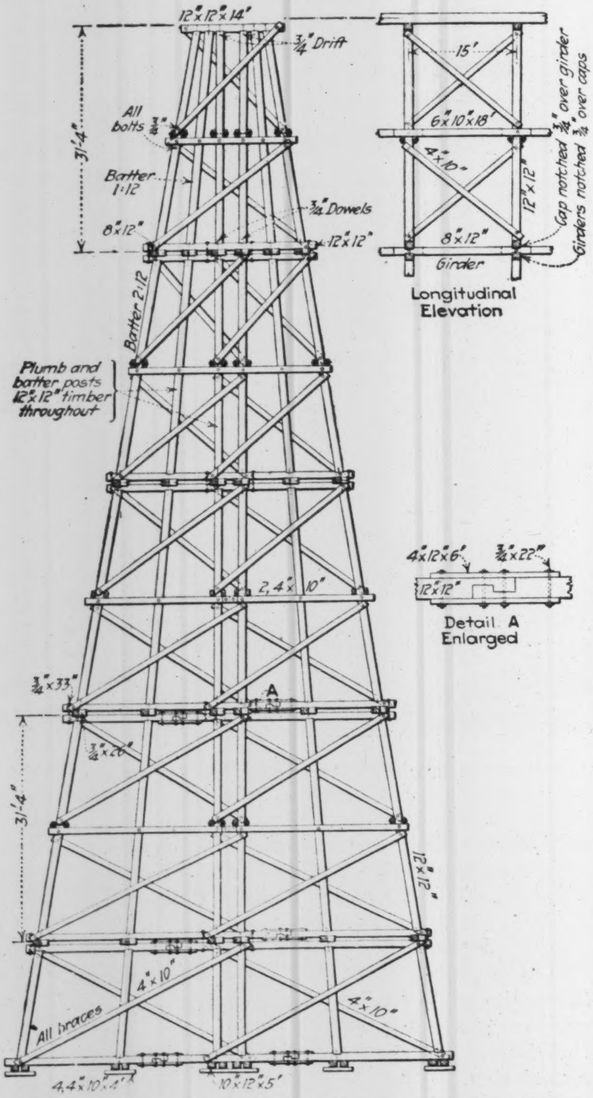
It is calculated that about 15 per cent of all the lumber produced in the United States is consumed in the manufacture of wooden boxes, according to the information bureau of the National Lumber Manufacturers' Association.

More than two-thirds of the low grade product of the North Carolina pine region is ordinarily used for box purposes. Nearly 50 per cent of loblolly or North Carolina pine goes into boxes; 35 per cent of shortleaf pine in the same territory; about 8 per cent of longleaf pine and a smaller percentage of the other softwoods in that region.

Heavy Trestlework Required on New Logging Railroad

Line 38½ Miles Long in Oregon Used 4,500,000 Ft. B.M. in Five Trestles—Cableway Erected High Bents in 30-Ft. Sections

A STANDARD-GAGE railroad 38½ miles long is now being constructed to the northwest of Portland, Ore., to tap heavy stands of fir timber that are to be cut in the near future. The line was originally begun as a private enterprise but construction has recently been taken over and is being completed by the Spokane, Portland Seattle R.R. Co. Rails have been laid over about 23 miles of the new line and construction is progressing rapidly. In addition to the railroad a mill is under construction at Vernonia, which is at milepost 22 on the new line, designed to cut 250,000 ft. b.m. per 8-hr. shift. Logs brought out over the new railroad will be delivered via the United Railways to a booming ground on Willamette Slough near Portland whence delivery to mills of the vicinity can be made by water.



TYPICAL CONSTRUCTION OF FRAMED BENT TRESTLES

The new railroad begins at Wilkesboro, Ore., the terminus of the United Railways, a subsidiary of the Spokane, Portland and Seattle system, and extends thence 32.6 miles to the Columbia-Clatsop County line. This much of the new railroad is to be a common carrier operated by a company formed for this purpose and known as the Portland, Astoria & Pacific R.R. Co. Beyond the county line the Oregon-American Lumber Co., which is constructing the mill at Vernonia, will operate the remaining 6 miles of track as a private logging road.

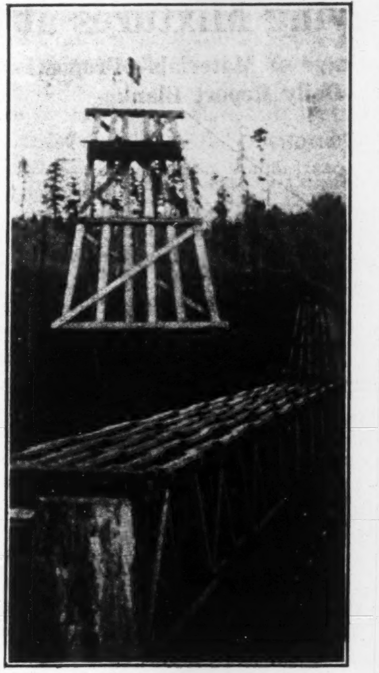
The new railroad has a maximum gradient of 2.3 per cent, compensated, a maximum curvature of 12 deg. up to the county line and 14 deg. for the 6 miles beyond. Eighty-five-pound rails are used throughout. There is only one tunnel, which is 1,143 ft. long, but trestles and bridges abound. In all there are forty-two stream or canyon crossings including thirty-five trestles or bridge-approaches aggregating 10,140 ft. in length, five bridges of 60-ft. span, five of 72-ft. span and two of 84-ft. span. All the bridges are Howe framed timber trusses.

The most notable construction feature of the new line is the trestlework. Five of the trestles located within a track length of about two miles required a total of 4,500,000 ft. b.m. The Brook Canyon trestle, for example, has a maximum height of 165 ft. and is 696 ft. long; another structure nearby, built entirely on a 12 deg. curve, is 605 ft. long and has a maximum height of 133 ft. The Ganzer Canyon trestle, 925 ft. long and reaching a height of 155 ft., required 1,100,000 ft. b.m. in its construction.

Timber for these five trestles was delivered to storage yards at the site well in advance of track laying operations by the use of old logging railroad spur lines which were rehabilitated for the purpose. In the case of three of these the old spur tracks actually passed through sites suitable for timber storage yards. In the other two cases short extensions of the old spurs were required. From the storage yards, which were all in the bottoms of the gorges crossed by the new line, inclined cableways delivered timbers to framing platforms at one end of the trestle site and at deck level.

The framing platform consisted of a plank floor large enough to accommodate one 30-ft. section when laid out flat. The location was selected so that the platform would be under both the main cableway spanning the gorge and the upper end of the incline cable from the timber storage yard. Timbers were handled on the platform by a locomotive crane. All boring was done with compressed air boring machines served from compressors on the steam donkey engines used for operating the cableways. As each section was finished it was immediately removed from the platform to make room for the next. With a little care in operating the cableway each section could be delivered to its exact location in the trestle.

The framing platform crew normally consisted of twenty-one men. This included, in addition to the men actually framing and assembling the sections, all labor required to move the timbers from the storage yard in the valley below and complete the sections on the platform ready for removal by the main cableway. The work of this crew, it was found, would just balance the work of an erection crew on the trestle consisting of seven men. Included in the latter were two main cableway operators and one "hooker on," leaving only four men continuously employed on the trestle. These four, in addition to fastening the sections that were delivered at the rate of about one every hour, placed the girders and braces and drifted or bolted them into place as required.

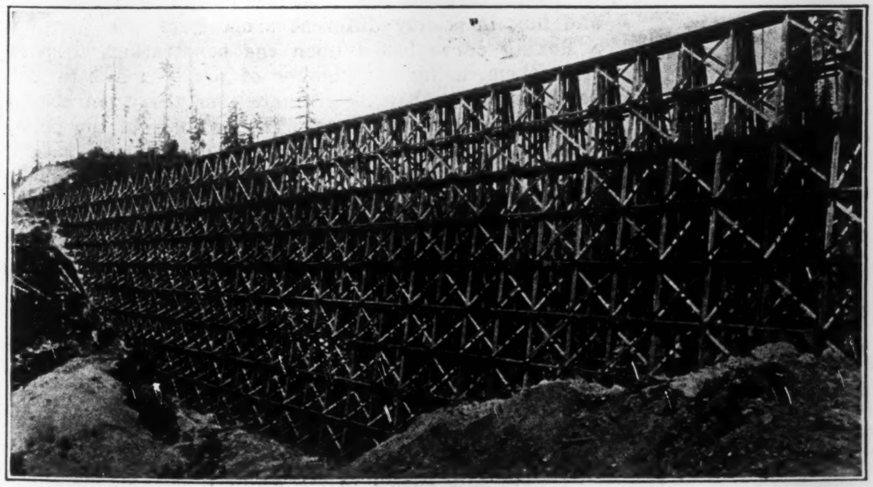


FRAMED SECTION EN ROUTE TO POSITION

The dark object near the top of the section is a 2 x 12-ft. log used as a counterweight.

For this average crew of twenty-eight men the daily payroll was $182. When placing seven sections per eight-hour day which was a common rate of progress, the labor cost on timber in place was about $8 per thousand feet board measure. On some days a much more rapid rate of progress was attained. In the case of the trestle located on a 12 deg. curve the main cable was provided with two anchorages a short distance apart on one side of the gorge so the arrangement of the cable end, in plan, would take the form of the letter "Y." With this plan and by paying out or taking up slack at these anchorages from time to time as required, the main cable was shifted so as to permit of delivering sections in place on all parts of the trestle. The main cable was 1⅞ in. in diameter.

The location of the old logging road spurs was found convenient only in the case of the five large trestles. For bridge and trestlework farther along the line timbers went in from the nearest Southern Pacific R.R. siding on motor trucks which made the latter part of their haul over the graded roadbed. Thus the trestles were completed well ahead of the tracklaying crews and despite the numerous crossings and heavy trestlework there were no delays in track construction on this account.



GENERAL VIEW OF GANZER CANYON TRESTLE
This structure has a length of 925 ft., a maximum height of 155 ft. and contains 1,100,000 ft. b.m. of lumber.

The design of the trestles as well as the initial work of construction was under the direction of George Scoggin, chief engineer and F. I. Roth, assistant engineer, Portland, Astoria & Pacific R.R. On Nov. 1, 1921, the work was taken over by the Spokane, Portland & Seattle R.R. Co. and since then has been carried on under the direction of A. J. Witchel, chief engineer, and G. V. Lintner, assistant engineer, of that company. Construction of all trestles and bridges is being carried out by J. F. Clarkson & Co., Portland, subcontractors. The Utah Construction Co. holds the general contract.

Operation of a Drainage Pumping Plant

PERFORMANCE and operating cost of a drainage pumping plant on the Yuma project of the U. S. Reclamation Service as given by D. C. McConaughy, office engineer, in the February issue of the *Reclamation Record*, are summarized in the accompanying table. Two screw pumps, a 36-in. and a 30-in., driven by 100-and 75-hp. oil engines, have capacities of 60 and 30 sec.-ft. respectively. Provision is made for two more 36-in. units. The lift is variable, partly on account of changing water level and partly because the pumps are operated normally only a portion of each day, so that water accumulates in the forebay. In 1921, the plant averaged 8½ hours operation daily, with an average lift of 9.25 ft. During a 6-weeks' flood stage in the Colorado River, the head reached a maximum of 14.2 ft. and the maximum daily operation was 22 hours. A chief operator and one assistant constitute the regular force, with a second assistant during the high water period. This force will be sufficient to operate the plant when additional units are installed.

PERFORMANCE OF DRAINAGE PUMPING PLANT

	Cost	Per Cent of Total
Operation: Labor	$4,176.74	37.5
Fuel	3,143.54	28.2
Lubricants	811.36	7.3
Repairs to machinery: Labor	435.76	3.9
Materials and supplies	1,360.00	12.2
Minor equipment, repairs and supplies	864.56	7.8
Minor miscellaneous expense	16.65	0.1
Equipment	330.00	3.0
Total	11,139.61	100.0
Per acre-foot	0.437	....
Per foot acre-foot	0.044	....
	Pump Performance	
Average run per day	100-hp., 9.1 hr.; 75-hp., 9.3 hr.	
Average lift (both pumps)	9.9 ft.	
Water pumped: acre feet	25,520	
Foot acre feet	253,170	
Fuel oil, per acre foot	1.34 gal	
Per foot acre foot	0.13 gal.	

How To Inspect Asphalt Paving Mixtures at the Plant

Testing Outfit Required—Inspection, Testing and Storage of Materials—Proportioning the Materials—Methods of Sampling—Daily Report Blank

BY W. J. EMMONS

Professor of Highway Engineering, Agricultural and Mechanical College of Texas, College Station, Tex.

PLANT inspection is one of the essential details of asphalt pavement construction and, if intelligently carried on, is a measure of true economy. Given an inspector endowed with common sense, tact and a knowledge of the principles of asphaltic construction, the engineer may feel assured that the component materials and the resulting product will conform to his specifications and that in its uniformity of composition the mixture will almost certainly be far superior to one whose proportioning is left to the contractor's forces.

RULES FOR INSPECTORS

1. An inspector with a chip on his shoulder has a hard time getting what he wants.

2. Except to the mixing crew, when quick action is demanded, give no direct instructions to the laborers—make known your desires to the foreman.

3. Do not discuss plant problems and difficulties while off the job—a twisted version of your account may reach the engineer or contractor and cause embarrassment.

4. Do not make unsolicited suggestions regarding the operation of the plant unless it is for the good of the pavement mixture.

5. Make tests upon new materials promptly, decide carefully whether they should be accepted or rejected, and do not reverse your decision without very good reason.

6. Be fair and consistent in your rulings. Remember that the contractor as well as the engineer has definite rights under the contract.

7. Get your daily reports in daily.

Field Laboratory and Equipment—A field laboratory should be established at the paving plant. It may be located in any convenient structure which is well lighted and in which a work bench is available. Preferably it should contain a window commanding a view of the mixer platform in order that the inspector may be in constant touch with operations there. The following apparatus should be supplied the inspector:

1—Penetrometer, field size, with standard needle.
1—Balance and set of weights, capacity to not less than 100 grams and sensitive to 0.1 gram, for sand tests.
1—Balance and set of weights, capacity to 1,000 grams and sensitive to 1 gram, for sieve tests upon coarse aggregates.
1—Set of sand sieves—10-, 40-, 80-, and 200-mesh sizes.
1—Set of stone screens—¼-, ½-, ¾-, 1-, 1¼-, 1½-in. diameter holes or those necessitated by the maximum size of aggregate to be used.
2—Armored asphalt thermometers reading to 600° F.
1—Trowel.
24—Tin cans, approximately 2⅛ in. in diameter by 1⅜ in. in depth for penetration tests upon asphalt.
1—Ten-quart bucket for cooling penetration specimens.
1—Small dipper or ladle for sampling asphalt.
1—Wood paddle for the pat test upon sheet asphalt mixtures.
1—Set of specifications.
A supply of stout unglazed paper for the pat test.
A supply of report forms.

Duties of Inspector—The duties of the inspector should be as follows:

1. To test materials as received and during use and to see that they are not mishandled during storage.
2. To oversee the combination of materials, including the checking of proportions, accuracy of scales, and regulation of temperatures.
3. To secure samples of materials and the mixture as produced.
4. To submit daily reports to the engineer, giving full information regarding the operation of the plant.
5. To secure data regarding the origin and the costs of materials and the cost of plant operation.

Asphalt—Ordinarily the inspector is required to test the asphalt for penetration only, and it is common practice to allow an approved brand to be used, provided the consistency is correct, without awaiting the results of complete tests from the laboratory.

A penetration test should be made upon shipments of asphalt as soon as the car is steamed and upon any which may have been left over from the previous day's operations. The asphaltic cement is kept hot by means of direct fire or steam and is agitated by steam or air. High temperatures (above 325 deg. F. for most asphalts) and violent agitation both tend to reduce the penetration and may even change the characteristics of the asphalt if carried to extremes.

When a refined asphalt and a flux are to be combined into an asphaltic cement, the inspector must determine the combination required to yield the desired consistency. This is most easily accomplished by preparing three or four mixtures of the refined asphalt and flux in widely different proportions and plotting a fluxing curve based upon the penetrations derived from them, using the number of parts of flux to 100 parts refined asphalt as ordinates and the penetrations at 77 deg. F., as abscissas. The ordinate of the point upon the curve corresponding to the desired penetration will give the parts flux to the 100 parts refined asphalt which it is necessary to use.

In order that accurate and consistent results may be obtained in the penetration test, the following rules should be strictly observed:

1. Fill the small can with hot asphalt and set aside for one-half hour in order that it may cool to air temperature. Be sure that the sample is free from air bubbles and that no dust from the plant can get into it.
2. Immerse the sample in water at exactly 77 deg. F. for one hour. (Sample should never be rapidly cooled in ice water.)
3. Perform the test with sample under water held accurately at 77 deg. F.

4. Specimens which have stood for more than three hours should be carefully reheated to about 325 deg. F., stirred and recooled under the conditions given above.
5. Take particular care that the needle is not allowed to rust or the point to become dulled. Stick it into a cork when it is not in use.
6. Wipe the needle with clean cloth between tests; never with oily or gasoline-soaked waste.

Sand—The sand supply should be watched by the inspector with extreme care, for upon its composition the success of the pavement largely depends. A general inspection should be made and samples for sieve analyses selected from all sand in storage piles as soon as the inspector reaches the plant. He should note the number of varieties, their individual uniformity and whether each is piled separately or is more or less mixed with other grades. This latter practice is very bad practice and should be guarded against. Subsequent shipments should be inspected and tested as soon as received to determine not only their suitability, but also whether they may be stored with the present stock or are of such different characteristics that they must be piled separately.

Samples must be taken so that they will be truly representative of the whole mass. This may best be accomplished while the sand is moist, as segregation of sizes is then avoided. The mixture of several handfuls, scraped from the vertical faces of holes dug into the pile at a number of points, constitutes a convenient method of sampling. The large sample should be taken to the laboratory, thoroughly mixed and reduced to the proper size for a sieve analysis by the quartering method. A 100-gram sample is sufficiently large for a sieve analysis, and if the material is dry the test may be run immediately. If the sand is moist the sample obtained by quartering should be a few grams heavy in order that it shall weigh not less than the 100 grams after drying. The 10-, 40-, 80- and 200-mesh sieves are generally used in making sieve analyses at the plant.

As the sand in most mixtures is a combination of two or more sands from the stockpiles, it is well to check the uniformity of feeding by frequent samples taken from the hot sand storage bin. A small frying pan or a wooden box with a short handle makes a convenient sampler. The sampler is taken at the time a batch is being drawn into the measuring box by passing the sampler back and forth through the stream. The first material flowing from the bin may not be representative and it is, therefore, better to delay taking the sample until a few seconds after the gate is opened. After cooling, the sample should be quartered to 100 grams and screened.

Stone screenings are sampled and tested by the same general methods outlined for sands. In the sieve analysis, however, sieves of larger sizes are used as required. To avoid excessive wear upon the fine mesh sieves, the sample is divided over the 10-mesh sieve, the proportions retained and passing noted, and separate analyses run upon each. The ordinary 100-gram sample is used for the finer portion, but 500 grams should be selected for the coarser. By multiplying the several component per cents constituting each sieve analysis by the respective per cents which the fine and coarse materials bear to the original sample of screenings, the sieve analyses of the parts finer and coarser than the 10-inch mesh sieve are proportionately reduced to per cent of the original sample.

Crushed Stone and Gravel—These materials, as they appear in the storage piles and shipments, should be inspected for freedom from weathered, or disintegrated particles and coatings of dirt.

It is difficult to sample large masses of coarse aggregate, especially if the sizes composing it are somewhat segregated. The best method is to go over the pile carefully, noting the presence or lack of uniformity, and take shovelsful from several locations in such a manner as to represent the composition of the whole as closely as possible. The sample so selected may weigh 40 or 50 lb. and should be collected in a large box or clean sack. After the sample is quartered down to 4,000 or 5,000 grams, a sieve analysis may be run by ordinary methods.

Grades of coarse aggregates, differentiated upon the basis of nature or test characteristics should be stored in separate stockpiles. The unloading of dirty or otherwise unsuitable aggregates should not be permitted.

Dust—The one test which the inspector is usually required to make upon material used as filler is that for fineness, or per cent passing the 200-mesh sieve.

The dust may be received at the plant either in bulk or in sacks. In the former case it is only necessary for the inspector to collect small quantities from a number of different places in the mass to secure his sample. In the latter case small quantities should be taken from a dozen or more sacks. Once the sample is obtained, it should be quartered down to 50 grams and shaken over the 200-mesh sieve until virtually no dust falls upon a clean sheet of paper placed under it. The residue retained by the sieve is then weighed and the per cent passing computed.

Dust which becomes damp or wet during storage forms into lumps which do not break down in the process of mixing and such material is unsuitable for use as filler.

Proportioning Cold Aggregates—The uniformity of all asphaltic paving mixtures depends to a greater or lesser extent upon the care and accuracy with which the cold aggregates are fed into the plant. Clearly defined piles of the several materials should be located at the foot of the cold aggregate elevator with one or two laborers assigned to feed them systematically in simple proportions.

Sometimes the contractor sinks a box around the foot of the cold aggregate elevator, dumps into it alternate wheelbarrowsful of the several materials and assigns a single man, armed with a hoe, to the task of maintaining the feed. Such a practice seldom results in uniform aggregate at the mixer, since the materials are very likely to become segregated. The only conditions under which such proportioning should be permitted are those in which each batch is fed into the plant and delivered to the mixer as a unit, and in such cases the barrows should always be accurately filled to a level of known volume.

Proportioning the Hot Aggregates—From the dryer the heated aggregates are elevated to screens which separate the materials and deflect them into the stone and sand bins over the mixing platform. Segregation of sizes in these bins is one of the difficulties in the path of uniform proportioning and constitutes the strongest objection to the use of a single storage bin when such stone and sand mixtures are being prepared. Holes in the partition between two adjacent bins or in the screens will result in a mixture of two classes of aggregate and entirely upset the scheme of proportioning. The same thing may occur in some plants from the too rapid feeding of any one cold material, the result being that it finally fills its bin and overflows into the next. The composition of aggregate showing contamination with others should never be guessed at as a basis for the addition of bitumen, but the bins should be emptied and the trouble corrected before mixing is resumed.

CITY OF BRYAN, TEXAS
10th Daily Report of Asphalt Plant Inspection

Street: *College Ave.*
Type of Const.: *2-in. Mod. Topeka*
Contractor: *Municipal Paving Co.*
Location of Plant: *S. P. Siding*
Foundation: *6-in. Concrete*
Type of Plant: *Peerless*
Weather: *Fair*
Date: *9-*
Temp. A.M.:
Temp. P.M.:

MATERIALS AND PROPORTIONS IN PAVEMENT

Materials	Origin or Brand	Proportions Of Feed		Batch Weights (Lb.)		Per Cent		Total Used (Tons)	In Stock (Tons)	Cost per Ton
Refined asphalt										
Flux										
Asphaltic cement	*Mexaco*			*43*		*8.6*		*5.16*	*50*	
Sand (*fine*)	*Brazos Sand Co.*	*1 pt.*		*208*		*41.6*		*12.48*	*100*	
Sand (*coarse*)	*Brazos Sand Co.*	*1 pt.*						*12.48*	*75*	
Dust (filler)	*Southern Lime Co.*			*41*		*8.2*		*4.92*	*50*	
Screenings	*Colorado Cr. Stone Co.*	*2 pts.*		*208*		*41.6*		*24.96*	*175*	
Crushed stone										
Gravel										
Total				*500*		*100.0*		*60.00*		

DAY'S PRODUCTION

Construction	No. of Batches	No. of Loads	Hours in Oper'n	Sq.Yds. Laid
Modified Topeka	*240*	*30*	*8*	*580*

PLANT OPERATING COSTS

Material	Origin	Am't. Used	Cost
Coal (tons)			
Fuel oil (gal.)			
Lub. oil (gal.)			

SAMPLES TO LABORATORY

Material	Origin	Am't. Rep't'd	Serial No.
Modified Topeka	*Daily plant sample spout*	*day's run*	*8*
Asphalt (Pen.)		*day's run*	*9*

Labor	No.	Hours	Total Hours	Rate of Pay
Foremen	*1*	*10*	*10*	
Engineers	*1*	*10*	*10*	
Skilled labor	*2*	*10*	*20*	
Unskilled labor	*6*	*10*	*60*	
Trucks	*5*	*10*	*50*	

MATERIALS TESTED AT PLANT

									Penetrations	
Material	*Sand*	*Sand*	*Sand*	*Sand*	*Sand*	*Sand*	*Scr'gs*			
Sample from	*Bin*	*Bin*	*Bin*	*Bin*	*Car*	*Car*	*Car*		No.	Test
Per cent passing 200-mesh sieve	*3.0*	*2.8*	*2.0*	*3.0*	*6.8*	*0.3*	*2.0*		*1*	*50*
Per cent passing 80-mesh sieve	*24.0*	*25.6*	*12.0*	*26.0*	*50.0*	*6.7*	*1.2*		*2*	*52*
Per cent passing 40-mesh sieve	*42.8*	*40.0*	*46.8*	*41.3*	*39.2*	*49.0*	*2.8*		*3*	*52*
Per cent passing 10-mesh sieve	*29.7*	*30.6*	*37.2*	*29.4*	*4.0*	*40.0*	*14.7*		*4*	*51*
Per cent passing 4-mesh sieve	*0.5*	*1.0*	*2.0*	*0.3*		*4.0*	*43.3*		*5*	*50*
Per cent passing 2-mesh sieve							*36.0*			
Per cent passing ¾-inch screen										
Per cent passing 1-inch screen										
Per cent passing 1¼-inch screen										
Per cent passing 1½-inch screen										
Per cent retained 1½-inch screen										
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*		Ave.	*51*

Remarks:—*Plant shut down 2 hrs. for repairs on elevator. Low 80-mesh at 1 P.M. due to poor feeding by new laboror.*

J. W. Brown, Inspector.

The measurement of aggregates by volume is sometimes attempted, and, while not as easily controlled as measurements by weight, uniform results may be obtained provided the box-man can be impressed with the necessity for accuracy. The asphalt is always measured by weight and the volume of aggregates must be determined which will correspond to their proportions by weight in the mixture. The point to which this volume of sand fills the measuring box must be indicated by a permanent and clearly recognizable mark. A second mark must be made showing the height reached by the combined aggregates after the stone has been placed on the sand. The box-man must be required always to draw the sand first and to level each material even with its mark by means of a short hoe.

The greatest care should be taken to insure the accuracy of the scales. Before work starts the inspector should check them by means of test weights or with large rocks or sacks of cement previously weighed upon scales which may be found in express depots or elsewhere. After mixing begins whole loads should, if possible, be frequently weighed upon platform scales and checked back against the batch weights at the plant. Care should be taken that aggregate does not wedge under the free platform upon which the measuring box is mounted and all parts of the weighing apparatus should be cleaned daily. If the scales get out of order, mixing should be immediately suspended until repairs are made.

Unless the box-man is experienced and cool headed he will many times overrun his weights. This may easily be a serious situation and he must be trained to work carefully. Sand requires approximately four times as much bitumen as does an equal weight of stone, and thus, if the routine amount of asphalt be added to an unbalanced aggregate, the mixture will be rich or lean, depending upon whether the stone or the sand is in excess.

Asphalt—The volume of a given weight of asphalt varies greatly with changes in its temperature and consequently this material is always proportioned by weight.

The asphalt bucket is suspended from a set of scales and these should be checked for accuracy as was suggested previously for those supporting the aggregate measuring box. The weights, both compensating for the tare weight of the bucket and representing the contents of the bucket, should be fitted with set-screws which will prevent them from being disturbed by the vibration of the plant or accidental blows.

The attention of the inspector should be given more or less constantly to the proportioning of the asphalt and particularly at certain critical periods. In the morning the bucket is clean and cold and retains a considerable proportion of the first batches as a coating on the bottom and sides. Succeeding batches continue to build up this layer until the bucket becomes thoroughly heated, when the adhering asphalt is gradually released. Finally an almost constant quantity is retained by the bucket for such period of time as the plant remains in continuous operation. It is clear, therefore, that in order to avoid a deficiency of bitumen in the first few batches and an excess in succeeding ones, the tare weight of the bucket must be almost constantly watched and the counter-balancing weight frequently adjusted.

Filler—Dust may be weighed with the other aggregate but is more likely to be blown away by the wind, especially if the mixing platform is not enclosed. Ordinarily, the weight of dust which one or more ordinary water buckets will hold is determined and the proper number of bucketsful added to each batch. As it is easy for the laborer only to partially fill the buckets or to forget exactly how many are required, the inspector should watch this detail carefully.

Regulation of Temperatures—Mixtures reaching the street should be hot enough to rake properly but not hot enough to permit the segregation of materials in this process or to injure the asphalt. Under ordinary summer temperatures outside limits for asphaltic concretes and sheet asphalt should be 225 deg. F. to 350 deg. F.

Of almost equal importance with the proper degree of temperature is the uniformity with which it is maintained. All asphalts suffer a decrease in penetration when heated, and the higher the temperature the greater will be the extent to which they will harden. Also hot mixtures compress to a greater degree than do cold ones. Thus extreme variations in temperature at the plant may seriously affect the serviceability of the pavement.

Constant attention must be given the rate of feeding cold aggregates and the fires under the dryer if uniform temperatures are to be maintained. When the plant starts in the morning, materials are fed in slowly, but nevertheless the first aggregate through the cold elevator, bins and measuring box may reach the mixer at too low a temperature to be properly mixed. By pushing the fires and feeding slowly, aggregate will soon come through at satisfactory temperatures and as soon as it does the rate of feeding should be increased. Otherwise the temperatures may swing to the other extreme and necessitate another delay until they can be lowered.

A method of reducing temperatures which are too high, is to increase the rate of feeding cold and damp aggregates and at the same time open the door of one or more of the fire boxes. Aggregate which is coming through at too high a temperature may, in some types of plants, be cooled by throwing cold sand into the heated aggregate as it falls out of the dryer.

Whenever it appears that aggregate is being received at improper temperatures, it should be held in the measuring box and tested despite the eagerness of the mixer crew to rush it through. Let the thermometer remain in the material until it ceases to rise. Remember that it is easier and less expensive to reject aggregates before rather than after the bitumen and dust have been added. In the former case they may be hauled back to the storage piles and used again later; in the latter case the batch is a total loss. It should seldom be necessary to reject a completed batch due to improper temperatures, although occasion to do so frequently arises due to blunders in proportioning on the part of the mixing crew.

Mixer and Conditions of Mixing—The mixer must be in good shape, all blades must be present, and, while long enough to prevent masses of partially mixed asphalt and aggregate from adhering to the sides of the mixer box, should not be long enough to wedge coarse particles. The blades should be so spaced and placed that the mixture is worked from both ends toward the center and the speed of rotation should be sufficient to churn the mass vigorously.

The aggregate, after being run into the mixer, should be turned for a few seconds in order to permit a uniform distribution of the filler before the asphalt is added. The asphaltic cement should be poured in slowly and uniformly over the full length of the mixer. The time of mixing should be extended somewhat beyond the instant at which the mixture appears uniformly black. At proper temperatures one minute for sheet asphalt and three-quarters of a minute for coarse graded mixtures is sufficient.

Asphaltic pavements should not be laid during a rain or on a wet base. As soon as rain starts to fall the inspector should direct that plant operations be stopped. If the precipitation is very light he may allow the last truck to proceed to the street and leave its disposition to the inspector there. Following light summer showers it is frequently possible to proceed with the work, but the inspector should await advices from the street before permitting the resumption of operations.

Samples of Materials and Mixtures—Samples of all new materials not conforming to those approved before the work is started should be sent to the engineer or laboratory, even though the inspector regards them as suitable and permits their use. Samples of aggregates should be taken by the methods outlined earlier in this article.

For proper control daily tests should be made upon the mixture for bitumen content and sieve analysis of the aggregate. The plant inspector should gradually collect a sample for this purpose by taking a trowelful from each of a large number of batches during the day. It may be heated, mixed and quartered to the proper size at the end of the day's work. The proper sizes of samples for the several materials are as follows:

Sand, lb.	5
Screenings or stone passing a ¼-in. screen, lb.	10
Coarse aggregate, lb.	25
Asphalt, qt.	1
Sheet asphalt wearing surface mixture, lb.	½
Topeka surface mixture, lb.	1
Binder or coarse graded asphaltic concrete, lb.	3

All samples should be numbered serially and further identified by reference to them in the inspector's report.

Inspector's Reports—The engineer must be kept fully informed regarding the progress of the work and conditions at the plant. The inspector is furnished with report forms for this purpose and it is very necessary that they be submitted daily. The reports should be numbered in series beginning with the day the inspector reaches the plant and continued (Sundays excluded) until the work is completed. Every detail of the plant operation and inspector's activities should be included. A specimen report is shown here, illustrating a day's operation upon a modified Topeka mixture.

Keeping Costs—Cost data are necessary in order to formulate accurate estimates and the inspector should collect detailed information concerning them. If possible, the costs of materials, bills of lading showing weights of materials, and the wages paid to labor should be obtained from the contractor. The quantities of fuel and lubricants used may be obtained from approximate weekly consumption.

New Outfall Sewer and Sewage-Works Progress at Los Angeles

A PROGRESS report on the outfall sewer and sewage works project of Los Angeles, Calif., for which $12,000,000 of bonds were voted on Aug. 29, shows that on Dec. 4 there had been built or put under contract 3.68 of the 7.41 miles of emergency relief sewer, that plans had been made or were well under way for the remainder of this sewer; plans were being made for a 3-m.g.d. emergency sewage-works near Culver City, consisting of storage reservoirs, pumping plant, Imhoff tanks and sludge beds, sprinkling filters and secondary tanks, these works to be enlarged as the flow in the relief sewer increases; plans were being made for a new ocean outlet at Hyperion, at the end of the existing trunk sewer, the new outfall to be of 60-in. cast iron and to extend about a mile into the ocean, to a water depth of some 54 ft. below mean sea level.

The emergency relief sewer from the present ocean outlet to the emergency sewage-works on Ballona Creek is designed for a capacity of 40 sec.-ft., to accommodate the excess dry-weather sewage flow of the next three years. For the upper 2.15 miles of this relief sewer, now built or under construction, there is being used 44-in. riveted steel pipe formerly used on the construction of the Los Angeles Aqueduct. For the remaining 5.26 miles of this sewer a contract was awarded on Nov. 29, specifying Ferguson's segmental block for 1.58 miles, and for the remaining 3.68 miles there is under consideration the same material with wood-stave pipe as an alternative for the upper end and for the lower end reinforced-concrete pipe lined with vitrified clay blocks, with wood-stave pipe as an alternative.

The construction work at Hyperion will be divided into three contracts: (1) The ocean outlet a mentioned; (2) about 700,000 cu.yd. of grading f sewage-works; (3) the sewage-works proper. dates for letting these three contracts have not fixed, but it is expected that the lettings will take and the sewage-works and the ocean outfall be pu use before the new outfall to the ocean is put construction.

John A. Griffin is city engineer and W. T. Knowlt engineer of sewers at Los Angeles.

Operator's Viewpoint of Canal and Structure Design

Irrigation System Efficiency and Maintenance Depends on Proper Layout—Experience on Valier Project Given

By George Ebner

Operation Engineer, The Valier-Montana Land and Water Co., Valier, Mont.

WITH the increasing importance of problems relating to irrigation operation and maintenance and the greater study being given them a review of many practices which have been shown advantageous are of value when new construction is planned or replacement or remodeling is necessary. Observations are given on the location of structures, silt problem, design to prevent or minimize slides, methods of handling weeds, alkali and preferences as to chutes, pipes or drops.

The main canal should be free from check gates which create orifice conditions and under no circumstances should two sets of orifice gates, without overflow, be used in a diversion structure. If it is necessary, and it often is, to check water into a lateral some flashboard arrangement is preferable, since it is impossible to check with gates under the varying flow of a main canal. A combination of gate and flashboard control is oftentimes an advantage. Generally a weir action control will cause less surge and wash downstream and result in less maintenance expense.

Unless exceptional conditions exist no lateral or service turnout should ever be placed above the main canal grade. Excessive checking is necessary and good service is not possible. Whenever the turnout or intake can be placed below canal grade the check can be eliminated.

In diversion structures where silt laden streams are encountered the surface water is taken into the canal; in other cases silt traps and wasteways are used to wash out the sand during flood seasons. However with many mountain streams the entire flow even in flood season is taken. When the creek has a fall of 10 ft. per mile and the canal 3 ft. it can be seen that all the silt load will be thrown into the canal. By raising the diversion weir and canal intake a backwater pond upstream will be formed where the creek can unload. This plan was used on the Birch Creek headworks, designed by C. E. Atwood, chief engineer of the Valier Project, and after four years' use no appreciable silt has reached the headgates or has entered the canal.

On side hill location where the bank has a tendency to slide, it is believed that a wide, shallow canal section is better than one deeper and narrower. The bank pressure is less and there is less head to cause seepage. Often this situation can be benefited by a parallel drain at the toe of the bank with sufficient outlets. Bond ditching under the embankment and rolling the fill material are of direct benefit. A preliminary investigation may disclose a tendency to slide and make a lined section or bench fluming advisable. Pumping plants could have been built in some cases where distribution begins at no greater construction cost than that of the gravity canal and the pumping cost would not exceed the gravity section maintenance charge.

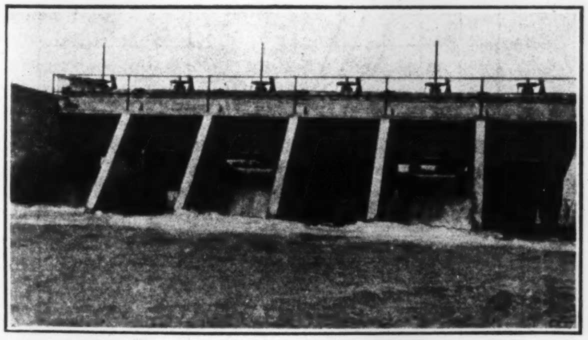
No canal should be permitted to cut and carry silt. With excessive silting portions of the canal may lose area so that to permit cleaning service must be interrupted every season. In maintenance work the construction of grade controls and drops will be found more economical than never ending silt cleaning. Too much importance cannot be attached to this point. The writer has in mind two canals of 400 and 500 sec.ft. capacity, slope of 0.004 and 18 and 20 miles length which after ten years are carrying their rated capacity without any silt cleaning at all.

Because of the growth of grass and weeds it is good practice to make small ditches of excess capacity. Cleaning is deferred and the yardage per station is light. Where moss grows an excess cross-section is needed in all canals to insure good delivery service.

Structures have been built which meet all hydraulic requirements but easily become clogged with weeds and thistles. This is true of baffles and of small openings below curtain walls. With a combined turnout and check the turnout is more likely to clog than it would were the check a short distance downstream. Of various measuring devices, weirs and Venturi flumes offer less obstruction than orifices.

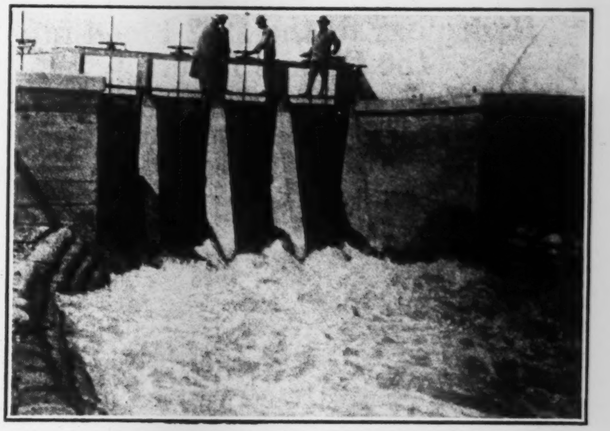
Where alkali is present it is imperative that attention be given design, drainage and kind of material for initial or replacement structures. The cement gun is found profitable for repair work.

Wherever topography will permit their use open concrete chutes have been found more economical than pipe lines or a series of drops. It is axiomatic that all chutes should have transition intakes, computed cross-sections and be tile drained. Those built by the U. S. Reclamation Service are models in every respect. Metal chutes carrying silt-laden water are found to wear excessively under the high velocities created. The cost of a properly designed chute outlet is but slightly greater than for the outlet of a single drop. Special attention is being given the hydraulic-jump type of outlet at the present time. In the design of all intakes to chutes, flumes and drops, care should be taken to maintain upstream in the canal the proper water depth and slope.



WEIR TYPE OF INTAKE SHOWING LITTLE DISTURBANCE

Remodeling a structure may increase its capacity or lower maintenance cost. On replacement structures whenever the annual interest charge for new construction plus its annual maintenance is less than the present yearly maintenance, relocations or additional construction should be considered. For proper service and economy, the maintenance work should be kept up to requirements for no irrigation district can afford poor or frequently interrupted service.



TURMOIL WITH ORIFICE GATES PASSING 250 SEC.-FT.
Disturbance so great sand bag revetment necessary to prevent erosion.

The Proper Term for Water-Works Bonds

BY CHARLES W. SHERMAN

Of Metcalf & Eddy, Consulting Engineers, Boston, Mass.

Conclusions of a paper read before the New England Water Works Association, Dec. 12.

1. The average life for a "typical" water-works plant in this country is about 50 years. It will rarely be less than this in individual cases, and may be as much as 60 years or more for some works.

2. Complete records of depreciation, including abandoned structures, of a number of water-works plants of considerable age show that the total accrued depreciation of the physical plant of such works is about 20 per cent of the cost. Departures from this mean are not great. Records of depreciation suffered by the plant still in service, modified by a suitable allowance for plant abandoned, confirm this as a reasonable figure.

3. The corresponding average age for works of 50 years' life is 20 years, leaving 30 years average remaining life. If the average useful life were 60 years instead of 50, the average age would be 27 years and the remaining life 33 years. Thirty years is a fair estimate of the remaining life of any water-works plant in normal condition, and therefore a proper term for which water-works bonds should run.

4. If the works have suffered a depreciation of 20 per cent, including abandoned property, there is a residual value of 80 per cent of cost of the physical plant. Water-works bonds may therefore be issued up to 80 per cent of the cost of the works.

5. Municipally-owned water-works should be self-supporting, and their financing should be on the same basis as that of private corporations.

6. The present Massachusetts law which limits bonds for the extension of municipally-owned water-works to 5-year terms is illogical and burdensome and should be repealed.

7. Special legislation for particular cases, made necessary by the existence of the five-year limit, is undesirable from every point of view.

8. Suitable control over municipal bonds for water-works purposes can be exercised by requiring the approval of the Public Utilities Commissioners in exactly the same way as for bonds of a private water company; and misuse of water revenues can be avoided by legislation limiting their uses to water-works purposes.

Hydrology of the 1922 Flood in the Illinois River

Maximum Stages Reached with Minimum Flow Due to Channel Restrictions by Levees—Long Period of Heavy Rainfall

By H. E. Grosbach
District Engineer, U. S. Geological Survey, Chicago

The Illinois River flood of April, 1922, was notable in that the stages reached were the highest ever observed, although the flow was less than had been recorded within twenty years. This flood resulted from an unusually long continued period of rainfall. Precipitation occurred over the drainage basin on all except nine days of the period from March 10 to April 18. Fig. 1 shows basin and drainage area. For other notes on this flood see *Engineering News-Record,* May 11, p. 804.

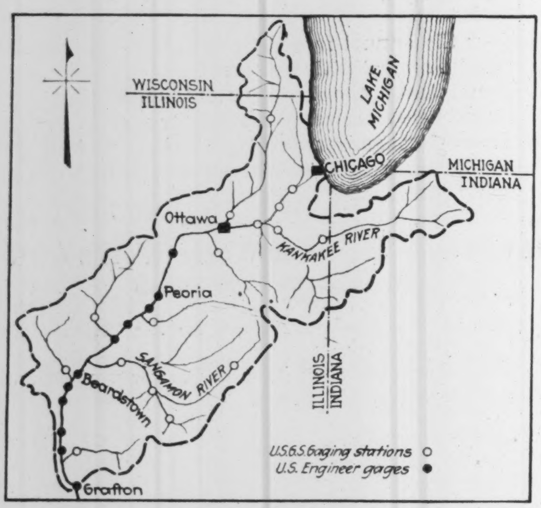


FIG. 1. MAP OF THE ILLINOIS RIVER BASIN

Daily average rainfall on different sections of the basin above Beardstown, computed from Weather Bureau records, is shown in Fig. 2. In this figure are shown also the daily discharges at Peoria and Beardstown for April, as determined from gage readings of the U. S. Engineers and discharge measurements by the U. S. Geological Survey, co-operating with the Illinois Division of Waterways and the U. S. Public Health Service. The discharge includes the flow of the Chicago drainage and sanitary canal, diverted from Lake Michigan.

Precipitation was heaviest in the drainage area of the Sangamon River, the largest tributary, where the average rainfall from March 10 to 14 was 3.0 in; March 19 to 20, 1.4 in.; March 24 to 31, 2.9 in.; and April 3 to 18, 5.4 in. The maximum 24-hour fall recorded was at Morrisonville in the Sangamon basin, and amounted to 4.4 in. The Sangamon was at high stages for several weeks reaching a maximum discharge of approximately 39,000 sec.-ft. at its mouth on April 14. Some tributaries from the north received much less rainfall and neither the Fox nor Spoon rivers reached flood stages. A maximum of 30,400 sec.-ft. was recorded on the Kankakee River at Custer Park, near its mouth.

Profiles of the maximum water stages in the lower section of the river for various floods are shown in Fig. 3. The flood of 1844 reached higher stages than any previously observed since the Illinois Valley was settled. The elevations of that flood were determined by the U. S. Engineers from authentic high water marks.

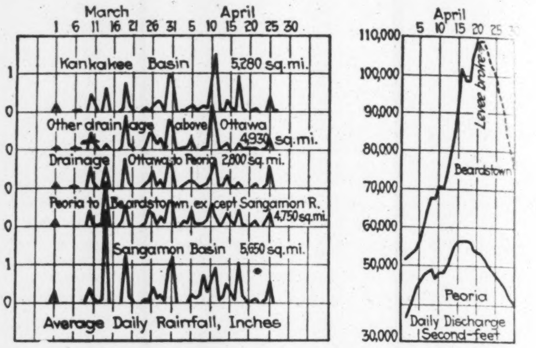


FIG. 2—DAILY AVERAGE RAINFALL AND DISCHARGE

The other profiles were drawn from gage readings by the U. S. Engineers. Maximum discharges are given below as indicated by the Geological Survey measurements except that the 1904 discharge at Beardstown was determined by the U. S. Engineers:

	1904	1913	1922
Peoria	70,000	55,000	56,600
Havana	80,000	......	68,000
Beardstown	115,000	......	109,000

It will be noted that the 1913 flood with practically the same stage and considerably less discharge at Peoria than recorded in 1904 rose to higher stages below Havana. No discharge measurements were made below Peoria in 1913. In 1922 the discharge at Peoria was considerably less than in 1904 and at Beardstown slightly less. The maximum stage in 1922, however, was 1.7 ft. above that in 1904 at Peoria, 2.5 ft. higher at

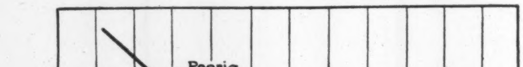


FIG. 3—PROFILES OF ILLINOIS RIVER FLOODS

Havana and 5.0 ft. higher at Beardstown, where the greatest damage resulted.

These increased stages were due largely to the construction of levees for land reclamation, which reduced the natural overflow channel of the river. The failure or overtopping of some levees near the crest of the flood, while allowing waters to overflow and damage surrounding country, did not provide sufficient outlet to cause a material lowering of the stage.

Small Tunnels Lined With Precast Concrete Ribs

Tongue and Groove Sections 9 In. x 6 In. and Weighing 330 Lb. Swung From Flat Cars Into Place by Two Men

At the Calaveras Dam of the Spring Valley Water Co. in California, short tunnels were required to admit water from intermediate levels of the reservoir to the intake shaft. As these tunnels traverse swelling ground, it was necessary to provide temporary support. A form of timbering was adopted which would also serve as permanent lining, in the shape of precast concrete ribs, as shown in the accompanying illustration.

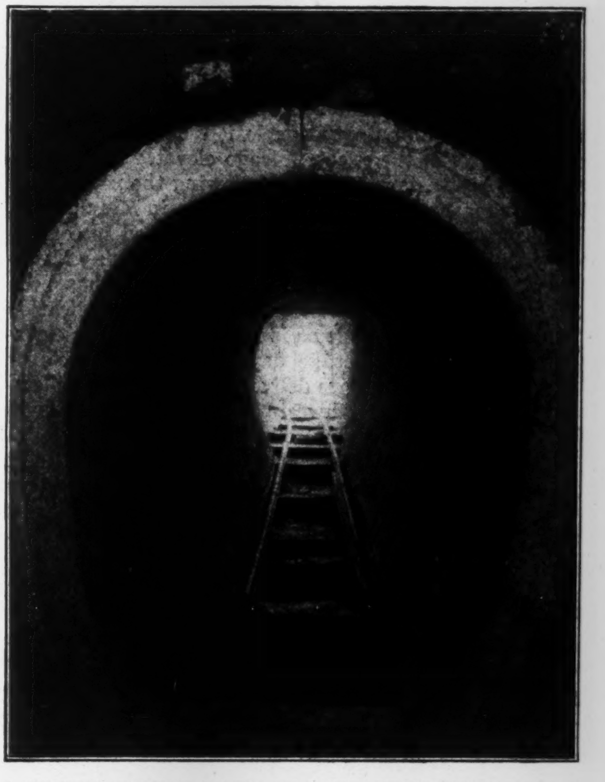
Inside the lining the tunnels are 4½ ft. high and have a maximum width of 3½ ft., with a 2-ft. width at the bottom. Three such tunnels are being built at different levels, the total length of the three being 600 feet.

As tried out at first, the ribs were made 6x6 in. in section and weighed about 220 lb. each. These were handled so much more rapidly and easily than anticipated that the size was changed to 9 x 6-in. section, the 6 in. being the thickness of the lining. These larger ribs weigh about 330 lb. apiece; they are taken into the tunnel on small flat cars and after a little practice a crew of two men is able to swing them up into place with ease. As a convenient means of securing good alignment each rib has a V-shaped tongue on one face and a groove of the same cross-section on the opposite face.

Ties under the track laid in the tunnel for construction purposes consist of heavy wood blocks with ends beveled to parallel an inclined surface at the lower ends of the ribs, as shown in the illustration. Two-inch planks are placed along the ends of these blocks and serve to align the bottoms of the ribs and maintain the desired bottom width of the tunnel during construction. As the first rib of each pair is placed, it is held by a wedge near the crown of the arch until the opposite rib is set. After two or three ribs are placed any space behind them is back-filled. As a final operation in lining the tunnel the cracks between adjacent ribs are to be grouted and a 6-in. concrete floor poured.

A 1:2:4 mix is used in the ribs, which are cast in a row at a conveniently located casting yard. Wood side forms were placed for the ribs of the first pour, these forms being so spaced that when the concrete had set and the forms were removed, the space between adjacent ribs was just the width of a rib. In this way the ribs poured first served as forms for a second pour. The only provision necessary to prevent bonding was a thin film of oil swabbed on just before pouring. By taking alternate ribs from the row in this way the wood forms used on the first pour were the only ones required during the entire work.

The work is being done under the direction of George A. Elliott, chief engineer, and T. W. Espy, construction engineer of the Spring Valley Water Co., from whom the foregoing data were obtained.



A TUNNEL LINING MADE OF PRECAST CONCRETE RIBS
Note arrangement of planks and spacers in background designed to hold ribs until invert is poured.

Responsibility for Damage by Piledriving

In a case at law recently decided in London the owners of a building near the site of London Bridge sued the contractors for a new structure nearby, Robert McAlpine & Sons, for damaging their building by subsidence and vibration caused by the driving of piles. The building was over a hundred years old, but it was shown that in November, 1920, when the piledriving began, it had only recently been repaired and was declared to be in good condition. Six months later it had become dangerous and was shored up, and in January, 1922, the owners received notice from the city that the building would have to be torn down. The suit stated that the contractors had driven "671 piles more than 1 ft. square and from 24 to 38 ft. in length," through 16 ft. of made ground into clay, and that more were to be driven. The plaintiffs charged that at a certain depth the clay transmits vibrations like a fluid. The contractors denied the damage and denied that vibration from piledriving was capable of causing injury to property. The judge, however, found that the damage had been caused by the piledriving and that the contractor was responsible. The case is reported in *The Engineer*, Dec. 1.

Dust Removal by Vacuum Sweeping in Grain Elevator

Deposit in Vacuum Machines Fed Into Pipes of Low-Pressure System, Thence to Collector Stations—2 Tons Daily Average

THE first application of the vacuum sweeping system for the removal of dust in grain elevators, in order to reduce or eliminate the explosion hazard, has been made recently in the great Chicago elevator of the Chicago & Northwestern Railway, following the reconstruction of the plant after the dust explosion in March, 1920. The dust removal installation was mentioned in connection with the reconstruction work in *Engineering News-Record*, Sept. 21, 1922, p. 483. This system has been used in other industries but this is the first application on such an extensive scale as is required for grain elevator service. In an average day about 250 bushels or about two tons of dust are delivered to the main collecting station at the Northwestern elevator. This is in addition to a low pressure collecting system.

Since the presence of dust in enormous quantities is unavoidable under present methods of operating grain elevators, the problem is to remove this dust before it accumulates to such an extent as to be dangerous. Removal of the deposits by brooms, scrapers and air jets causes clouds of dust which again settles so that only a part of the accumulation is actually removed from the building. By the new vacuum-sweeping system, which is a development of the familiar vacuum cleaner on a large scale, the dust is not dispersed but is drawn directly through suction nozzles into flexible tubes connected to piping which leads to large collectors or tanks. A vacuum of about 11 in. Hg. is maintained. The deposit in these collectors is fed automatically into the pipes of a low-pressure pneumatic system which delivers it to a main dust collector station at some distance from the elevator. The dust is separated from the air current before it reaches the exhauster, but the collection of the dust was a special problem owing to the great quantities to be handled, so that an ordinary collector would soon be filled. For this reason it was necessary to equip the collectors with discharge locks by which the dust is discharged continually and automatically into the low-pressure piping without the admission of air to lower the high degree of vacuum. The air passing from the collector tank is filled before reaching the exhauster so that it is discharged practically free from dust.

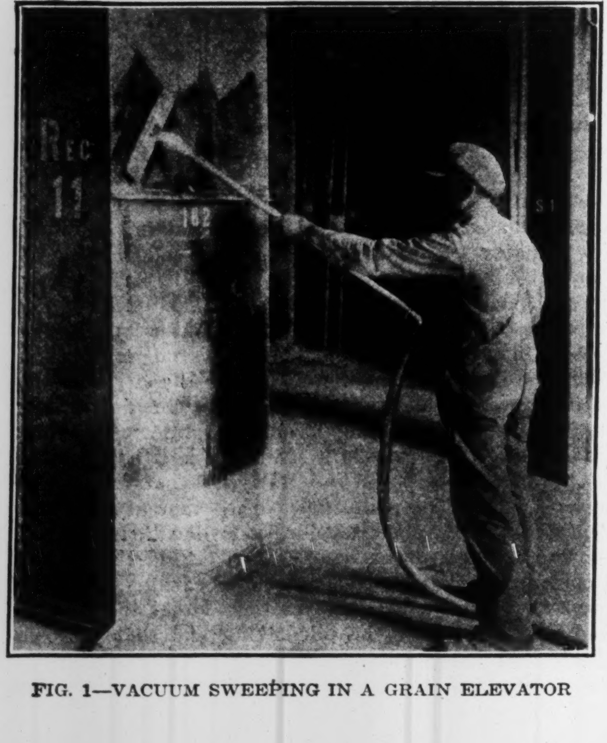


FIG. 1—VACUUM SWEEPING IN A GRAIN ELEVATOR

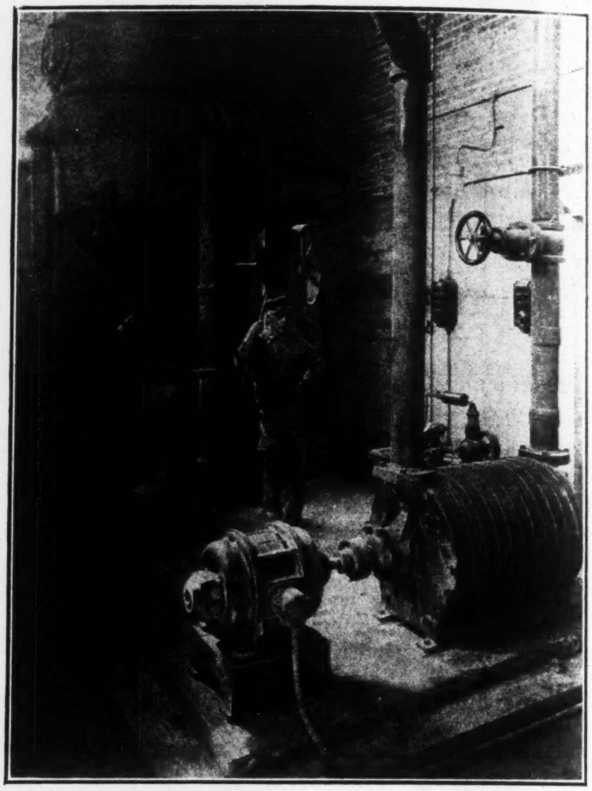


FIG. 2—VACUUM UNIT AND DUST COLLECTOR

Both fine and coarse material are handled, the latter including husks, chaff and grain particles. Fig. 1 shows the cleaning of vertical surfaces, but nozzles of different forms are used in various parts of the plant. For handling piles of material, as where tanks are emptied or grain is spilled, larger hose is employed to ensure more rapid removal. One of the four multistage centrifugal vacuum-producing units is shown in Fig. 2, with its 20-hp. motor and a filter tank which discharges the dust into a pipe of the low-pressure air conveying system. This vacuum sweeping plant for the Northwestern elevator was designed and built by B. F. Sturtevant Co., Boston, Mass.

Smokeless Powder for Blasting

Comminuted smokeless powder, the invention of Maj. John Herbert Hunter, Ordnance Department, U. S. Army, can be used in blasting, being detonated by No. 6 or No. 8 detonators, the rate varying with its fineness. In use the powder should be packed in cartridges, as is the practice with dynamite. Because of the high percentages of poisonous gases produced, it should not be used in mines, tunnels, or other close places unless the ventilation is very good.

Unique Sewage-Works and Pump-Equipment Bid Plan

Sludge from Plain Settling Tanks at Syracuse Mixed With Solvay Lime Liquors — Pump-Equipment Contract Awarded on Basis of Annual Capital and Electric Current Charges

By Glen D. Holmes
Chief Engineer, Intercepting Sewer Board, Syracuse, N. Y.

The Syracuse Intercepting Sewer Board has recently awarded a contract for the machinery and equipment for its sewage pumping station and grit chamber under specifications containing several features which are of more than usual interest. The specifications provided for alternative bids on variable-speed alternating-current motors of both the slip-ring and brush-shifting types. Each bidder was required to guarantee the calculated annual current consumption charges for the main centrifugal pumps driven by the variable-speed motors, based on the stated hourly fluctuations of flow and pumping heads, and the local power rate schedule.

In canvassing the bids for the equipment, particular weight was given to the efficiencies of the main pumps and the power factors and efficiencies of the motors. In order to determine to whom the contract should be awarded the bids were canvassed by comparing the sums of the annual amortization charges for the equipment and the guaranteed annual main pump current consumption charges submitted by each bidder in his proposal.

General Statistics—Before discussing the pumping station further, it may not be amiss to briefly summarize a few important statistical facts and other pertinent data. According to the 1920 census, Syracuse has a population of 171,717. The greater portion of the city is sewered on the combined system. The intercepting sewers have been designed and constructed for an estimated future population of 400,000 with a per capita contribution rate of 375 gal. per day. The variation in the sewage flow now reaching the treatment site ranges between a minimum dry-weather discharge of 10 m.g.d. to a maximum storm discharge of 150 m.g.d. The average flow for the year 1940 has been estimated at 27.5 m.g.d. and the present works are being constructed to treat twice this average, or 55 m.g.d. Pumping will be required for only such sewage as is to be treated and the excess over the 55-m.g.d. rate will flow around the plant by gravity directly into Onondaga Lake, which also receives the effluent from the treatment works.

Treatment—Sewage on reaching the works will first pass through a venturi flume for measurement and then enter an overflow chamber where excess storm flows will be diverted. From the overflow chamber the sewage to be treated will pass through an inclined rack or bar screen having clear openings of about 3 in., through a grit chamber, then through a mechanically-raked bar screen, with clear openings of ½ in., into the suction well, from which it will be pumped to plain sedimentation tanks equipped for the continuous or frequent removal of the deposited sludge.

The clarified tank effluent will flow by gravity into the outfall conduit and thence be discharged into Onondaga Lake through deep-water multiple outlets located about 1,600 ft. from shore. Sludge from the sedimentation tanks will be removed under water and pumped about 12,000 ft. to the lime waste beds of the Solvay Process Co. At these beds the sewage sludge will be thoroughly mixed with the lime liquors, which carry about forty times as much suspended solids as the sludge and contain about ten times the amount of active reagents required for complete sterilization of the sewage sludge.

COMPARATIVE BIDS FOR TWO TYPES OF MOTORS AND EQUIPMENT FOR SEWAGE PUMPING STATION AT SYRACUSE, N. Y.

Bids were received on Oct. 10, 1922, for slip-ring and brush-shifting motors and corresponding electrical equipment and were compared on the basis of annual amortization charges plus annual charges for electric current, as detailed below.

Item		Public Service Production Co.	John W. Danforth Co.	Roberts Filter Mfg. Co.	McCarthy Brothers & Ford
1*a*.	Switchboard, control mechanism and wiring, brush-shifting type motors	$38,400	$23,247	$22,600	$26,500
1*b*.	Switchboard, control mechanism and wiring slip-ring type motors	39,880	21,237	20,500	24,100
2*a*.	Main centrifugal pumps and brush-shifting type motors	41,175	38,082	40,400	43,000
2*b*.	Main centrifugal pumps and slip-ring type motors	32,025	23,248	24,600	24,600
3	Vacuum priming pumps	2,050	1,836	1,625	2,280
4	Sump pump and motor	2,185	1,794	1,740	3,000
5	7½-ton hand travelling crane	1,740	1,823	1,860	1,850
6	54-in. sluice gate	2,150	1,997	1,890	2,200
7	24-in. gate valves	2,150	1,525	1,750	2,110
8	Main suction and discharge piping	7,785	5,789	5,450	15,900
9	Vacuum piping system	2,425	1,621	1,560	2,350
10	Grit chamber sluice gates	8,200	6,727	8,050	9,300
11	Motor-generator set	1,135	1,012	950	910
12	Tram-rail system	2,100	1,882	2,465	2,240
13	Hoist, cab and bucket	3,685	3,796	3,660	4,360
14	Extra work, cost plus 15 per cent	......	......	......	......
15*a*.	Guaranteed calculated annual current consumption charges for main pumps, with brush-shifting type motors, per specifications	10,350	9,697	9,760	9,800
	Computed annual amortization charges being 7.4 per cent of the sum of Items 1*a* and 2*a* to 13, both inclusive	8,523	6,744	6,956	8,584
	Sum of computed annual amortization charges for Items 1a and 2a to 13, both inclusive, and Item 15a, brush-shifting type	18,873	16,440	16,716	18,384
	Guaranteed calculated annual current consumption charges for main pumps, with slip-ring type motors, per specifications	10,500	10,465	10,300	10,240
	Computed annual amortization charges being 7.4 per cent of sum of Items 1*b* and 2*b* to 13, both inclusive	7,929	5,497	5,630	7,045
	Sum of computed annual amortization charges for Items 1b and 2b to 13, both inclusive, and Item 15b—slip-ring type	18,429	15,962	15,931	17,285

Pumping Station Equipment—The pumping station is a one-story brick building about 46 x 60 ft. in plan. The equipment includes: Four main pumping units, consisting of a 24-in. bottom-suction centrifugal pump direct connected to a 75-hp. a.c. motor; a switchboard and control mechanism whereby the speed of the units will be automatically controlled to maintain the sewage level in the grit chamber at such elevation as is required to keep a constant velocity through the compartments in service; motor-operated vacuum priming units in duplicate, a small vertical centrifugal pumping unit for the drainage of the station and unwatering the several compartments of the grit chamber; a 7½-ton, hand-traveling crane; several hydraulically- and electrically-operated valves and sluice gates; a 10-kw. motor-generator set for supplying direct current for the operation of the grit-chamber cleaning equipment and various indicating and recording gages and mechanisms.

Each of the four pumping units is designed to handle one-third of the maximum quantity to be treated, one unit being a spare. The ordinary daily peak loads can be carried by two units.

Grit Chamber—The grit chamber has an over-all length of about 70 ft. with three flowing-through compartments each 40 ft. long, 4¾ ft. wide and 8½ ft. deep. The inlet to each compartment is controlled by an electrically-operated sluice gate. The cleaning equipment of the grit chamber includes a clam-shell bucket and cab traveling on an overhead tram-rail extending longitudinally over the center of each compartment.

In the operation of the grit chamber, the principal function of which is to prevent abrasive material from reaching the pumps and causing undue wear, shorter useful life and impaired efficiencies, it is desired to maintain a velocity of about 1 ft. per second. Velocities in excess of this rate do not permit the suspended inorganic matters to settle, while slower velocities are apt to result in accumulation of foul and objectionable organic deposits.

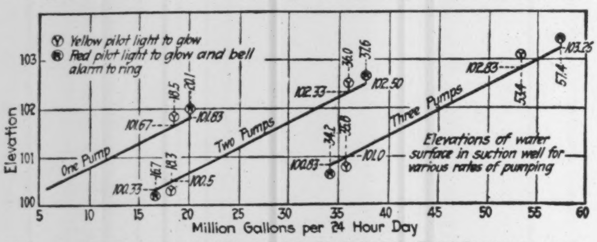


FIG. 1—SEWAGE LEVELS FOR VARIOUS PUMPING RATES

When the sewage level reaches the elevations indicated by "Y" a yellow pilot light glows; when levels indicated by "R" are reached a red light glows and an alarm bell rings.

The automatic control and maintenance of uniform constant velocity is without question preferable to manual control by attendants who for various reasons may not give the necessary attention required.

Operating Schedule—The operating schedule is such that for flows of less than 18.33 m.g.d. any one of the three grit chamber compartments may be in service with any one of the four pumping units; any two of the grit chamber compartments with any two pumping units for 18.33 to 36.67 m.g.d.; and all three grit chamber compartments with any three pumping units for flows varying between 36.67 and 55 m.g.d.

The grit-chamber compartments and pumping units are to be manually placed in and out of service, but while in service their operation will be automatically governed by a master controller.

Master Controller—The function of the master controller is to vary the speed of the motors driving the pumps in accordance with the elevation of the sewage level in the grit chamber. The operating conditions are shown in Fig. 1 and the specifications stipulate that the variation in sewage level shall not exceed 1 in. above or below that indicated on the graph when pumping the corresponding volume of sewage. The rate of pumping will be measured by a venturi meter equipped with indicating and recording mechanism.

Within the first stage, when one pump is operating, the master controller is to vary uniformly the rate of delivery of any pumping unit from 5.7 m.g.d. when the sewage level is at El. 100.33 to 20.1 m.g.d. when the sewage level is at El. 101.83.

With an increasing sewage flow, when the sewage level reaches El. 100.67, the controller will cause a yellow pilot light on the master controller panel of the switchboard to glow. This signal will serve to notify the attendant to place a second pumping unit in service, and he will manually start the operation of the second grit-chamber compartment sluice-gate motor, the corresponding screen-raking mechanism motor, the vacuum priming-pump motor and the main sewage-pump motor. Should the attendant fail to note the signal and the sewage level continue to rise and reach El. 101.83, the controller will cause a red pilot light to glow and will continuously ring a bell alarm until the sewage level recedes below El. 101.83.

Within the second and third stages, with two and three pumping units in service, the master controller will function similarly in accordance with the graph, Fig. 1. With an increasing flow, when the sewage level reaches Elev. 103.17, in the third stage, with three grit-chamber compartments and three pumping units in service operating at the maximum rate desired (55 m.g.d.) the three grit-chamber sluice gates will automatically start closing slowly and throttling the inflow until the level below the gate reaches El. 102.83. The gate will then continue to "hunt" so that any increase or decrease in the head above the gate will maintain the sewage level below the gate (in the grit chamber) between the limits of El. 102.83 and 103.17, thus preventing flows in excess of 55 m.g.d. entering the grit chamber. The throttling of the gates and the backing up in sewage level behind the gates will permit the excess flows to discharge over a weir in the overflow chamber and discharge directly to the lake.

Main Pumps—The pumps will be of the horizontal-shaft, single-stage, double-suction centrifugal type, with vertical bottom inlet and horizontal discharge. They are to be designed to give their maximum efficiency at the ordinary total head of 12.6 ft. when pumping at the rate of 13.75 m.g.d., and to give as high efficiency on as flat a curve as possible within the ranges of heads and capacities specified. The estimated annual average hourly quantities to be pumped and the corresponding ranges in head are shown in Fig. 2.

Electric Current—The treatment works are located in close proximity to the municipal garbage-reduction plant which is now operating on alternating current furnished by the Syracuse Lighting Co. Four sources of power (one of which is Niagara Falls) are available for instant interchange, insuring little if any interruption in service. The operating current is stepped down from 11,000 to 440 volts and is 3-phase, 25-cycle. The schedule of rates for power includes a demand charge, an energy charge and an adjustment for power factor, and is such that a substantial reduction in the annual current cost can be secured by the use of one meter for measuring the total current purchased by the city for the two plants. Auxiliary meters will be placed for properly distributing the costs.

Although direct current is perhaps better adapted for the variable-speed motors of the pumping station, estimates of cost indicated that their installation would not prove economical, on account of the necessity for providing large rotary converter units in duplicate and the cost of additional floor space for housing this machinery.

Motors for Main Pumps—The choice of motor drive for the main centrifugal pumps narrowed itself down to two types; either the brush-shifting or the slip-ring. Although the brush-shifting motors are more economical in regard to current consumption, they require a considerably larger capital investment. From such information as was obtainable from the manufacturers and various users, it appeared that the brush-shifting type of motor might show a lower capitalized cost for installation and operation, but the difference in the estimated capitalized costs was so slight that it was felt that greater competition would be afforded by including both types of motors in the specifications.

In general, each of the motors is to be of not less than 75 hp. rated capacity and capable of developing the specified loads at the necessary speed reductions. The synchronous speeds are not to exceed 500 r.p.m. when operating under no load; the motors are to be designed for continuous service and for direct connection to the centrifugal pumps. Slip-ring motors were to have open-phase wound rotors and a power factor at full load not less than 91 per cent. A power factor of not less than 96 per cent was required for brush-shifting motors at full load.

Canvass of Bids—The legislative act under which the Board operates requires that all contracts be awarded to the lowest responsible bidder. This restriction, if bids were canvassed on the prices submitted for furnishing and installing the equipment, would not permit giving proper consideration to the efficiency of the various units.

All of the funds of the board are obtainable from the sale of 20-year serial bonds, bearing interest of about 4½ per cent, according to market indications at the time of issue. It is, therefore, necessary during the following 20 years for the city to raise by taxation each year for retirement and interest charges an average amount equal to 7.4 per cent of the bonded cost of the work. This 7.4 per cent is designated in the specifications as the amortization charge. It will also be necessary for the city to provide funds in its annual budget for the operation of the pumping station, including electric current, labor, supplies, etc. The cost of electric current is dependent upon the type of motors and pumps and their efficiencies while other annual operating charges will be but little affected.

In order that the slip-ring and brush-shifting motors might both be admitted to the specifications, and be considered fairly and truly upon their performance, and that each bidder might know definitely what consideration would be given for efficiency of performance, the specifications provided:

> The bids will be canvassed to determine the bidder to whom the contracts will be awarded by comparing the sums of the annual amortization charges and annual main-pump consumption charges submitted by each bidder in his proposal, and that responsible bidder whose sum is the lowest will be awarded the contract.
>
> The annual amortization charges shall be computed by multiplying the total amount of the bid for the machinery and equipment by 0.074. This 7.4 per cent average annual charge is computed as the interest upon the serial bonds issued by the city to pay for the work and for the retirement of one-twentieth of the total sum each year until the entire issue is amortized at the end of twenty years.

Tests and Trials—Pressure, endurance, capacity and efficiency tests are to be made prior to acceptance of the equipment. The efficiency tests to determine whether the guaranteed main pump current consumption charges have been met or exceeded are to be made not less than 30 or more than 60 days after the units have been placed in regular service. The tests are to be made under the joint direction of the engineer and contractor. In case of disagreement, an expert of acknowledged reputation, acceptable to both the engineer and contractor, will be chosen and his decision will be final.

The tests and the manner of conducting them are specified in detail. The performance tests of the main pumps are to be made at each hourly rate of pumping and corresponding head shown in Fig. 2. The rate schedules for electric current and method of application, with examples, were presented in full in the specifications in order that there might be no misunderstand regarding the computations and guarantees of the electric current consumption charge.

Bonus and Penalty—A bonus will be paid the contractor if the performance tests show that the guarantee has been exceeded and that the annual current consumption charges will be smaller than the amount stated in his proposal. The amount of this bonus will be one-half the present worth of an annuity, equal to the decrease in current consumption charge, based upon a period of twenty years at 4 per cent compound interest, or $6.795 for each dollar that the test shows the annual current charges to be less than that guaranteed. In case of failure to meet the guarantee a deduction will be made equal in amount to the present worth (as above described) of the excess current charge, or $13.59 for each dollar of excess current cost.

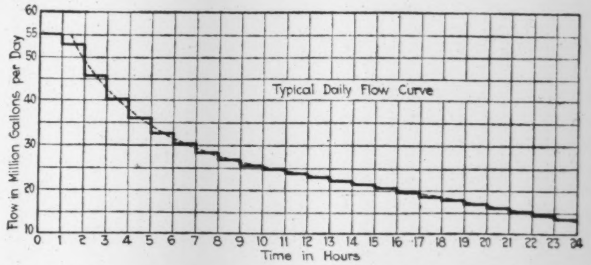


FIG. 2—TYPICAL DAILY SEWAGE FLOW CURVE

Indicating and Recording Gages—The station will be equipped with somewhat more than the usual number of recording gages to keep the superintendent informed regarding routine operation of the works and the attention given by the attendants of each shift. This equipment includes apparatus for the following records:

Total flow reaching the works—venturi flume.
Total volume pumped and treated—venturi meter.
Discharge head—for each of the four main pumps.
Vacuum in priming system.
Sewage level in pump well.
Sewage level above screens—grit chamber.
One electric time recorder with 12 pens showing time of:
  Starting and stopping each of the four main pumps.
  Opening and closing each of the three grit chamber gates.
  Starting and stopping of each of the three screen cleaning mechanisms.
  Starting and stopping the sump pump motor.
  Starting and stopping the d.c. generator set.

Previous to advertising for bids the unual sections relating to the method of canvassing, tests, trials, guarantees, as well as the bonus and penalty clauses, were thoroughly discussed with manufacturers of pumps, motors and general equipment contractors The general consensus of opinion indicated that the specifications were altogether fair and would result in keen competition. This proved to be the case, as an unusually large number of contractors figured on the work.

During the advertising period some adverse criticism was received from a few pump manufacturers, who objected to the tests for efficiency being made over the entire range of speed variation. They desired the specifications so modified that it would be necessary to make a guarantee of efficiency only against a single stated average quantity to be pumped. One or two manufacturers objected to the tests being made when pumping sewage. As a result of this attitude, which was not announced until shortly before the date set for receiving bids, several prospective bidders did not submit proposals.

The itemized proposals received for the machinery and equipment are given in the table on page 1121. The contract was awarded to the Roberts Filter Manufacturing Co., of Darby, Pa., in accordance with the lowest proposal, which included slip-ring motor equipment.

The equipment to be installed includes: Westinghouse motors, switchboard and control apparatus, Morris Machine Works pumps; Coffin Valve Co., electrically-operated sluice gates; Eddy Valve Co., hydraulic-operating gate valves; Cleveland Crane & Engineering Co., tram-rail system for grit chamber cleaning.

All of the work of the Syracuse Intercepting Sewer Board is being carried out under the direction of the writer as chief engineer, who desires to give special recognition to the valued services of J. X. Cohen, designing engineer.

Use of Copper Sulphate at Hartford and Effect on Filter Runs

Utilized to Lessen Amount of Filtrate—Costs Also Reduced—Runs Long When Micro-Organisms Are Few

BY J. E. GARRATT
Office Engineer, Water Board, Hartford, Conn.

Abstract of a paper read before the New England Water Works Association.

FOR several years copper sulphate has been applied to the reservoirs of the Hartford water system at times when the number of micro-organisms has been large. Previous to the filtration of the supply, which began late in the fall of 1921, copper sulphate was used principally to improve the taste and odor of the water. Since the introduction of filtration, the use of copper sulphate has been continued to lessen the amount of material which the filters have to remove from the water and thereby lengthen filter runs and reduce costs of operation.

The new filters were started in a small way in November, 1921. Early in February, 1922, the whole supply to the city was being filtered. Nepaug water was used until the middle of March. During all of this time the micro-organisms were low in number, ranging from 80 to 25. The average amount of water passed between scraping or rakings was about 250 m.g. per acre of filter bed.

From March 17 to April 3, while high-colored bottom water was wasted from the Nepaug Reservoir previous to the spring turn-over, water to the filters was taken from the West Hartford reservoirs. This raw water had a color of about 25. The numbers of micro-organisms was not as low as in the Nepaug water but they were relatively low: 80 on March 17, increasing to 185 by April 3. A filtered water with a color of about 15 was obtained. The rate of clogging during this short period indicated that the quantity of water filtered between cleanings or rakings would have averaged about 250 m.g. per acre had water of this character continued through the filters.

Copper Sulphate Used—Nepaug water was again put onto the filter beginning April 3. By the end of the month micro-organisms had increased to 150 or so, more than one-half being Asterionella. In anticipation of the probable need of treating the Nepaug reservoir with copper sulphate as was done the previous year, the principal West Hartford reservoirs, in which the total micro-organisms had gradually increased to from 240 to 300 (in two Asterionella was the principal micro-organism and in another Nitzschia), were treated with copper sulphate at the rate of 2.3 lb. per m.g., early in the month of May, in order to have them available with water low in micro-organisms for use while the big reservoir was being treated.

Early in May, with Nepaug water, the filters clogged very rapidly. Runs of as little as 40 to 50 m.g. per acre were the rule. It began to look as if night shifts would be needed on the washing outfit. On May 22 Nepaug water was shut off so that the reservoir could be treated with copper sulphate. While the total number of micro-organisms did not seem large yet there were several times as many as in the water which had been used previously. At the surface they totaled 300 and at the depth of 30 ft., 200. It was decided to treat the portion of the Nepaug Reservoir near the intake at the rate of about 1.3 lb. per m.g. The predominating micro-organisms were Uroglena, 50 per cent, and Asterionella, 30 per cent. The treatment, however, was without material results. The total organisms at the surface were not reduced in number while at a depth of 30 ft. they increased very materially to about 600 total.

In the meantime the treated West Hartford reservoir water, with total micro-organisms of 50 to 100, was put onto the filters. filter runs lengthened appreciably to 130 to 150 m.g. per acre between washings, and the washing emergency was passed.

But it was desired to use Nepaug water as soon as possible so it was decided to treat the same portion of this reservoir again. On June 3, 1922, sulphate was applied at the rate of 2.3 lb. per m.g. Total micro-organisms were 250 at the surface and 600 at a depth of 30 ft., half Asterionella and half Uroglena. Quite a few small fish were killed. Samples taken three days after treatment showed a slight reduction in Asterionella and practically no reduction in the number of Uroglena. Samples taken the following day, June 8, showed still further reduction in the micro-organisms at the surface (average total 140) but large increase in number at a depth of 30 ft. (average total 1,030).

On June 9 the change back to the Nepaug water was made, taking water from the intake nearest the surface where the micro-organisms were the lowest in number. On June 14 conditions were the same as on June 8, but by June 21 surface counts had decreased to an average of 65 and at the 30-ft. depth to an average of 100.

Filter Runs Shorten—As a result of more or less off-hand consideration of all this, it appeared that all that was necessary to do in order to keep filter runs long was to keep micro-organisms low in number. Careful watch, therefore, was kept of micro-organisms. No considerable increase was noticed in the Nepaug water but all of a sudden early in July filter runs of 36 to 50 m.g. per acre were gotten. Experience had shown that filters could be lightly raked over once or even twice without materially increasing the amount of sand to be scraped off and washed ultimately so that no washing crisis seemed at hand, but on several beds there were periods of only ten days between rakings or scrapings and in one case only seven days.

While water in the Nepaug reservoir was low in micro-organisms it was found that water in the West Hartford reservoir into which the pipe line from Nepaug emptied, had developed a considerable growth of micro-organisms (Nitzschia) so on June 8 this reservoir was shut off and the Nepaug water allowed to pass directly to the filters. About July 11 the West Hartford reservoir was treated with 2.3 lb. per m.g. of copper sulphate, the micro-organisms reduced from 270 to about 100 by July 18 and on that day the gate on the line to and from the treated reservoir was opened again. At the time this treated water was again free to pass onto the filters one bed had passed only 60 m.g. per acre and had lost 3 of its 5 ft. of head. Other beds had either just started on new runs or were practically at the end of runs of 40 to 50 m.g. per acre as stated above. A few days later it was noticed that loss of head on the bed which was in the midst of a run began to decrease. It continued to decrease. At the same time a slimy deposit on the walls and bottom of the aerator disappeared. This bed gained a new lease of life and continued in service until Aug. 24 passing 180 m.g. per acre. Runs on other filters since the last of July have varied from 90 to 160 m.g. per acre. Micro-organisms in Nepaug reservoir per acre have continued low, 30 to 50. But at the present time (Aug. 25), micro-organisms in the West Hartford reservoir have again increased to over 300 without as yet causing any noticeable increase in the rate of clogging of the filters.

Presumably we have not as yet got the whole story in regard to the amount of copper sulphate needed for effective treatment or in regard to the relation between number of micro-organisms and lengths of filter runs but it is thought from the information so far collected that the application of copper sulphate has possibilities as an aid to economical filter operation of Hartford water.

Personal Liability Laws for Losses From Fire

A summary prepared by the National Fire Protection Association shows that a number of American communities now have laws which require the owner of premises in which a fire occurs to reimburse the city for the services of the Fire Department, as well as to pay damages to persons or property resulting from the fire, provided the fire is due to non-observance of a fire order or non-compliance with law. Provisions to this effect are found in the charter of New York City, the Pennsylvania State code, and in the city ordinances of Cleveland and Cincinnati, Ohio, Portland, Ore., Billings, Mont., and Austin, Rangers, San Angelo, Cleburne, Wichita Falls, and Greenville, Tex. The summary as published also includes several court decisions bearing on owners' liability in connection with fires, decisions which indicate a drift toward the view incorporated in some European law codes, by which the parties responsible for the origin of a fire are liable for all losses caused by the fire.

Fire-Fighting Ability of Chicago Summarized with Recommendations

A GRADUAL, continuous extension of metered services, an increase in the water pressure to at least 50 lb., and a new high-pressure fire system are the starred [urgent] recommendations of the National Board of Fire Underwriters as to the water supply in a recent report on Chicago. Other recommendations include the following: Combustible material should be removed from pumping stations to render them fireproof; an emergency crew with an automobile carrying gate-operating tools and records should be available; no mains should be tapped before the property needs the service; the distribution system should be strengthened so that it can furnish 1,500 gal. per minute in outlying residential districts, 3,000 to 6,000 gal. in closely-built residential districts of two- and three-story buildings, and 5,000 to 15,000 gal. in inner mercantile manufacturing and lumber districts.

The high-pressure fire system recommended would have a pumping capacity aggregating 30,000 gal. per min., made up of small units in the Chicago Ave., Harrison St. and Fourteenth St. stations. The distribution system should deliver two-thirds of the full capacity about any block with a maximum pressure of 200 lb., and arteries should be so arranged that the failure of any one would not prevent the specified delivery. No dead ends or pipes less than 12 in. are allowable. Gate valves are to be spaced not to cut out more than three hydrants by a single break. Hydrants are to have four gated outlets, to be set on 8-in. gated branches and to be so distributed as to serve an average area not exceeding 40,000 sq.ft. Connections are to be provided for fire boats.

The following paragraphs epitomize the board's findings as to the present water supply fire-fighting facilities and a summary of the whole situation.

Water Supply—Municipal works; organization good; records complete. Supply from Lake Michigan, inexhaustible; cribs and tunnels of sufficient capacity and in good condition. Pumping stations not fireproof, but with low internal hazards and mostly unexposed; mutually reinforce each other; capacity of pumps ample. Distribution in one service, except three small outlying sections. Consumption excessive and its reduction of utmost importance. Pressures too low for adequate fire engine supply in some parts of the city. Arterial system fairly adequate; minor distributors well gridironed. Gate valves generally well spaced and in fair condition. Old hydrants of unsatisfactory patterns, but new hydrants satisfactory; all poorly maintained; distribution mainly good.

Probably the following paragraphs were written with the recent Burlington Building "group" fire in mind:

Building Department—Laws mainly good; several fire prevention features omitted or not sufficiently restrictive. Enforcement somewhat lax. Fire units of large area, but still inadequate. Structural conditions strong to weak in congested value district; new construction in principal portion of district practically all fireproof.

Conflagration Hazard—In the congested value district the increased amount of firepoof construction, especially in the portion south of the river, the increased number of automatic sprinkler equipments (many in buildings which might be classed as conflagration breeders) and the large amount of window protection have reduced the general conflagration hazard. However, group fires are probable in many sections because of poor structural conditions, the frequent high winds and the inability of the fire department to cope with serious fires.

FROM JOB AND OFFICE

Hints That Cut Costs and Time *For the Contractor and the Engineer*

Third Curve Replaces Two Curves Joined by Tangent—Four Solutions

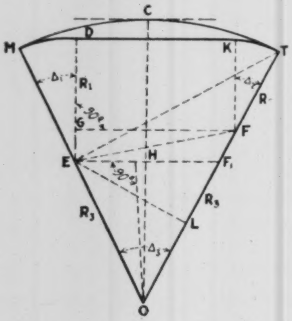
In Engineering News-Record, Oct. 26, p. 713, there appeared a solution to a curve problem wherein a third curve replaced two short curves joined by a tangent. The solution offered by Mr. Syme therein has interested engineers widely, and numerous letters have been received in which different solutions to the problem have been set forth. Four of these solutions follow.—EDITOR.

BY BURNETT HAMILTON

Street and Engineering Department, Alameda, Calif.

USING *T* as the origin of co-ordinates determine the co-ordinates of the points *E* and *F*. The direction of the line *TFO* is known as the point *T* is fixed. Draw EF_1 locating F_1 so that $FF_1 = ME - TF$. Determine the co-ordinates of the point F_1 and close between F_1 and *E*, securing the bearing and the length of the line EF_1.

The triangle EF_1O is isosceles and as the directions of the lines F_1O and F_1E are known, the angle OF_1E (which is equal to the angle OEF_1) is known. The angle $EOF_1 = 180$ deg. — $(s\ OF_1E + OEF_1)$, which gives the direction of the line *OM*.



Solve the triangle *EOF* for *EO*,

Then $EO + EM = OM$, the required radius.

* * *

BY J. C. CRAWFORD

Assistant Engineer, Pennsylvania R.R.

GIVEN radius R_2, angle Δ_2, tangent *KD*, and radius R_1: to find radius R_3 and Δ_1.

$$GE = R_1 - R_2; \quad EF = \sqrt{(GE)^2 + (KD)^2};$$

$$\sin EFG = \frac{GE}{EF};$$

$$EFO = 90^\circ - (\Delta_2 + EFG); \; FO - EO = GE.$$

Having the base *EF*, the angle *EFO* and the difference between the sides *EO* and *OF*, the triangle *EOF* can readily be solved under the rule that "In any plane triangle, as the base is to the sum of the other two sides, so is the difference of those sides to the difference of the segments of the base made by a perpendicular let fall from the vertical angle."

Then $OF + R_2 = R_3$, and $\Delta_3 - \Delta_2 = \Delta_1$.

* * *

BY C. K. CONARD

Northport, Long Island, N. Y.

THE curve *TCM* is to replace the tangent *KD* that joins two curves on the ground, and must start at a known point *T*. From *T* as an origin of co-ordinates work latitudes and departures through *TF*, *FK*, *KD* and *DE*, to obtain the co-ordinates of center *E*. By differences of co-ordinates determine the length and the bearing of *ET*.

From *E* draw *EL* perpendicular to *TF* produced.

In the right triangle *ETL* the angle *ETL* and the side *ET* are known.

Solve for *TL* and *EL*.

Now *ME* plus *EO* equals *TL* plus *LO* or, *EO* minus *LO* equals *TL* minus R_1 equals a known quantity, say *m*.

In the triangle *EOL*, $EO^2 = EL^2 + LO^2$ and $EO - LO =$ the known quantity *m*, or $EO = m + LO$.

Substituting, $m^2 + 2mLO + LO^2 = EL^2 + LO^2$.

From this, $LO = \dfrac{EL^2 - m^2}{2m}$; $LO + TL = R_3$ and the angle at *O* may now be found.

Angle *MED* equals angle *O* minus angle *KFT*.

* * *

BY E. A. WHITE

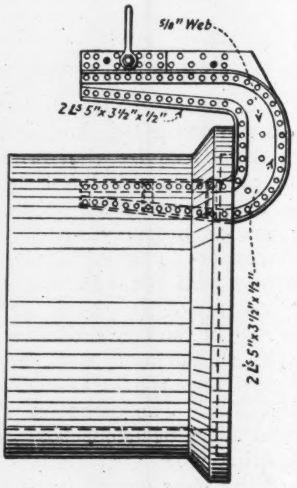
County Engineer, Pierce County, Tacoma, Wash.

DRAW the curve *MCT* and join the centers *E* and *F*; draw *GF* perpendicular to *DE*, produce *TF* to a point F_1 making TF_1 equal *ME*; EF_1 will then connect points on the radial lines of curve *MCT* and will be parallel to its long chord *MT*. Bisect EF_1 at *H* and erect a perpendicular which will intersect *TF* extended at *O*, the center of the curve *MCT*. Solve triangle *GFE* as before, which gives sufficient data to solve triangle EFF_1.

Then, in right triangle OHF_1 side HF_1 and angle $HF\,O$ can be computed and the triangle solved, giving the data for computing Δ_3 and R_3.

Steel Hook Handles Concrete Pipe

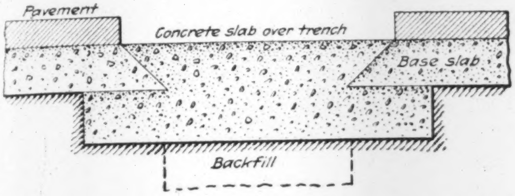
AT THE recent annual convention of the American Railway Bridge & Building Association held in Cincinnati, Ohio, the committee on labor saving devices described in its report a structural steel hook for use in holding the larger sizes of concrete pipe when placed by a derrick. The hook, illustrated herein, is made of heavy structural steel. By adjusting the lifting line to one of the other two holes in the upper part of the hook the pipe can be picked up from one end. The usual manner of setting a pipe is to place a cable or chain sling around the exterior and set the pipe in the desired position. When the sling is removed there is a tendency to uncouple the bell and spigot end. The use of a hook obviates this difficulty and under some conditions expedites the work.



PICKING UP CONCRETE PIPE WITH STEEL HOOK

Trench Backfill Covered with Concrete Slabs

IMPROPER backfilling of trenches has been so great a source of trouble, states H. H. Edwards, City Engineer, Danville, Ill., that municipal control of the replacement of paving over such openings has become necessary. It is now required that for any street opening a permit must be obtained and a bond filed sufficient to protect the city against damage. Backfilling and repaving are done by city forces, the owner being charged the exact cost plus 10 per cent. Over the trench is laid a 12-in. concrete slab extending 12 in. on solid ground on each side, and where a concrete base is cut the edges are sloped to support the trench slab, as shown in the acompanying drawing. For wide or deep trenches, ½-in. transverse bars 6 in. c. to c. are placed 2 in. from the bottom of the slab. With this construction there has been no trouble from sunken pavements.



CONCRETE SLAB COVER FOR BACKFILLED TRENCH

Precast concrete slabs 5 x 2 ft. and 8-in. thick, reinforced as described above and having the joints grouted, are contemplated as an improvement upon the slab poured in place. It is hoped that this form of concrete base will save time and will permit the replacement of paving in cold weather when it would be difficult to lay new concrete.

Inexpensive Method of Mounting Maps

By Emile Low

U. S. Assistant Engineer, Buffalo, N. Y.

ENGINEERS often find it desirable to mount maps, drawings, documents or photographs. Mounting by use of paste is tedious and having binding done at a bindery is expensive. A better process is to use rubber mounting tissue, which is convenient and cleanly. The other requisites are either a flat, electric or gas iron and a felt pad or ordinary blanket. The procedure is as follows:

Place the pad on a table. The map is then laid face down, after first placing a strip of tissue paper about 5 in. wide around the edge of the map, between the pad and the map and projecting one-half its width outside of the map (this is to prevent the edge of the map from sticking to the pad).

The mounting tissue, of a size to overlap the drawing about ¼ in. all around, is placed on the reverse side of the drawing. The cloth on which the drawing is to be mounted is cut about 1 in. larger than the mounting tissue. It is placed over the rubber mounting tissue and fastened to the board or table at two corners with glass push pins.

Then run an iron over the cloth, beginning at one end and moving along one edge. Then move the iron at right angles to the edge thus fixed.

After the drawing is mounted the edges are trimmed off. In trimming it is advisable to cut about ⅛ in. outside the edge of the drawing as a neater edge can be secured.

Fast Time Recorded in Casting Concrete Segmental Sewer Blocks

WHEN a crew of 12 men first started pouring segmental concrete block sections which form the circular sewer being constructed in Queens, N. Y., and known as the Woodside tunnel sewer, 3 hr. and 40 min. were required to pour the first 72 three-block sections. Each block weighs approximately a ton and 8 blocks are required to the full circle. When the first day's run had been made the resident engineer told the crew he would not be satisfied until an average pouring time of 1 hr. 30 min. was maintained. Since then the 72 forms have been filled in a record time of 55 min. and in many cases slightly over 1 hr. and the 1½-hr. schedule is never exceeded.

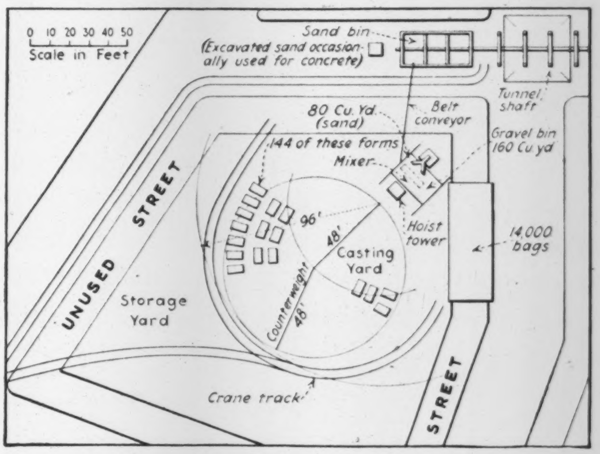


FIG. 1. LAYOUT OF RADIAL CASTING YARD
The radial layout allows all forms to be reached by an easy swing of the boom supporting the chuting. Forms are poured alternately allowing each section 24 hr. in which to set before forms are stripped.

The Woodside tunnel sewer is a segmental block ring with an inside diameter of 11 ft. 9 in. and a uniform wall thickness of 16 in. The contract, which is held by Booth & Flinn, New York City, calls for the construction of 4,025 lin.ft., most of it on Fiske Ave. from Queens Boulevard to Polk Ave.

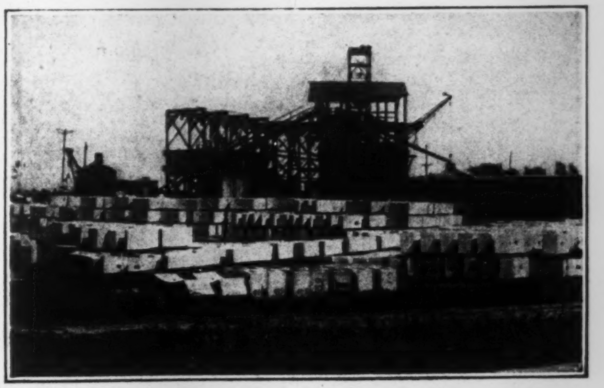


FIG. 2. STORAGE YARD AND CONCRETE PLANT
Dates of casting blocks are easily discernible. Each of these blocks weighs a ton.

The yard in which concrete sections are cast has been carefully arranged and located near the shaft so that blocks can be handled practically from the casting

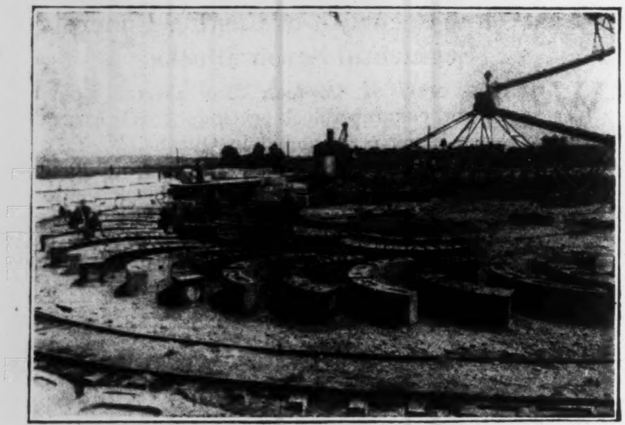


FIG. 3—SEGMENTAL BLOCKS CAST ALTERNATELY
Each form accommodates three 1-ton blocks. By pouring sections alternately 72 sections are poured and 72 sections stripped and the blocks stored every day.

yard to the shaft. The layout of the casting yard is indicated in the accompanying sketch. As is indicated, forms were laid out radially so that an easy swing of the boom (operated by one man) which supports the chuting through which concrete is handled reaches all forms easily.

Specially-constructed steel forms are used and three one-ton blocks are cast within one form. There are 144 forms and pouring is done into alternate forms so that every 72 sections poured are given 24 hr. in which to set before stripping.

A locomotive crane circles the casting yard and a switch is provided at about the center so that blocks can be handled direct from forms into the storage yard from either end of the track. A concrete bed of even grade and smooth surface has been laid as a foundation for section forms, so that little difficulty is experienced in adjusting forms for receiving concrete. After the sections are all poured the recessed forms are bolted on top to give the blocks their lock joints.

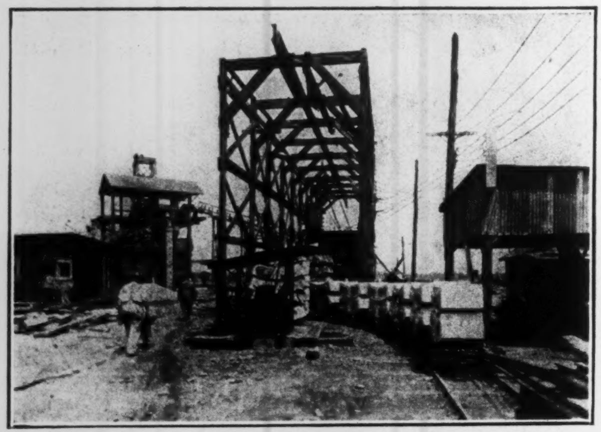


FIG. 4—BLOCKS AT SHAFT ENTRANCE
From the storage yard the blocks are hauled by electric locomotive to the shaft mouth as needed. Enough blocks for a night's run are stored each evening as shown above.

As it is cast each block is marked with the date. When ready to store each block is picked up by the crane fitted with a semi-friction grab onto one side of which is welded a knob that slips into the grout hole of the block. From the storage yard the blocks are loaded onto heavy-truck narrow-gage cars and hauled direct to the mouth of the shaft by an electric locomotive.

The sewer is being built for the Bureau of Sewers, Borough of Queens. A. H. Jorgensen is the contractor's resident engineer.

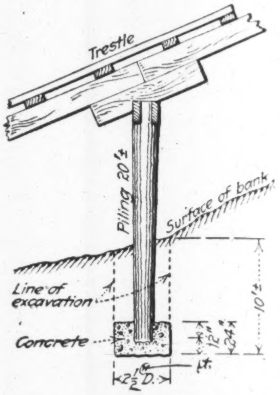
FROM JOB AND OFFICE

Hints That Cut Costs and Time

Piles Are Set in Concrete to Avoid Inconvenient Driving

By George W. McAlpin
Glenwood, W. Va.

DUE TO the necessity of completing work by a certain date and the inability to secure piledriving equipment the writer was led to use the following method of setting instead of driving piling for a sand and gravel incline. The distance from the top of the bank to the edge of the river, over which the incline was to pass, was about 300 ft. To rig up a piledriver to cover this distance would have been expensive. Also such equipment was not available at the time. It was necessary to sink the pile bents, rather than use the ordinary mud sill, due to the tendency of the river to scour at high stages. Consequently, holes for each piling were excavated, the first 4 ft. with long-handled shovels and the rest of the distance, usually 5 to 6 ft., with an extended handle post-hole digger. About 12 in. of concrete was then placed in the bottom of each circular hole, the piling set in and plumbed to correct position and an additional 12 in. of concrete poured around it. The holes were then backfilled and tamped. The method has proved cheap and effective, the concrete forming a perfect base for each piling.



PILES FOR SAND RAMP SET IN BURIED CONCRETE

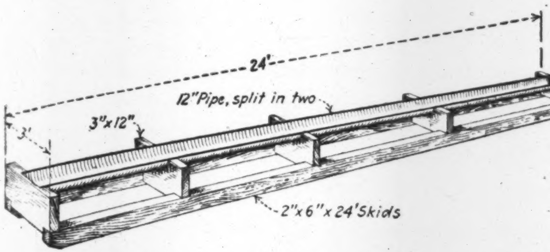
Dipping Trough for Iron Pipe Made From 12-in. Casing

IN THE coastal oil fields rust causes the loss of thousands of dollars annually in new and second-hand materials. The oxidation of iron occurs everywhere to a greater or less degree, but it is especially rapid in this part of the United States, where the climate is subtropical and the humidity extreme. Probably the greatest loss is in the deterioration of drill stem, casing, line pipe, and the like which is not in use.

Painting is the only safeguard, but painting with a brush is a slow and costly process, and, furthermore, the inside of the pipe is not touched. The cheapest and most effective way of applying paint to all surfaces of a length of pipe is by dipping. To facilitate this work,

FROM JOB AND OFFICE

For Contractor and Engineer



CASING MAKES TROUGH FOR DIPPING IRON PIPE

the dipping trough shown in the accompanying illustration was devised. It consists of a semicircular receptacle, about 24 ft. long, made of a short length of 12-in. casing that has been split in two and the two pieces butt-welded by means of the oxy-acetylene blowpipe, and with semicircular plates welded over the ends. The trough is set in a suitable wooden frame on skids.

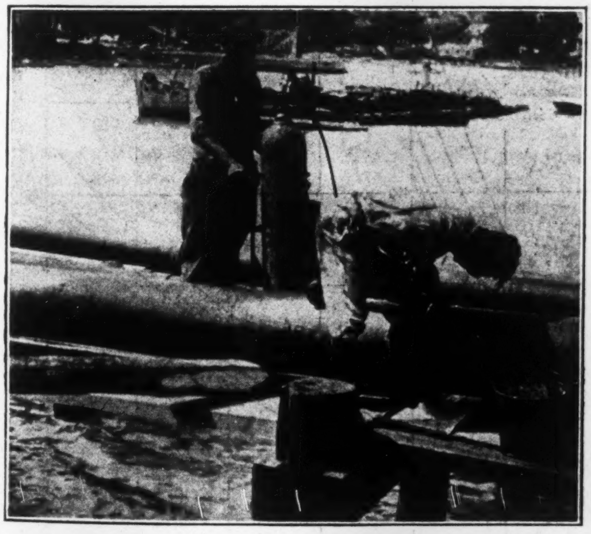
In using the trough, it is partly filled with the preservative paint. Smaller sizes of pipe are simply immersed; pipes of larger diameter must be revolved once to coat all surfaces. After being dipped the pipe is elevated, two blocks of different heights are slipped under it, and the excess paint is allowed to drain back. —*Engineering and Mining Journal-Press.*

Acetylene Torch Melts Pipe Joint Filler

By George C. Love

Chief Engineer, Newport News Light and Water Co.,
Newport News, Va.

The accompanying photograph shows a piece of work recently completed by this company wherein it was necessary to remove a 14-in. cast-iron water main from a pile trestle. The joints were of the usual bell and spigot type with calked lead filler. Water was first drawn from the main and then an ordinary acetylene burning outfit was used to melt the filler. The pipe was left in condition to be used again, part of the lead was recovered and the work was done more rapidly than by any other means available.



BURNING LEAD FILLER FROM PIPE JOINTS

Graphs Allow Rapid Yardage Calculation

By R. C. Hardman

Division Engineer, Central Highway Board, Republic of Panama,
Aguadulce, Panamá

For use in preparing a preliminary estimate of quantities on a projected location of some 125 km. of highways in the Republic of Panamá, a large part of which was through broken country necessitating much side-hill work, the accompanying graphs were prepared. As will be seen these show the amount of cut or fill per 20-m. station for varying center-line values and varying transverse ground slopes.

The graphs were made by substituting the proper values for the particular cross-section of roadway to be used in general equations derived in terms of center-line values, width of base, side slopes and transverse ground slopes. As will be seen, two general equations are necessary—one when the section is trapeziform and the other when the section is triangular.

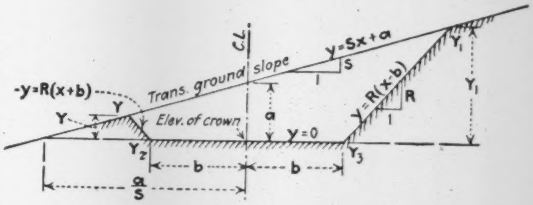


FIG. 1—SECTION USED IN FORMULA DERIVATION

Referring to Fig. 1:

Let a = depth of cut or height of fill on center line
b = one half width of base
R = ratio of side slopes
S = ratio of transverse ground slope
A = area of trapeziform section
A_1 = area of triangular section.

The equations of the four lines forming the trapezium are:

$$y = Sx + a$$
$$y = R(x - b)$$
$$-y = R(x + b)$$
$$y = 0$$

Solving for the co-ordinates at the common points Y, Y_1, Y_2 and Y_3 we have:

$$Y = \frac{R(a - Sb)}{R + S}$$

$$Y_1 = \frac{R(a + Sb)}{R - S}$$

$$Y_2 = Y_3 = 0$$

Then
$$A = \frac{\left(\frac{a}{S} + b\right) Y_1 - \left(\frac{a}{S} - b\right) Y}{2} \qquad (1)$$

Substituting the above values for Y and Y_1 Equation (1) becomes

$$A = \frac{a^2 + 2Rab + (Sb)^2}{R - \frac{S^2}{R}} \qquad (2)$$

Which is the general equation for the trapeziform section.

When the line $y = Sx + a$ passes through the point Y_2, $\frac{a}{S} = b$ and Equation (1) becomes the equation for the triangular section by the dropping of the last term of the numerator, which is equal to zero.

Therefore
$$A_1 = \frac{\left(\frac{a}{S} + b\right) Y_1}{2} - \tag{3}$$

which becomes
$$A_1 = \frac{a^2 + 2Sab + (Sb)^2}{2\left(S - \frac{S^2}{R}\right)} \tag{4}$$

when the values for Y_1 are substituted.

For use for any particular cross-section, the values of b and R are substituted for the general case and value of S for the special cases and the equation becomes of the form $A = Aa^2 + Ba + C$ from which curves can be rapidly made.

If ditches, surfacing trenches, etc., are to be used their area must be added or subtracted as a constant for all values of a when $a > Sb$ and the proper proportion of such area when $a < Sb$.

For purposes of actual use the center-line values are taken from the profile and tabulated, the rate of ground slope is taken from the topography and tabulated beside the former so that both variables will be together for picking quantities off the chart, the plotted curves being, of course, ($A \pm$ Ditch constant) times length of station.

In taking off the rate of ground slope, the easiest method is by counting the number of contours crossed by a known unit of measure, such as one centimeter, depending upon the scale of the map.

It will be noted that the curves take care of the combined cut and fill section which occurs when $a < Sb$, by showing two readings for any given transverse slope.

FROM JOB AND OFFICE

Hints That Cut Costs and Time

Contractor and Footing Course

By Frank E. Sanborn

Oxford, Ohio

Does every construction superintendent and foreman realize the harm he may do by lack of care in building the footing courses? The designer has planned his footings for equal settlement of the whole foundation, adjusting the loadings to the different kinds of soil encountered, and he wants the pressure to be uniform across the footing course. All this planning is made useless by wrong location or size of the footing course.

Errors in footing location may come about through wrong measurement on the ground, carelessness in staking out the trench, or digging away from the line. Any of these causes will produce a loading on the ground which is not uniform as intended but is greater at one edge than at the other, a condition which invites unequal settlement. The man laying out the trench or hole may regard it as rough work, sufficiently close if there is a footing course under the wall no matter if it is wider than called for, especially as the work is soon covered and out of sight; yet due care is as important here as at any other place in the structure.

Uniform distribution of load is secured only when the load comes in the center of the footing course. Any foreman or laborer can verify this fact by placing a block of wood on the surface of soft ground and stepping on it: if his foot rests on the center, the block squeezes down evenly, while off-center loading makes the nearer edge sink down deepest and causes the block to tip.

What is the amount of these inequalities of pressure resulting from off-center loading? For the simplest case we may compare a correctly located footing, Fig. 1.

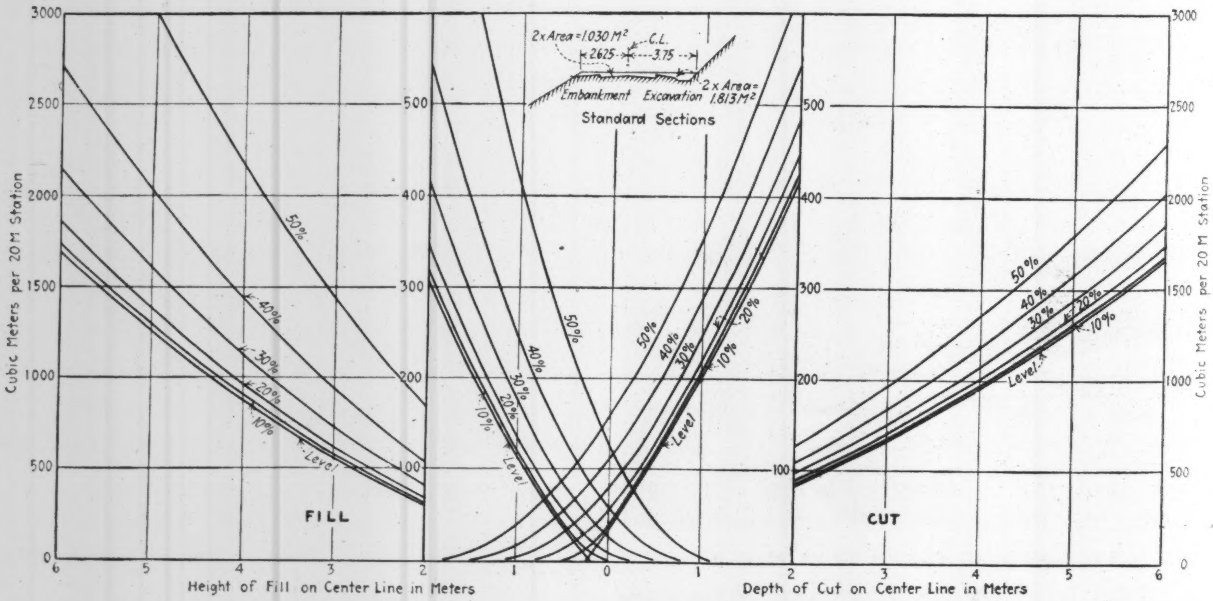


FIG. 2—GRAPHS FOR ESTIMATING YARDAGE

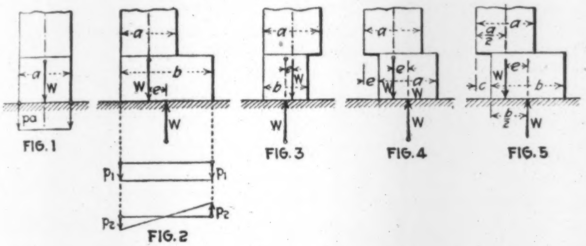
As is apparent, the flatter curves are but continuations of the sharp ones, though on a larger scale.

FROM JOB AND OFFICE

For Contractor and Engineer

with a footing widened out on one side, Fig. 2. In Fig. 1 the load W comes in the center of the width of the footing course and the pressure per square inch of area is the same everywhere,

$$p = \frac{\text{Weight on the footing per inch of length}}{\text{Inches of width}} = W_a$$



FIGS. 1-5—BADLY BUILT FOOTINGS

In Fig. 2 we have the same load W, at the same distance from the unaltered side of the footing, but the soil loading is non-uniform. The greatest load per square inch, p_{max}, will be $p_1 - p_2$ or,

$$p_{max} = \frac{W}{b}\left(4 - 3\frac{a}{b}\right)$$

which means that the intended loading p has been multiplied by the factor

$$\frac{p_{max}}{p} = \frac{a}{b}\left(4 - 3\frac{a}{b}\right).$$

At the opposite edge of the footing the intended loading has been reduced in the ratio

$$\frac{p_{max}}{p} = \frac{a}{b}\left(3\frac{a}{b} - 2\right).$$

$\frac{a}{b}$	$\frac{p_{max}}{p}$	$\frac{p_{min}}{p}$	$\frac{a}{b}$	$\frac{p_{max}}{p}$	$\frac{p_{min}}{p}$
1.0	1.0	1.0	0.5	1.25	—0.25
0.9	1.17	0.63	0.4	1.12	—0.32
0.8	1.28	0.32	0.3	0.93	—0.33
0.7	1.33	0.07	0.2	0.68	—0.28
0.6	1.32	—0.12			

These values are plotted in Fig. 6. The negative values mean that the top part of the projection of the footing course would press upward against the soil upon it.

Thus it appears that if a foundation course is widened on one side, the maximum pressure per square unit of area upon the soil is increased, unless the footing is made more than three times its proper width. If a 16-in. course is made wider on one side by 4 in., making its total width 20 in., then $\frac{a}{b} = 0.8$ and $p_{max} = 1.28\,p$; that is, the greatest pressure is 1.28 times the designed pressure. If the designed pressure is 4,000 lb. per sq.ft., then the greatest pressure becomes 5,120 lb. per sq.ft., while the pressure at the opposite edge is only 1,280 lb. per sq.ft., so that the greatest pressure is four times the smallest pressure. With this unequal loading of the soil, tipping of the footing course due to uneven settlement is to be expected.

The footing course may be reduced in width on one side, Fig. 3. Then the same formulas apply, merely interchanged; the pressure ratios are plotted in the right-hand part of Fig. 6. A 16-in. course reduced by 1½ in. on one side would have a 14½-in. width and a value of $\frac{a}{b} = 1.1$; the greatest pressure would become 1.43 times the designed pressure. For an intended soil loading of 4,000 lb. per sq.ft., the actual loading at one edge is 5,720 lb. per sq.ft. and that at the opposite edge 3,080 lb. per sq.ft.

If the course is widened or narrowed equally on both sides, then the load would be uniformly distributed upon the soil, but of less or greater amount respectively than planned and so not in keeping with other footings.

If the footing is of proper width but wrongly located, an eccentric load results as shown in Fig. 4 and plotted in Fig. 7, the factor of pressure increase being

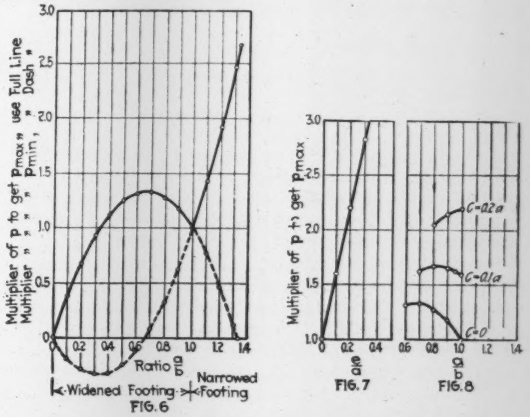
$$\frac{p_{max}}{p} = 1 + 6\frac{e}{a}$$

It is possible also that a footing may be both widened and misplaced, or widened on one side and narrowed a less amount on the other side, as in Fig. 8. For this condition the factor is

$$\frac{p_{max}}{p} = \frac{a}{b}\left(4 + 6\frac{c}{b} - 3\frac{a}{b}\right)$$

and may be represented by a series of curves depending upon the relative values of the widening and the narrowing. Three of these curves are given in Fig. 8.

Thus, good building practice requires that the contractor follow the plans closely in laying out and constructing a foundation. Lines should be stretched and stakes driven in the proper places; digging should follow the line, the sides of the trench be pared plumb, and the bottom be made level. Plumb-bobs hung from lines stretched between batter-boards will be helpful. A carpenter's or mason's level will be found of service. Any widening in an earth form for concrete should be corrected with form boards and not filled out with the concrete in the thought that the extra concrete is cheaper than the form boards. Some foremen think that a widened base always reduces the loading on the soil, but they are wrong.



FIGS. 6-8—PRESSURE RATIO IN UNSYMMETRICAL FOOTINGS

Fig. 6—One side of footing misplaced. Fig. 7—Footing shifted sideways. Fig. 8—Width and location wrong.

LETTERS TO THE EDITOR

This department aims to be a forum for the discussion of the views of engineers and contractors. The range of interest should be as wide as possible. Contributors are, therefore, asked to make their letters short.

Studies of Flow of the Tennessee River

Sir—Permit me to call attention to a statement in the article by Benjamin E. Jones on "Flow in Tennessee Checked Against Hydraulic Formulas," appearing in *Engineering News-Record*, Oct. 12, p. 610, as follows: "The extent to which the values of *n* and *C* obtained in these experiments could be applied to other similar channels depends, of course, on the relation that the cross-section at the bridge on the Tennessee River bears to the average cross-section of the whole stretch of channel involved in the measurements —on the whole the area at the bridge doubtless represents fairly well the cross-section of the seven miles of channel."

Experiments upon channels show that even where the locations are selected for investigation because of their regularity, considerable variations in cross-section and hydraulic radius are present. The case of a measurement on the Ohio River at Cincinnati might be cited where the maximum variation of the area was "from about 15 per cent below the average to about 14 per cent above," and the maximum variation in the hydraulic radius was "from about 23 per cent below the average to about 33 per cent above." (Quotation from "Calculation of Flow in Ohio Channels," by Ivan E. Houk; Miami Conservancy District Technical Reports, Part IV., p. 119).

A section selected at random in a crooked river is therefore not likely to represent "fairly well" the average cross section. In fact, while such a section may be nearly the average, it is more likely to be considerably different, especially at low stages. Any conclusions based upon such an assumed condition are liable to be entirely untrustworthy. It is greatly to be regretted that a number of other cross-sections were not available for use in determining the real average cross-sectional area of the river, as the data would then be very valuable and interesting, but without them any conclusions drawn from the data must be regarded as "not proved." E. W. LANE.

Representative of the Morgan Engineering Companies.
Yangchow, Ku., China, Nov. 7.

[Mr. Jones submits the following reply.—EDITOR.]

Sir—The results of slope and discharge measurements on the Tennessee River were published to show the relation, if any, between variations in values of *C* and variations in values of hydraulic radius and slope. The measurements answer this purpose whether or not the cross-section is uniform throughout the channel involved. For example, measurement 33, with hydraulic radius of 10.9 ft. and slope of 0.0000506, shows a value of 40 for C, whereas measurement 34, with hydraulic radius of 10.5 and slope of 0.0000839, shows a value of 52 for *C*. A change in the average cross-section would have little effect on the relative values for *C*.

Mr. Lane's criticism would apply only if it is desired to use the values of *C* and *n* found for the Tennessee River in computing the discharge of other channels. In that case they would necessarily be used in connection with other similar measurements and the engineer would give them such weight as the facts in his opinion warranted.

A survey of Tennessee River made in 1910 shows an average width at low water in the stretch of channel covered by the slope measurements about 15 per cent greater than at the bridge at Chattanooga. The average depth of water at different cross-sections was nearly uniform. The survey was made before the Hale's Bar dam was constructed and there may have been changes since in the average depth but probably not in the average width. BENJAMIN E. JONES,

Hydraulic Engineer, U. S. Geological Survey.
Washington, D. C., Dec. 19.

A Protest Against "Sales Engineer"

Sir—Is it not time to do away with the term "sales engineer" before it gets any further? The writer's objection is that there is no such thing. Selling is not in any sense engineering; and while an engineer may leave his occupation and take up selling, yet such an act does not make him a sales engineer. It is true that a technical training often qualifies a salesman to do better work in the promotion and selling of engineering supplies; but he is then an engineering salesman, not a sales engineer.

The ethics of the two occupations are incompatible. If a salesman applied a professional man's ethics to his own work, he would soon be out of a job. Should an engineer use a salesman's methods he would be accused of sharp practise. A salesman has little identity of interest with his customer; he "sells" his customer in the interest of the manufacturer by whom he is paid. An engineer would act unprofessionally if he recommended the purchase of any material or process the use of which would result in his gain. He gives service to, and is paid by, the customer whose interests and his are one.

It is to be regretted that a name, as soon as it gets a reputation that is at all advantageous, is borrowed or stolen by others for its reflected credit. It is to be expected that many manufacturers will want to call their salesmen engineers; but the last thing to happen should be for engineers to use the name themselves that way. The writer invites the attention of both the American Association of Engineers and also the American Society of Civil Engineers to this matter, for the words "sales engineer" are used freely in the employment bulletins of both societies. Among the mechanic arts we are all familiar with the hoisting engineer, the stationary engineer, etc.; with the encouragement now given by engineers to the general use of their name, we may soon look for its adoption in a variety of indoor lines, such as sales engineer for drummers and floor-walkers, accounting engineer for clerks and bookkeepers, and tonsorial engineer for barbers.

Faribault, Minn., Dec. 16. A. W. BEDELL.

Liquid Pressure and Coal Bin Design

Sir—The letter of Edward Godfrey in *Engineering News-Record* of Nov. 9, p. 808, seems to require elaboration of some statements in my letter in the issue of Oct. 19, p. 669.

My objections to a method of approximating the lateral pressure of granular materials, such as sand, grain, coal earth, etc., are based upon theoretical, experimental and economic grounds. That granular materials, for example coal in a bin, do not act like liquids is evident and will probably be accepted by all. That no liquid-pressure formula can take into consideration the effect of surcharge or of the width of the bin is also true. Of course, tables of coefficients may be computed to take care of each individual case, but, if they are reliable, such coefficients have been computed by taking into consideration the physical properties (those possible values which will give the maximum pressure) of the material in question. The Pascal law for liquid pressure requires that the lateral pressure be independent of the width of the containing vessel. But the pressure of a granular material on the side wall of a narrow bin is not as great as that on a wider bin, all other conditions being the same.

Some of the supporters of the "equivalent liquid pressure" method recommend the formula *P*, a horizontal pressure, equals $\frac{1}{2}Cwh^2$; the value of *C* is then given as $tan^2 \frac{1}{2}(90°-\phi)$, where ϕ is the natural slope. Substituting, we see that the formula is really Coulomb's formula for the pressure of a horizontal fill against a perfectly smooth wall with a vertical back face, after Woltmann's assumption that the tangent of the angle of natural slope was equal to the coefficient of internal friction had been added. Incidentally, I might mention that Coulomb did not include the natural slope in his theory, based on the wedge of maximum pressure. I realize that most texts do not emphasize Coulomb's own restrictions to his formula, but they can be found in the original papers, "Memoires de l'Academie Royale des Sciences"

T. 7, 1773, or in "Theorie des Machines Simples" by Coulomb. A second edition (1821) of the latter is in the Congressional Library. Later developments of this theory assume the existence of a vertical component in all cases (since the wall cannot be perfectly smooth) and also take care of all cases of surcharge or sloped wall.

Unfortunately, experimental data on a scale large enough to be applicable are rather meager. However, the tests mentioned below, where work with sand, grain and earth is reported, all seem to show the reliability of the wedge theory, at least as a close approximation. Tests with similar materials in different parts of the world with unlike types of apparatus check each other so closely that there can no longer be any argument about the existence of a component along the wall. Lack of space prevents more than the references:

A. A. Steel: *Engineering News*, 1899, p. 261;

H. Mueller-Breslau: "Erddruck auf Stuetzmauern," 1906;

R. B. Fehr and C. R. Thomas: Penn. State College Bulletins 8 and 11, 1912-13;

P. M. Crosthwaite: Proc. Inst. C.E., 1916, 1920;

A. R. Fulton: Proc. Inst. C.E., 1916;

M. Enger: *Proceedings*, A.S.C.E., 1920, p. 251;

F. H. Hummel and E. J. Finnan: Proc. Inst. C.E., 1921, p. 369;

Preliminary Cincinnati Tests: *Engineering News-Record*, Aug. 25, 1921, p. 314; Jan. 19, 1922, p. 106.

It is hoped that the complete set of tests on sand performed by the writer at the University of Cincinnati, 1921-2, may soon appear in print.

Practically, the use of an approximate method based on assumed coefficients is neither economical nor safe. It is true that no exact design of a retaining wall or bin is at present possible. That is so because of lack of information, but is no reason for not using what information is available. Incidentally, where in engineering design can we point to an exact method? But, in order that the approximation be closer and therefore more economical, and based upon experimental data and therefore safer, it is advisable to beware of easy, short-cut formulas, especially since those who do not realize that there are limitations to such formulas are the ones likely to place greatest faith in them. R. W. Dull in *Engineering News*, Aug. 21, 1904, gives a complete set of formulas and coefficients for the design of steel bins, based upon both the Poncelet wedge and the Rankine theories. They are no harder to use than the "equivalent fluid method" and have the advantage of experimental verification, to some extent anyway. Until we know more about granular materials and their action, it seems to me that extra care should be taken in designing structures where the action of such materials must be taken into consideration.

JACOB FELD,
Formerly, Baldwin Fellow in Civil Engineering,
University of Cincinnati.
Brooklyn, Dec. 4.

Sir—If Mr. Feld would boil down his objection to the equivalent-fluid-pressure method of designing retaining walls and bins, there would be only two points left. One of these is that the equivalent fluid pressure method does not include nor imply the existence and effect of vertical friction on the side of the wall or bin. The other has to do with the effect of surcharge.

Taking up first the case where there is no surcharge: The horizontal pressure on the side of a wall or bin, as found by the equivalent-fluid-pressure method, is absolutely identical with the tabular results found by R. W. Dull in *Engineering News*, July 21, 1904. This is true both of the case where vertical friction is neglected and the case where a certain angle of friction is assumed, though, of course, the coefficient or unit weight of "liquid" is different in the two cases. Furthermore, by using a proper unit weight of fluid the lateral pressure for the case of indefinite surcharge is identical with that worked out by Mr. Dull, to which Mr. Feld refers as a correct method.

The effect of vertical friction on a coal bin is not used at all in the design. In a retaining wall it is an aid to stability which is too uncertain to enter as an element in design and had best be neglected.

As to the work saved: It is certainly easier, say in the case of horizontal beams in the side of a bin, simply to take the depth from the top of bin as a basis for fluid pressure and to design each beam for its spacing and span, rather than to find the total wedge pressure for the whole side of the bin down to that beam and half way to the next and deduct the wedge pressure to the mid-space to the beam above, as Mr. Feld's theory and method requires. Besides this, a designer feels far more secure with a simple method of unit loads, easily checked, than with a long formula.

The surcharge in a coal bin, which may be a wagonload of coal, or even a carload, piled in a pyramid on top, does not justify entering into extremely complex theory in design. Probably not one engineer in five hundred could apply the theory to this problem without giving it study for a day or two. I am among the 499, for I give very little time to theories that have so little of the practical to commend them. I venture to say that, given identical bins to proportion, on identical unit stresses, Mr. Feld's theoretical method and my rough one, given in *Engineering News-Record*, Nov. 9, 1922, would produce identical beam sizes. This, it seems to me, is the proof of the pudding.

Pittsburgh, Dec. 8. EDWARD GODFREY.

The Ventilation Problem in the Light of Recent Research

Sir—I have read with much interest the letters in *Engineering News-Record* of Dec. 7, 1922, on "Sanitation, Ventilation and Vaccination" by F. W. Harris and Rudolph Hering's comments on p. 1040 of the following issue, entitled "Ventilation, Body Temperature and Health." It would be most short-sighted to minimize our debt to vaccine and serum therapy. Vaccination has played a large part, along with sanitation, in the conquest of typhoid fever; and vaccine and serum therapy promises far more than any other measure in the control of pneumonia which we hope for but have not yet attained. Yet it is well that the importance of air conditioning as a factor in building up vital resistance should be emphasized. As you pointed out in your one line of editorial comment on Mr. Harris' letter, these procedures are fortunately not mutually exclusive. Let us by all means "vaccinate, ventilate and sanitate."

Mr. Hering's emphasis on the importance of air conditioning is more than justified for there is no more neglected field of applied physiology than the hygiene of the skin. The work of the New York State Commission on Ventilation (to be presented in book form by E. P. Dutton & Co., during the coming winter) makes it clear that overheating of occupied rooms is a factor of the first importance in reducing efficiency and increasing respiratory disease.

It is important, however, to note that modern ideas of ventilation with their emphasis on temperature control, rather than the removal of hypothetical and non-existent atmospheric poisons, demand a somewhat radical change in ventilation practice. The studies of the New York State Commission on Ventilation indicate that the ample air flushing (30 min.-ft. per person) required by the laws of many states is not only unnecessary but positively harmful since such an excessive air flow inevitably tends to overheating, discomfort, and increased respiratory disease.

Mr. Harris' statement that "windows are for light and should only be used for this purpose during the winter months" will not be accepted by those who have followed recent advances in this field, for the best general system of schoolroom ventilation which we observed in the studies of the New York State Commission is that which admits air over slanting window boards, with ample radiation below to moderate its temperature, and with gravity exhaust ducts for the removal of vitiated air from near the ceiling. The substitution of this system for fan ventilation will not only save money in construction but will also effect material saving in operation (since a much less volume of air must be warmed per hour) and will promote both the comfort and the health of the occupants.

New Haven, Conn., Dec. 16. C.-E. A. WINSLOW,
Professor of Public Health,
Yale School of Medicine.

NEWS OF THE WEEK

New York, December 28, 1922

Reclassification of Federal Employees Doubtful

Heavy Work Devolving Upon the Senate Appropriations Committee May Keep Measure Out

Washington Correspondence

Although several hearings have been held by a sub-committee of the Senate appropriations committee, the final report on the bill to reclassify the employees of the federal government and readjust salaries has not been formed and in view of the heavy work devolving upon the appropriations committee because of the annual supply bills fears are expressed that the reclassification measure will not be brought to action on the floor in time to assure passage at the present session of congress. Senator Smoot, chairman of the sub-committee in charge of the bill, has stated, however, that a report may be expected shortly.

Friends of the reclassification bill are dubious of its passage in the present Congress even with a report coming in January because of the doubt over the shape in which the bill will appear when it does come from committee.

FURTHER CHANGES PROPOSED

The civil service committee of the Senate considered this measure some weeks and reported it with a recommendation that it be passed on Feb. 8, last. Because of the financial features of the bill, it was referred to the appropriations committee for further study. The civil service committee made a number of changes in the bill from the form in which it was passed by the House. While the sessions of the sub-committee on appropriations have been executive, with a number of government officials testifying as to their ideas, it is generally understood that further changes have been seriously considered by this committee. Senator Smoot himself is the author of another reclassification bill which originally projected reforms based upon a somewhat different theory than those contained in the Lehlbach-Sterling bill, which was the basis of the one now under consideration.

It is said that the appropriations committee has been considering further reductions in the number of classes outlined in the bill, and that there has been serious thought of eliminating workers in the field and confining the measure to government employees within the District of Columbia. Changes in title and in relative pay for professional and sub-professional workers also have been suggested, it is said, because these men are leaving the service in increasing numbers.

Franklin Furnace Typhoid Outbreak Reaches 16 Deaths

Up to Dec. 15 the typhoid outbreak at Franklin Furnace, N. J., noted in *Engineering News-Record*, Dec. 14, p. 1045, had resulted in about one hundred reported cases and sixteen deaths.

New Jersey Road Bonds in Demand at Good Premium

Bids for $2,000,000 of 4½ per cent highway bonds of the State of New Jersey brought offers totaling about $50,000,000 on Dec. 19. The highest of nine bids for the entire issue was at the rate of 102.097 and secured the award. Bids for portions of the issue ranged from par to 103+ but the syndicate bid gave a higher yield than the best of the fractional bids.

Special Train for A.G.C. Convention

A special train will take the members of the Associated General Contractors to the annual convention at Los Angeles, Calif. Assembling at Chicago at the close of the Good Roads Show the members will leave by the Atchison, Topeka & Santa Fe Ry., at 6 p.m. Jan. 21 and arrive in Los Angeles at 12 m. Jan. 29. The trip will include a stop at Grand Canyon. For the return trip a choice of three routes, via the Union Pacific, the Southern Pacific or the Chicago, Milwaukee & St. Paul railways will be afforded. Complete schedules of the several trips, including excursions and stops at points of scenic interest, and giving railway fares, may be secured from the Associated General Contractors, Munsey Building, Washington, D. C.

Shreveport Division of Katy Sold at Public Auction

The Shreveport division of the Missouri, Kansas and Texas R.R., from Greenville, Texas, to the Louisiana state line; and the McKinney branch, between Greenville and McKinney, Texas, were sold at public auction in Greenville Dec. 16 for $700,000, the minimum price asked by the court. The lines involved in the sale total approximately 180 miles.

The sale of the branch lines at Greenville ends the receivership of the "Katy" R.R. that has been in effect since September, 1915, and also brings to a close the successful reorganization of the Katy lines, which has been worked out by a group of New York bankers headed by firm of J. W. Seligmann & Co.

It is planned to extend the line west for a connection with the Ft. Worth & Denver City, but just what point at which the connection is contemplated is not generally known. The road will have direct connections with Dallas and Ft. Worth and other important shipping centers.

The deal above mentioned will eventually give the Edenborn lines 523 miles of railroad through a rich lumber and farming belt, also two deep waterways.

Concrete Institute Program Is Announced

An exceptionally live and interesting program has been provided for the nineteenth annual convention of the American Concrete Institute to be held at the Hotel Sinton, Cincinnati, Ohio, Jan. 22-25, 1923. The meeting starts at 2 o'clock Monday afternoon with a special session on concrete products manufacture and has a meeting that night; Tuesday, Wednesday, and Thursday there will be three meetings each day, the Wednesday evening session, however, being devoted to a get-together social meeting.

Papers include methods of making concrete pressure pipe, by W. G. Chace of the Lock-Joint Pipe Co.; design and construction features of the ideal section of the Lincoln Highway, by W. G. Thompson; trend of design and construction of concrete roads, by H. Eltinge Breed; correction data for comparative test results from field specimens, by G. W. Hutchinson; effect of impure water on the strength of concrete, by Prof. Duff A. Abrams; design of elastic structures from paper models, by Prof. George E. Beggs; an interesting case of dangerous aggregate, by J. C. Pearson; thoughts on concrete houses, by J. C. Pearson; developments in surface treated concrete, by R. F. Havlik; some defects in concrete buildings, by H. C. Loring; inundation methods for measurement of sand in making concrete, by W. A. Slater and G. A. Smith, of the U. S. Bureau of Standards; analysis of the variables in concrete from the construction standpoint with some results of job tests, by W. P. Bloecher, Stone & Webster; and causes of steel corrosion and concrete disintegration, and methods of their prevention, by M. M. Upson.

In addition to this there are the usual presentation of specifications, a number of which this year are of great importance and a whole session devoted to a question box to which already some very important questions have been submitted. The secretary of the Institute is Harvey Whipple, 1807 East Grand Boulevard, Detroit, Mich.

Reclamation Levee Under Way on North Sulphur River

The Howard-Kenyon Dredging Co., of Houston, Texas, has unloaded a dredging machine at Cooper, Texas, to be used in the construction of the levee being constructed by the Delta Lamar Improvement District No. 1. The district now has a channel machine in operation and a channel in North Sulphur River about nine miles long is being cut. With the additional machinery, a levee about 12 miles long will be built. The levees and channel, when completed, will reclaim about 7,000 acres of rich bottom lands at a cost of approximately $350,000, and will make one of the best agricultural tracts in the State.

Winners of Michigan U. Highway Fellowships Announced

The board of regents of the University of Michigan at its November meeting appointed the following to receive 1922-1923 fellowships in highway engineering and highway transport:

Roy D. Chapin fellow in highway transport, Major Mark L. Ireland, Quartermaster Corps, U. S. A.; 1901, B. S. and 1913, M. E., Michigan Agricultural College; 1921, M. S., Massachusetts Institute of Technology. Since 1904 Major Ireland has been an army officer.

Roy D. Chapin fellow in highway engineering, William J. Groves; 1920, B. S., University of Missouri. (Entered School of Arts and Sciences, University of Missouri, 1914-15, School of Engineering 1915-1918, U. S. Army, June 1918 to June, 1919, School of Engineering, University of Missouri, 1919-1920.) Mr. Groves is at present assistant county engineer, Fayette County, Texas.

Detroit Edison fellow in highway engineering, A. T. Bragonier; 1909 graduate of Normal Department, Shepherd College; 1916 B. S. C. E., West Virginia University. At present Mr. Bragonier is instructor in highway engineering, West Virginia University and an engineer with the West Virginia State Highway Department.

Detroit Edison fellow in highway engineering, John D. Slye: 1914, B. S. C. E., University of Colorado. Mr. Slye, since 1919, has been chief of road surveys, U. S. Bureau of Public Roads, Denver, Colo.

Port Authority Reaffirms Opposition to Newark Bridge

The Port of New York Authority has reaffirmed to the Secretary of War its position of opposition to the construction of a bridge by the Central Railroad of New Jersey at the mouth of Newark Bay from Elizabethport to Bayonne and urges the postponement of action by the War Department on the matter for at least two years. The Port Authority, in a letter to the United States engineer officer in New York, states that it will be not possible until two or three years have passed to foreshadow the development of Newark Bay as to marine traffic and that it would be unfair to possible Newark Bay traffic to set up across the lower bay a bridge which would impede such traffic.

Hearings are still under way at Washington in the matter of the bridge, which was authorized by federal law some years ago and which is now being opposed by the city of Newark. The railroad's authorization expires next Friday and it is now endeavoring to have the last date for commencing work put forward some years.

Army Engineers Visit Rio Grande

Army engineers have been sent to El Paso, Texas, to inspect the Rio Grande River between El Paso and Fort Quitman, Texas, with the view of passing on the proposed deepening and straightening of the river channel as a means of removing the flood and mosquito menace at El Paso. The project will involve the expenditure of millions of dollars, according to Major Adams, who is in charge of the inspection party.

Electric Generating Stations To Absorb Indiana Fuel Wastage

The proposal of the construction of electric generating stations at the coal fields, to absorb fuel wastage has taken definite form in the North Middle West.

In discussing the situation recently Walter P. Bloecher, of Stone & Webster, has the following to say:

"The electric power and lighting utilities of some seventy cities and towns in Central Indiana, with Indianapolis as a center, have been consolidated by the Central Indiana Power Co. All will be interconnected and operated more or less as a unit. A new power station, with initial capacity of 40,000 kw., will be constructed on the bank of the Wabash River and in the center of some 3,400 acres of proven coal lands which the company has acquired. The electrical requirements of something in excess of 500,000 people will be met by the system. Savings in fuel, in administration and general overall expense are set up as results which may be expected to flow from interconnection operation.

"The new power station will be designed and built by Stone & Webster construction forces under the supervision of Kelsey Brewer & Co., of Grand Rapids, managers of the new system, while the financing of the consolidation, with the station and necessary physical links, to the extent of approximately $12,000,000, will be handled by Halsey, Stuart & Co., Stone & Webster, Inc., Spencer, Trask & Co., A. B. Leach & Co., and Paine, Webber & Co.

Municipal Garbage Collection to Be Continued at Seattle

By a vote of 5 to 4 the city council of Seattle, Wash., recently decided against changing from municipal to contract collection of garbage. Motor-truck collection is to be tried. A proposal to shift the collection work from the health to the public works department has been made.

Bridge Over Tanana River Nears Completion

When the Tanana River freezes over solidly, the finishing touches will be put on the 705-ft. span being used on the Alaskan R.R. to bridge that stream. The approaches have been completed and the falsework is all in awaiting the freezing of the river to complete the erection of the structure. It is believed trains will be using the bridge before the end of the year.

ALASKAN RAILWAY BRIDGE ACROSS TANANA RIVER

High Dam Conflict Awaits Legislative Action

Federal Power Commission Expected to Act Quickly Should the Minnesota Legislature Fail

Washington Correspondence

If the Minnesota legislature does not take action in the matter involving the use of the High Dam in the Mississippi River between St. Paul and Minneapolis, the Federal Power Commission is expected to act and quickly. The delay which has been occasioned by the conflict over who shall utilize the power which can be developed at that government dam, already has cost the Federal Government nearly $700,000. The matter has been further complicated by the filing of an application by Henry Ford.

The trouble was precipitated when the St. Paul Association, composed of leading citizens, induced their city to file an application with the Federal Power Commission for the right to develop the power which could be produced at the High Dam. This association is endeavoring to establish a new industrial area, and as a part of that campaign had secured the promise of Henry Ford to build a factory to employ 5,000 men on the understanding that the association would obtain power rights which it would transfer to him.

CONFLICTING APPLICATIONS FILED

This action caused the Northern States Power Co. to file a conflicting application. Still another conflicting application was filed by the City of Minneapolis. The Federal Power Commission held a hearing, but at the request of Senator Nelson, a decision was delayed so as to give the Municipal Electric Corp., composed of the cities of St. Paul and Minneapolis and the University of Minnesota, an opportunity to obtain the necessary state legislation to construct and operate the power plant.

It is apparent to those who have observed the situation closely that there is no chance for the two cities to get together on any proposition. In the meantime it has become apparent that the Federal Power Commission hardly would grant a license in such an indirect arrangement as is involved in the city of St. Paul—St. Paul Association—Henry Ford proposal.

As a result of the government's large investment in the dam, it is known that federal officials are disposed to make a final settlement of this project just as soon as the Minnesota Legislature will have indicated its intention in the matter.

Colorado Engineers to Make Survey of State's Technical Schools

The Colorado Engineering Council will make a survey of the state's technical schools, according to Arthur Ridgway, president of the council. The council will endeavor to ascertain the adequacy of technical education to meet the demand of engineering practice.

Mr. Ridgway asserts that "the council desires above all things else to see educational standards so maintained and specialization so distinctly marked that our young men will begin their professional careers thoroughly equipped to cope with the intricate and constantly increasing problems of our advanced civilization."

Great Northern Power Has Extensive 1923 Program

Will Spend Between $5,000,000 and $6,000,000 on Extensions—Pharris New Chief Engineer

Extensions of the Great Northern Power Company's Duluth electrical development to be started during 1923 at an estimated ultimate cost of between $4,000,000 and $5,000,000 have been announced by officials of the company. Included in the company's program is an extension of the present power development at Thomson on the St. Louis River, 18 miles north of Duluth, from 80,000 hp. to 150,000 hp.

The development program provides for the building of an additional dam in the vicinity of Fond-du-lac, Minn., at a point where a 70-ft. fall is available. The water from the power house there will be used over again in the reservoir to furnish the supply for the new buildings to be built at the dam. Additional pipe lines will be from that power house to the head gates of the company's present development at Thomson.

The Fond-du-Lac end of the project is estimated to cost $1,500,000. With a 375-ft. fall from the main reservoir to the present power house and a 70-ft. fall contemplated at the new dam, it is believed sufficient power will be furnished to operate Duluth and Superior street railways, and for industrial and electric lighting use in those cities for years to come.

Arrangements for financing the development program have been made with the Electric Bond & Development Co., New York.

Le Roy M. Pharris, of Salt Lake City, Utah, has arrived in Duluth to take charge of the company's plants and proposed extensions as chief engineer. He will direct the development program to its completion under the joint direction of the Duluth corporation and the Electric Bond & Share Co.

All the property necessary to carry through the power development has been purchased and it is expected that a start will be made next spring upon the Fond-du-Lac dam.

Dearborn Terminal Station at Chicago Burns

A short but spectacular fire in the headhouse of the Dearborn terminal station at Polk and Dearborn Sts., Chicago, practically destroyed the building on Dec. 21. This prominent structure, built in 1884, had heavy walls of brick and stone masonry, including a tall tower, but the floors and roof were of timber framing which burned rapidly. The main trainshed and a brick annex of the headhouse were not damaged. As the fire occurred about 4 p.m. it interfered seriously with the heavy rush-hour suburban service, but suburban and main-line trains were operated from the yards just outside the station.

It is thought probable that the first floor of the main building can be utilized temporarily for passenger facilities until decision is made as to reconstruction, but the office portion of the building is gutted. This station, which is owned by the Chicago & Western Indiana R.R., is the terminal for several important trunk lines and has an exceedingly heavy business.

Five Central States Announce Engineering Society Meetings

The Michigan Engineering Society will hold its annual meeting at Muskegon, Mich., Feb. 7 to 9, 1923. An exhibit of appliances and supplies is to be one of the features. C. B. Huff, Detroit, Mich., is secretary.

The Engineering Society of Wisconsin will hold its annual meeting at Madison, Wis., Feb. 22 and 23, 1923. L. S. Smith, Madison, Wis., is secretary.

The Iowa Engineering Society will hold its 35th annual convention at the Chamberlain Hotel, Des Moines, Iowa, Jan. 23 to 26. It is expected that 400 engineers will attend, including electrical, mechanical, mining, municipal, county, and drainage and structural engineers; and there will be an exhibit in connection with the meeting. M. L. Patzig of Des Moines is secretary of the society.

The Indiana Engineering Society announces the place and time of its annual meeting as the Lincoln Hotel, Indianapolis, Jan. 18 and 19, 1923. The preliminary program includes the following papers: "The Bates Experimental Road" by Clifford Older, state highway engineer of Illinois; "Hydraulic Power Development on the Tippecanoe River" by R. N. Freeman, New York; "Power Plant Progress" by Prof. A. W. Cole, Purdue University; "The Engineer License Law" by C. W. Cole, South Bend, Ind.; "The Railroad and the Public" by C. W. Paquette, chief engineer of the C., C., C. & St. L. Ry. There will be an excursion to the new dam and automatic hydraulic power plant of the Noblesville Light & Power Co., at Noblesville, Ind. Charles Brossmann, Indianapolis, is secretary of the society.

The Illinois Society of Engineers will hold its annual meeting Jan. 23 to 25 at Peoria, Ill.

Texans Urge Passage of Flood Control Bill

Messages have been sent to Representative J. P. Buchanan at Washington by Governor Neff of Texas and John A. Norris chairman of the state board of water engineers, urging support of the appropriation bill for topographic and flood-control work in Texas now before the House Finance Committee, of which Mr. Buchanan is a member. The measure, it is said, will assist Texas in carrying out its flood-control program. Similar messages are being sent by others interested in the program.

Colorado Supreme Court Upholds Moffat Tunnel Commission

On Dec. 18 the Supreme Court of Colorado denied to opponents of the Moffatt Tunnel project an injunction seeking to restrain the tunnel commission from entering upon the tunnel's construction. Ninety days are allowed in which appeal may be taken to the U. S. Supreme Court. It is not known yet whether an appeal will be made.

B. H. Bryant: A Tribute

By Charles Hansel

Consulting Engineer, New York City

I hope that every engineer can look back along the years to the time when he started his creative work under the direction of his first chief and be profoundly thankful that circumstances led him to begin his life's work under a man that he forever after looked upon with the same respect and admiration that I have continuously felt for my first chief, B. H. Bryant, who died July 8, 1922.

The years are many since I first looked upon him at Alamosa, Colo., in 1879, and each year has added to my knowledge and appreciation of his great ability as a railroad location engineer; tireless in energy and thoughtless of self, always a gentleman, always an engineer. His professional achievements were so varied and so important that I shall not here attempt to mention more than a few outstanding achievements.

As locating engineer, Denver & Rio Grande Ry. from Espanola, N. M. to El Paso, Tex., he located and built 400 miles of road. Later he was constructing engineer for the Canadian Pacific Ry. on the Kicking Horse and Columbus Rivers, and locating engineer, for the Great Northern Ry., from Helena to Great Falls. As chief engineer, Colorado Midland R.R., in 1887, he built the Buck Tunnel, 9,400 ft. long, then the second longest tunnel in the world. He served as chief engineer of the Colorado Southern during 1904 and 1905.

Mr. Bryant's work was not limited to the States. He left the Colorado Southern to accept the position of chief engineer of the Sao Paulo and Rio Grande R.R., Brazil; and while in Brazil he located more than 1,000 miles of line. From Brazil he went to Mexico with Dr. Pearson, where he explored and located several hundreds of miles. From Mexico he journeyed to Central America, where as chief location engineer for the International Railways of Central America he located projected lines in Guatemala, Salvador and Honduras.

During Mr. Bryant's later years he lived in New York and it was my great privilege frequently to receive him at my office, where my staff and I saluted him as chief. His picture honors my offices and I daily look upon it with pride—pride in his splendid character, ability and achievements, pride in having my first chief the intimate friend of my later years.

He was a man; he kept a holy faith in God and man. Work was his happiness, achievement his compensation; he loved his profession, he was loved. This fills the cup of contentment. The longest life contains no more.

New Niagara Gorge Bridge to Be Built by Michigan Central

Plans have been completed by the Michigan Central R.R. for a new double-track bridge crossing the Niagara gorge at Niagara Falls, N. Y., alongside the existing cantilever bridge of the railroad. Contract for construction of the superstructure has been let to the American Bridge Co. Active construction is expected to be started early in the coming season.

Cowper Nominated A.G.C. President

John W. Cowper, president of the John W. Cowper Co., Buffalo, N. Y., was nominated by the Board of Directors of the Associated General Contractors as president of the association for 1923 at a special meeting in Washington, D. C., on Dec. 12. The new nomination was made necessary by the death by accident of W. E. Wood of Detroit, Mich., previously nominated. Mr. Cowper is a member of the advisory board of the A.G.C., chairman of the committee on contracts, and vice-chairman of the joint conference on standard construction contracts.

St. Louis Engineers Will Talk on Bond Issue Items

To help inform the public as to the needs and purposes of the works covered by the proposed $88,000,000 bond issue at St. Louis, Mo., the Associated Engineering Societies of St. Louis have undertaken to have a series of short addresses given by engineers specially familiar with the several subjects. There are twenty-one items to be voted on separately and there will be a talk on each of these items. The series will begin in January, as a preparation for the public vote on Feb. 9, 1923.

In addition to this, a special committee organized by the Chamber of Commerce, with Baxter L. Brown, consulting engineer, at its head, has prepared a pamphlet explaining the items of the bond issue and giving the distribution of cost for the different works covered by these items.

Rio Power Plant Visited by American Engineers

An excursion to Lages, the source of hydro-electric power for the city and the state of Rio de Janeiro and the federal district in general, was arranged by the Brazilian Club de Engenharia for the visiting American engineers at the international exposition held in Rio de Janeiro in October, writes V. L. Havens, editor of *Ingeniería Internacional*, who represented the Am. Soc. C. E. at the congress.

The Lages installation, 13 miles from Lages and 58 miles from Rio de Janeiro, was reached by the Central Ry. of Brazil. The working head at the time of this visit was 304 m. The load in Rio de Janeiro averages about 900,000 kilos a day, among 80,000 light and 4,000 power customers. An outdoor substation supplies the state of Rio de Janeiro and a small interior department of the power house distributes to the works and to nearby farms and towns.

The electrical equipment at the plant is chiefly Westinghouse, with some Escher-Weiss hydraulic equipment and eight Pelton wheels. One of the wheels was idle for a time, and it was noted that the badly worn buckets had been built up by electric welding and later ground smooth with abrasive wheels.

The party made a trip by mule to the dam, which is built on a radius of 100 m., is about 45 m. high and stores 210,000,000 cu. m. of water. The lake above the dam follows a narrow canon for nearly 20 miles and runs back into many tributary gulches.

Are There Any Other State Engineering Societies?

In collecting information for its proposed booklet of engineering society data, Engineering News-Record has so far recorded only twenty-three state engineering societies. These, under various styles of name, are in the following states: Arkansas, Colorado, Connecticut, Florida, Illinois, Indiana, Iowa, Kansas, Louisiana, Massachusetts (Western), Michigan, Minnesota, Montana, New Jersey, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Vermont, and Wisconsin. If there are any others, notice of their existence and data concerning them would be appreciated. Please address letter to Editor, Engineering News-Record, and give name of society, secretary, president, location of home office, date and place of next annual meeting, and number of members.

Contractors' Insurance Claims Valid; A.G.C. to Handle Cases

Claims of contractors who built cantonments and other cost-plus works for the War Department during the war and were not reimbursed for the money they paid as premiums for surety bonds and liability, hold-up and burglary insurance, may be handled direct or through the Washington headquarters of the Associated General Contractors of America, such claims having been declared legitimate by the U. S. Supreme Court.

Following the high court's decision in the test cases brought before it by Mason & Hanger and the North-Eastern Construction Co., in which the ruling of the Court of Claims was upheld, the A.G.C. perfected arrangements to handle such claims for its members.

The cases decided by the Supreme Court grew out of a ruling by the Comptroller of Currency that money paid for bonds and insurance premiums could not be charged by contractors against the government on cost-plus contracts. The War Department had made a number of payments of this character before the ruling was handed down. The contractors who had thus been paid reimbursed the government. However, most of these claims were never paid. The Court of Claims and now the Supreme Court held that the government is obligated to repay the contractors for such expenditures.

Claims aggregating between $2,000,000 and $3,000,000 are said to be outstanding under this classification.

Texas Plans Drainage Reservoir To Benefit 100,000 Acres

A project involving the construction of a reservoir at Bronte, Texas, that will hold 250,000 acre-ft. of water and drain approximately 100,000 acres of land situated in Coke, Brown, and Runnels counties, has been approved by the state board of water engineers, according to Chairman Norris of the board.

Hearing on Louisville Dam Is Set for January 22

Washington Correspondence

The Secretary of War will hear on Jan. 22 the arguments of representatives of each party to the controversy over the power which will become available with the completion of dam No. 41 in the Ohio River at Louisville. Contenders for this power are the city of Louisville and the H. M. Byllesby Co.

Both the War Department and the Federal Power Commission are anxious to have a decision reached in this matter, since the construction of the dam is being delayed pending the outcome of the controversy. The appropriation necessary for the construction of the dam is available to the Chief of Engineers. It is felt that the successful applicant should co-operate with the district engineer in the preparation of the designs for the dam so that the maximum utilization may be made of the 35 ft. of head which will be developed.

The plan whereby the city of Louisville expects to make use of this power was worked out by the chief engineer of the city water-works. The city officials have been interested sufficiently to retain General William L. Sibert to investigate the proposition for them.

It is believed, however, that the city cannot make full utilization of the power unless it is prepared to take over the steam plant and distribution system of the Louisville Gas and Electric Co. Furthermore, Louisville probably cannot secure rights to own property and do business in Indiana. Indiana has the right to utilize one-half of the power which the dam will make available. Since the city is not in a position to make full utilization of the power, it is anticipated that the Federal Power Commission will decide the case in favor of the Louisville Hydro-Electric Co., which is the Byllesby subsidiary, and the actual applicant.

Report on Dirigible Design

A technical committee to report on the design of the U. S. Navy dirigible ZR 1 has made a preliminary report indicating that the design is satisfactory. This conclusion is specially reassuring because the vessel is rather similar in design to the British dirigible R 38 (American number ZR 2), which failed while flying over the Humber River. The committee, composed of Henry Goldmark, New York, as chairman, and W. W. Pagon, Baltimore, as secretary, both civil engineers, and Prof. William Hovgaard, Boston, Dr. L. B. Tuckerman, Bureau of Standards, and Dr. M. M. Munk, of the National Advisory Committee for Aeronautics, is expected to render a final report within a few weeks, having been engaged in the investigation since June. Its preliminary statement says that in the design of the vessel all available information on the subject has been applied with good judgment; that the quality of materials used and the methods of construction are satisfactory; that the strength of individual parts has been demonstrated by tests; that the vessel is stronger than the R 38; that the reasons for the failure of the latter have not been definitely established (by the British report); and that the design of the ZR 1 contains careful provision for possible causes of failure other than structural weakness.

Erie County, New York, Appoints Traffic Engineer

Erie County, N. Y., the county in which Buffalo is located, is to have a traffic engineer. George C. Diehl, county engineer and also president of the American Automobile Association, has been urging the establishment of a department in traffic engineering in his county for a number of years. His efforts have finally brought about the appointment of Howard H. Parsons as traffic engineer for the county.

ENGINEERING SOCIETIES

Calendar

Annual Meetings

FEDERATED AMERICAN ENGINEERING SOCIETIES, Washington, D. C.; Annual meeting Washington, Jan. 11-12, 1923.
AMERICAN ROADBUILDERS ASSOCIATION, New York City; Annual Convention, Chicago, Jan. 15-18.
AMERICAN SOCIETY OF CIVIL ENGINEERS, New York City; Annual meeting, New York City, Jan. 17-18.
AMERICAN CONCRETE INSTITUTE, Detroit; Annual Convention, Cincinnati, Jan. 22-26.
ASSOCIATED GENERAL CONTRACTORS OF AMERICA, Washington, D. C.; Annual meeting Los Angeles, Jan. 30-Feb. 3.
AMERICAN ASSOCIATION OF ENGINEERS, Chicago; Annual Convention, Norfolk, Va., May 7 to 9, 1923.

The San Francisco Section, Am. Soc. C.E., held its annual meeting on Dec. 19 and elected the following officers for the ensuing year: President, George A. Elliott, chief engineer, Spring Valley Water Co.; vice-president, H. H. Wadsworth, consulting engineer; secretary-treasurer, Henry D. Dewell, consulting engineer. The paper of the evening was read by Frank G. White, chief engineer, state Board of Harbor Commissioners, on "The China Basin Terminal."

PERSONAL NOTES

H. Burdette Cleveland, for the last three years secretary and consulting engineer of the Barth Engineering & Sanitation Co., and before that for fourteen years principal assistant engineer New York State Department of Health, will become associated with C. C. Vermeule, consulting engineer, New York City, on Jan. 1. Mr. Cleveland will devote himself to water supply and purification, sewerage and sewage treatment.

R. M. Cooley, for ten years a member of the engineering staff of the Minnesota State Highway Department, St. Paul, except for fourteen months spent in France during the World War with the 33rd Engineers, has resigned to represent the Holt Manufacturing Co. in Minneapolis. J. T. Ellison, assistant highway commissioner and chief bridge engineer, has assumed the bulk of Mr. Cooley's duties as superintendent of equipment for the highway department.

F. M. Mann, head of the department of architecture in the College of Engineering and Architecture, University of Minnesota, has been appointed a member of the Minneapolis City Planning Board.

Lieut.-Col. George B. Pillsbury, Corps of Engineers, U. S. Army, has been awarded a Distinguished Service Medal for exceptionally meritorious and distinguished service as an engineer officer. A similar decoration has been awarded to Lieut.-Col. John P. Hogan, of the Officers' Reserve Corps, for services as chief of the topographic sections of the Fifth Army Corps and of the Second Army in France. A similar decoration was awarded Major Howard S. Bennion, Corps of Engineers, for his services in organizing and placing the camouflage service on a high basis.

David A. Decker, engineer of water and sewers, Norfolk, Va., has resigned to accept a position with the Lock Joint Pipe Co., of Ampere, N. J. His first work will be the construction of 52 miles of reinforced-concrete pressure pipe for this company at Tulsa, Okla. With the completion of this work he will represent the company in the South. He has just completed the construction of the Lake Prince water supply project for Norfolk, at a cost of approximately $4,000,000, and in addition to this has had charge of all water-works and sewer construction and maintenance in that city. He has been with the Norfolk Department of Public Works since 1911, with the exception of ten months in 1917, when he resigned to enter private work, but was recalled in January, 1918, during the war, to take charge of water construction.

W. D. Barkhuff has been appointed by the Board of Public Works as superintendent of streets and sewers of Seattle, Wash., following the recent resignation of Lt.-Col. George M. Rice. Mr. Barkhuff is a civil engineer, having served as district engineer in the city engineering department from 1908 to 1911.

A. N. Johns, who for the past several years has been connected with the engineering department of the California State Railroad Commission, has severed his connection with that organization to take the position of chief engineer with the Associated Telephone Co., of Long Beach, Calif.

G. I. Batelle, formerly with the engineering department of the city of San Francisco; Charles Worden, of the firm of Lloyd and Worden, Quincy, Calif., and E. W. Roberts, formerly with the Western States Gas and Electric Co., are now in the employ of the California State Highway Commission.

J. R. Vernon has resigned his position as assistant division engineer for the Wisconsin Highway Commission at Lancaster, Wis., and has accepted a position in the Chicago office of the Johnson Service Co.

The Thompson & Lichtner Co., engineers, Boston, announce the addition to their firm, as partners, of W. Burton Wescott and Frederick F. Bryant, both formerly of the firm of Kalmus, Comstock & Wescott, Inc., Boston, and Ernest R. Sharpe, formerly of the Industrial Service Department, Boston.

The Highway Construction Co., Elyria, Ohio, has been incorporated with a capital of $250,000 to do general construction work, the incorporators being M. Mendelson, Fred E. Altfelt, H. C. Cheney, F. L. Hamel, and L. B. Fauver.

Robert Jemison, Jr., of Birmingham, Ala., has been appointed a member of the Alabama Highway Commission to succeed S. R. Batson, who resigned in order to devote his entire time to private practice. Mr. Batson was for many years county engineer of Jefferson County, Ala.

C. W. Best, Canonsburg, Pa., who has been a structural detailer with the McClintic-Marshall Construction Co., has taken up the same kind of work for the Fort Pitt Bridge Works.

F. W. Ward has been made superintendent of construction for the H. P. Cummings Construction Co., Ware, Mass., after having worked for the Fitzdale Paper Co. in the same capacity.

Robert D. Short, formerly concrete designing draftsman with the Kentucky Highway Department, is now concrete designer for the Sinclair Refining Co., an oil refining firm in Chicago.

Richard J. Hale has been appointed county engineer of Missoula County, Mont. He was formerly engineer with the Pioneer Construction Co.

Major Virgil L. Peterson, of Providence, R.I., has been awarded a Distinguished Service Medal for his work, as Colonel of Engineers, in reorganization training at Camps Lee and Humphreys, Va.

OBITUARY

Harold Howald, city engineer of Massillon, Ohio, was burned to death at Little Wadsworth, Ohio, in a fire which destroyed a cottage near the west reservoir. Mr. Howald had been city engineer of Massillon for ten years.

Frank S. Taylor, consulting engineer of Austin, Texas, died at his home Dec. 15 from the effects of a stroke of apoplexy suffered a few days previous. He was 54 years old. Mr. Taylor was born in San Antonio, Texas, and resided for the greater part of his life in Austin. He was a graduate of Vanderbilt University.

George Sears Greene, Jr., former director, treasurer and vice-president of the American Society of Civil Engineers, and a consulting engineer of New York City, died at his home in South Orange, N. J., Dec. 23, at the age of 85 years. Mr. Greene was prominent in the early engineering development of New York's port, having been in charge, as chief engineer of the Department of Docks, of building the sea-wall which partially surrounds the Island of Manhattan. An extended obituary will be published in next week's issue.

From the Manufacturer's Point of View

A Point of Contact Between
Maker and User of Construction Equipment and Materials

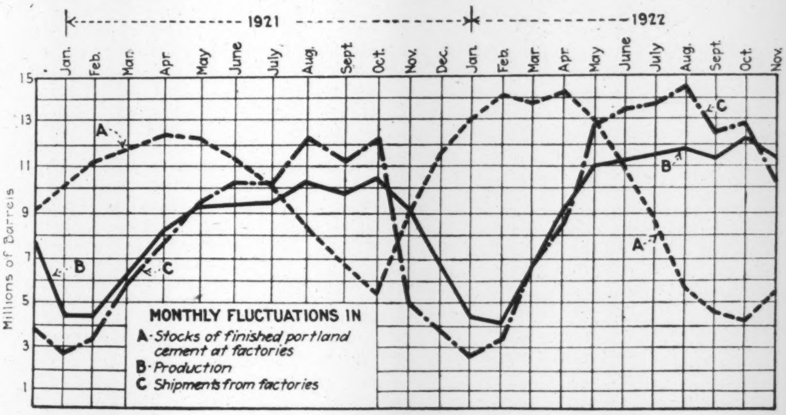
The following article amplifies some of the points regarding cement production, prices, and seasonal demand discussed by L. R. Burch, of the Atlas Portland Cement Co., in "Engineering News-Record" Sept. 14, p. 456 and Sept. 7, p. 404.—Editor.

Cement Producing Capacity in United States Is Ample

Seasonal Demand, However, Restricts Output of Mills to 80 per Cent of Maximum

By Blaine S. Smith
General Sales Manager, Universal Portland Cement Co., Chicago

DIFFICULTY in securing cement through the summer and fall of this year was due not only to the coal and railroad strikes, but to other reasons that applied this year and in many previous years. Purchasers demand large shipments of cement in summer and fall and decline to take deliveries in winter and spring. As a result, cement mills are idle or run only part time in the former season and are unable to produce enough to supply the demand in the latter season. Transportation usually is available in winter and spring, while the railroads are congested in summer and fall. Obviously the cement user's remedy is to order out shipments when cement and transportation to move it are available.



The cement manufacturing capacity of the country is from 130 to 140 million barrels a year. The country, however, has never used in any year prior to 1922 as much as 100 million barrels. The country fails to use as much as 80 per cent of its manufacturing capacity, even in a year of abnormal building activity, because, to a large extent, cement is considered a seasonal product.

Mills, therefore, manufacture and store large quantities of cement in the off season to be able to ship more than can be produced in the busy season. One manufacturer with a mill capacity of 12 million barrels a year, had in storage the latter part of April more than 4 million barrels, or over a third of a full year's output. This practice, of course, involves a very heavy investment by the manufacturer which of necessity is reflected in the price of his product.

Aside from this important feature, there is another of equal importance. The average cement mill operating at capacity will fill its storage space in about three months if it makes no outgoing shipments. All mills, of course, make some shipments in all months of the year but shipments through the winter and early spring are usually so light that storage bins becomme full, necessitating curtailment of production. In a year of ordinarily heavy demand for cement production lost by a cement mill in the early months is lost forever.

To illustrate: A mill with a producing capacity of 12 million barrels a year can produce a million barrels a month—and no more. If it loses a month's production from any cause it cannot the next month make up the loss by producing 2 million barrels. This year one manufacturer lost upwards of three-quarters of a million barrels of production in August and September because of the coal strike. When this manufacturer's mills later began to receive sufficient coal for full operations the mills could not make up the lost production because even at full operation they were not capable of turning out more than a million barrels a month. Their shipments were 2 million barrels in July and nearly as much in August, although in the latter month a large part of their producing capacity was shut down because of lack of coal. The heavy shipments were made from stocks produced in earlier months.

All this means that while the capacity of the country's cement mills is more by 20 to 30 per cent than the

(*Concluded on page 1140*)

More Suggestions—

For Better Equipment and Repair Parts Service

IN THE Dec. 14 issue was begun a discussion of "Better Equipment Maintenance and Repair Parts Service." Its object is to show how some of the misunderstandings between maker and user of construction machinery can be avoided. This week's contribution is a recital of experiences by a manufacturer of air compressors and pneumatic tools:

Sullivan Machinery Co., Chicago

OUR instructions to customers, printed in our part lists and instruction books, read as follows:

> *Always give the name of the part desired, the number stamped or cast on it, and the name, type and shop number of the machine on which it is used. With these identification marks before us, we shall be able to fill your repair orders promptly and without confusion.*

If we can get the customer to give us this information everything is lovely. In the case of certain machines, particularly those having a large number of parts, we have found it more convenient to use a reference number on a chart or group photograph of parts and the customer orders by the reference number, or by the telegraph code word identified with it, if he prefers. In every case we keep an exact duplicate part list corresponding with the machine which the customer has, and this list is referred to in making out repair orders which come in in this way.

Proper Repair Stock Base

We find that most customers do not know what a proper repair stock base is for their machine. This base varies with the number of machines which a customer has in use, the likelihood of breakage or wear requiring replacement, also with the size and expense of the part.

The troubles here discussed are old ones with us, and yet, in spite of all our pains, they keep recurring.

NOTICE

Please keep the enclosed detail part list in a prominent place where it can be easily referred to. When ordering duplicate parts for the machinery recently sent you, USE THIS LIST and give the following data, which will enable us to fill your order promptly and without mistakes:

1. **Symbol letters and shop number of machine.**
2. **Name of part and piece number stamped or cast on part to be replaced.**
3. State whether machine uses steam, air or electricity.

Sullivan Machinery Co.
Form 1228

We ship a book of instructions with each machine and a repair part list which is either a group photo list or an outline cut of the machine with arrows and reference numbers.

In addition, when the customer's part list is sent to him, a label is attached to it in such a way that it can hardly be overlooked. The part list should be placed in the hands of the proper clerk who has to do with ordering.

If we could get the acceptance of the idea of keeping proper stock of repairs on hand it would eliminate many troubles. The larger concerns are more intelligent about this than the smaller ones.

A tendency which has to be combatted is that of carrying too many repairs on hand. Machine design changes, and it is dangerous to carry too large a stock, as well as to carry too small a stock of parts. Manufacturers are not very receptive when they are asked to take back several hundred dollars worth of repairs which a customer has been cherishing on his shelf for eight or ten years, and which are for machines no longer built. This could be avoided by keeping suitable stock bases. Manufacturers' salesmen and engineers are always ready to indicate what adequate and safe bases are.

Further comment on better equipment maintenance and repair parts service will appear in an early issue.—EDITOR.

Cement Production

(Concluded from p. 1139)

country has ever used, it is impossible to utilize it.

The U. S. Geological Survey issues monthly statistics on cement production, shipments and stocks. Commenting on these statistics for August the Portland Cement Association says:

"That the portland cement industry has capacity sufficient to take care of a very marked increase in construction activity is evidenced by U. S. Geological Survey production figures for August and preceding months this year.

"Notwithstanding the inability of some companies to secure coal, which is a very important item in the cement manufacturing process (200 lb. of coal being required for manufacture of each 376-lb. barrel of portland cement), August was the best production month on record—11,664,000 bbl. being produced. This is the fourth successive month in which production has exceeded 11,000,000 bbl., and that figure had never heretofore been exceeded.

"Total production since the active construction season opened on April 1 has been approximately 55,000,000 bbl., or at the rate of 132,000,000 bbl. per year. Shipments for the best previous year on record totaled slightly under 100,000,000 bbl."

The rate of 132 million barrels a year is based on the average production of 11 million barrels a month for the five months beginning April 1, as reported by the Geological Survey. A further analysis of the Survey's figures shows stocks on hand at the beginning of the year about 13 million barrels and production in the first three months of this year 15¼ million barrels, some 17 to 18 million barrels short of the productive capacity of 11 million barrels a month for the following five months. If shipments in January, February and March had been at a rate sufficiently high to have permitted the production of all or a substantial part of the 17 or 18 million barrels just referred to, that quantity of cement would have been available later at a time of so-called cement shortage or would have been used in work earlier in the year thus reducing the later demand which was beyond the ability of cement mills to satisfy.

Next Week

Review of the developments, during 1922, in the field of Construction Equipment and Materials.

Still further analysis of the Geological Survey's figures shows that production up to the end of April was about 24½ million barrels, which added to stocks on hand at the beginning of the year of about 13 million barrels gives a total of about 37 million barrels available for shipment in the first four months of the year. Actual shipments in those four months were less than 22 million barrels, an excess of available cement over shipments of about 15 million barrels. For the next four months, from May 1 to Aug. 31, production was about 45½ million barrels and shipments about 54½ million, an excess of shipments over production of about 9 million barrels. In other words, purchasers took from cement companies in the first four months considerably less cement than was manufactured and a great deal less than the country's mills were capable of manufacturing. In the next four months they took more cement than was manufactured, a practice made possible by the fact that manufacturers carried in stock at the beginning of the year about 13 million barrels and produced in the first four months considerably more cement than purchasers allowed them to ship.

EFFECT OF REGULATION

Regulation of production, therefore, is most important in its effect on the cement purchaser who, unable to secure all the cement he wants in the late summer and early fall months, forms the opinion that the cement manufacturing capacity of the country is insufficient to supply the country's needs. That opinion is incorrect, as demonstrated by the Geological Survey's figures.

The next most important feature entering into the situation is transportation. It is a well known fact that in years of even normal business activity the railroads have difficulty in late summer and early fall in moving the traffic offered them, and in years of more than normal business activity the transportation system suffers an almost complete breakdown. In these conditions, it is clear that cement users cannot hope for as prompt deliveries in the late months as in the early months of the year. Yet they insist on demanding heavy shipments in summer and fall when deliveries are difficult to get because of lack of transportation facilities, and decline to take deliveries in winter and spring, when transportation is available.

Realizing the situation as affected both by production and by transportation, the Illinois State Highway Department is incorporating the following provision in its contracts with contractors who are to build roads next year:

Storage of Cement—It is understood and agreed that the contractor shall store during the months of January, February, March and April, 1923, not less than thirty-three and one-third (33⅓) per cent of the total amount of cement needed to complete this section, and that this rate of storage shall be maintained until the completion of the work, or until the end of the construction season of 1923.

Indiana also is incorporating a similar provision in its agreements with contractors. The highway departments of these two and other states have learned from bitter experience that they and their contractors cannot hope to carry out their extensive highway-building programs each year if they insist on trying to confine shipments of cement to the five months June to October inclusive, and decline to take out any cement in the remaining seven months.

Nor can the state highway departments alone, even if all the other states follow the lead of Illinois and Indiana, provide all the relief necessary. They can improve the situation vastly, but not relieve it entirely. The help of all other cement buyers also (dealers, railroads, industrial plants, contractors on both public and private work, all branches of federal, state and municipal government, etc., etc.) is needed.

Existing cement mills are amply able to supply the country's needs but they must be allowed to ship their output with some degree of regularity through all the months of the year. If more cement mills are built to supply the peak load in five or six months and remain idle or partly so in the other six or seven months it is inevitable that the price of cement will be higher than if the industry were conducted on a more businesslike basis. A mill running only part time cannot produce cement as cheaply as one operating continuously. The excess cost must be passed on by the manufacturer to the dealers in and users of cement.

Business Notes

FRED A. MARSH, general purchasing agent of the Link-Belt Co., Chicago, died in that city Dec. 11.

Mr. Marsh, who was 52 years old, had been a member of the Link-Belt organization for over 33 years; was one of the organizers of the Purchasing Agents Association of Chicago and served as its first president; and had been for years a director in the National Association of Purchasing Agents.

W. L. ALLEN has resigned as vice-president and general manager of Laclede Steel Co., St. Louis, Mo., to become associated after Jan. 1 with Frank H. Johnson of Chicago, Ill., in the sale of the Laclede and other steel companies' products. Mr. Allen was formerly president of the Valley Steel Co. of East St. Louis, Ill., which was taken over by the Laclede company in 1918. He was one of the early sales engineers of the armor plate department of Carnegie Steel Co. in the promotion of chrome-vanadium and alloy steels. He later acted as commercial engineer of the R. D. Nuttall Co. in the development of heat-treated gearings.

RICHARD H. CATLETT, formerly New England representative of the Cal Chemical Co., Inc., Hagerstown, Md., has been made general manager of that company and transferred to Hagerstown. The company will be represented in New England by William S. Simpson, Inc., distributors, Boston.

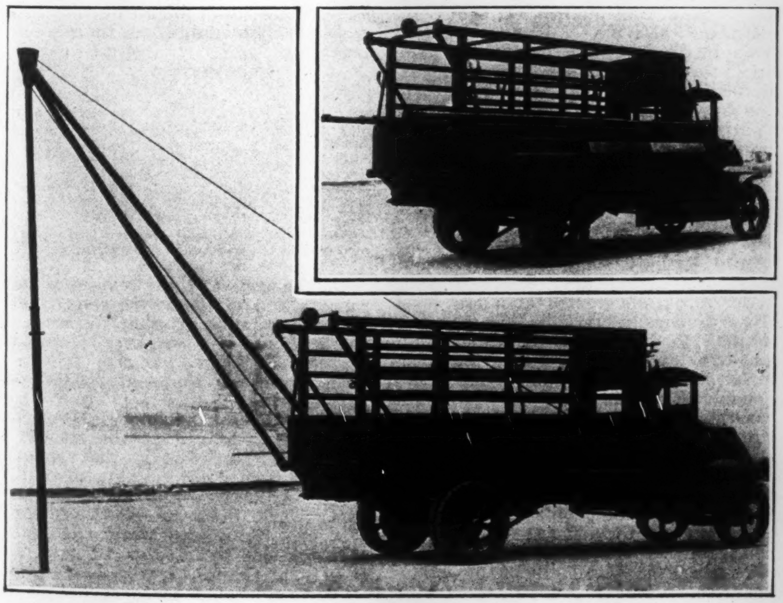
T. W. LACKIE, superintendent for the Texas Bitulithic Co. at Paris, Texas, for a number of years, is now superintendent for the West Texas Construction Co. at Abilene.

Equipment and Materials

Truck Specially Equipped for Electric Line Repair

For service on electric line repair, cable pulling, erection of poles, and general construction maintenance work, the International Motor Co., New York, has provided special equipment for its 5 and 3½-ton Mack motor trucks. One of these units is in service for the Flatbush Gas Co. of Brooklyn, N. Y. Along the sides of the body are box compartments for holding materials, such as insulators and other parts ordinarily employed in work of this sort, in addition to locker compartments for the clothing of the workmen, and a special compartment for a gas furnace plant. Underneath the floor of the truck are box compartments for heavy tools, such as crowbars, shovels, pickaxes, etc. Supports are furnished also for carrying along the side of the truck 10-ft. ladders.

One of the features of the equipment is a demountable derrick, shown in the accompanying photograph, which consists of steel tubing forming an A-frame with a vertical support as shown. This equipment is employed for erecting poles, power for hoisting being supplied by the motor truck engine. This derrick has a capacity of 3,000 lb.



Portable Air-Electric Device Drills Concrete or Stone

For drilling or chipping concrete or stone a portable drill operated by a combination of electric and compressed air power has been developed by the Pneumelectric Corp., Syracuse, N. Y. It is intended particularly for contractors, electricians, plumbers, steamfitters, and millwrights. According to statements of its manufacturer, this machine has drilled a 1-in. hole 10 in. deep in a concrete ceiling in 3 min. 22 sec. for the purpose of suspending an electric motor.

The drill is of the hammer type, striking 1,000 blows per minute and the drill steel is rotated 100 r.p.m. by positive drive from the motor. When used for chipping purposes the rotating gear is removed. The hammer is operated by air expanding in the same cylinder in which it is compressed. The motor is inclosed and when working in an upright position a dust guard and jacket are used to protect the machine from the drill cuttings. The drill weighs 56 lb.

All parts are machined and gears are of alloy steel, heat-treated, with cut teeth. The air cylinder is an aluminum casting bushed with a steel sleeve.

Publications from the Construction Industry

Rock Crushers and Screens—**SMITH ENGINEERING WORKS**, Milwaukee, in a 26-p. bulletin, illustrates and describes its line of rock-crushing and gravel-pit machinery. Several new sizes of Telsmith primary breakers are shown, ranging in rated hourly capacity from 12 to 325 tons. A new size of reduction crusher with a rated hourly capacity of from 30 to 45 tons with discharge openings of from 1 to 1½ in. is listed. In the Telsmith rotary screen there has been introduced a renewable steel tracker ring and angle-iron frame. Similar changes have been made in the heavy-duty washing screen and a new 24-in. size has been added. There is also announced a new line of sand-settling tanks with improved tilting discharge designed to produce a dewatered product.

Deaeration of Water—**H. S. B. W.-COCHRANE CORP.**, Philadelphia, discusses the deaeration of water to prevent corrosion in piping, economizers and boilers, in a 15-p. booklet. The apparatus described is designed to deliver water free of dissolved oxygen, at any temperature from 140 deg. F. up, as required for hot water heating and service systems and for feeding to economizers and boilers. The method consists in heating the water by spraying in a chamber under vacuum and then vigorously agitating or scrubbing the water by blowing steam through it. Charts are given showing the amount of iron converted into rust by water containing different amounts of oxygen, vapor pressures corresponding to water temperatures and solubilities of oxygen and nitrogen in water at various temperatures and pressures. The Winkler test for detecting dissolved oxygen in water is also described.

Trench Machine—**POTTER MANUFACTURING CO.**, Indianapolis, Ind., features its trench machine for sewer work in a 20-p. illustrated pamphlet. The equipment consists of a carriage which operates on a track supported above the trench by steel bents, forming a long trestle. Power for operating the equipment is supplied by a hoisting engine at one end of the trestle. Buckets for the excavated material are handled from the overhead carriage. The pamphlet contains a number of photographs of the trench machine in operation on contract work.

Steel Conveyor Belts—**SANDVIK STEEL, INC.**, New York, in a 24-p. illustrated booklet, describes its steel conveyor belts which are manufactured in one-piece lengths of from 250 to 325 ft. and various widths and thicknesses. The belts may be arranged to run either on roller supports or to slide on wood runners. The steel belt, it is pointed out, cannot be troughed in the same manner as a textile belt, but, for nonabrasive material the conveying strand may be made the bottom of a trough, with fixed sides $\frac{1}{16}$ in. clear of the belt, the carrying capacity being increased thereby from three to four times that of ordinary flat belt.

Business Side of Construction

Facts and Events that Affect Cost and Volume

Industrial Activity Nears 1919 Peak Level

Production and Car Loadings Increased —Fewer Business Failures—Stronger Foreign Exchanges

In its ninth bi-monthly review of industrial-economic conditions in the United States, just issued, the National Industrial Conference Board says:

The recovery of business in the United States since the severe depression late in 1920 and early in 1921 has been unusually rapid, and industrial activity today is fast approaching the level at the peak of the boom of 1919-1920. General business is probably not quite up to this point, but the general situation is sound and far better than could have been reasonably expected at the beginning of 1921 or even at the beginning of 1922.

The business and industrial situation as a whole has shown a remarkable degree of improvement since the slump of 1920 and 1921. An index of industrial activity compiled by the National Industrial Conference Board and including seventeen of the principal basic industries of the United States showed that, compared with the monthly average for 1919-21 as a base, industrial activity for the month of October stood at 124.8. This compares very favorably with 65.7, the index number for January, 1921, and the low point since the beginning of 1915. The peak was reached in October, 1919 and the high point for 1922 so far was reached in June, when the index stood at 119.9.

FUNDAMENTAL CONDITIONS SOUND

This index of industrial activity shows that the index rose 10 per cent from September to October and was 22.6 per cent higher in October, 1922 than in October, 1921. These facts indicate that industry has recovered much more rapidly than is generally supposed and that it is now at a very high point. In fact, it has been higher only on two occasions, namely, in July, 1918 and during the after-war boom in 1919 and 1920.

During October and November there was a steady improvement in the industrial situation. Fundamental conditions have become more sound. The evidence of this is to be found in those indices which are commonly accepted as measuring business conditions. The production of pig iron and steel ingots has increased, and during October it reached the highest point since the beginning of 1921. The unfilled tonnage of the United States Steel Corporation also rose considerably, indicating that even the increased production of iron and steel during October is by no means keeping pace with demand, which continues at a high rate. Commercial failures have decreased. Railroad car loadings have reached almost record-breaking figures; in fact, car loadings for the first ten months of 1922 are higher than for any similar period.

Prices have somewhat advanced and the tendency during the past two months, has been slightly upward.

Financial Situation

Stocks active in a professional way, with little trading by the public.

Bond market dull.

Money market quiet and steady. Demand loans on the stock exchange varied from 4 to 5 per cent, compared with 3¾ to 5 per cent the week before. Time money remains at 4¾ to 5 per cent.

Wholesale prices have increased appreciably and in most lines seem to be firm and strong. Prices of staple raw materials have shown a considerable advance. Retail prices, however, have not as yet reflected the increase in wholesale prices and, with the exception of those of coal and food, remain almost stationary.

The agricultural crops of the country are larger than usual. Prices, however, except for cotton, are relatively low. As a group, prices of agricultural products have advanced less beyond pre-war levels than prices of any other of the principal commodity groups. This condition has caused criticism and unrest in agricultural sections of the country, where it is felt that the general prosperity of the industrial districts has not been shared.

COAL OUTPUT NORMAL

During October and November the coal industry again developed production to the normal amount. The danger of a serious coal famine seems past, though there may be some difficulty in distributing adequate supplies for domestic use, particularly of anthracite. Prices, however, are high and business is paying heavy toll for the recent discord in coal mining.

Money conditions have been characterized by relatively low rates of interest and re-discount, large availability of credit, increased specie reserves, and continuance of heavy investment activity. The increasing strength displayed by some of the principal foreign exchanges may be explained partly by the fact that absorption by American investors of foreign securities, both governmental and private, amounted to $653,000,000 during the first half of 1922, compared with $626,000,000 during the whole of 1921. The growth of commercial loans of banks and expansion in note circulation are due rather to an increase in fundamental business than to the seasonal demand of agriculture.

Foreign trade is still at a low level. Exports consist largely of raw materials, foodstuffs, and staple commodities, and those of highly manufactured merchandise are much restricted. Considerable quantities of coal and iron have been imported from abroad, but such imports are scarcely normal and with the increased production of coal and improvement in transportation, will probably largely decline.

The Near East problem continues to unsettle the international situation and has probably had some part in discouraging the development of export business.

Steel Fabricating Shop Capacity Increased Since 1913

A considerable increase in the capacity of the structural steel fabricating shops of the United States since 1913 is shown in a special survey made by the Department of Commerce. A preliminary report, based on data received from 143 firms with a total revised capacity rating of 208,440 tons per month, shows an increase since 1913 of 45,025 tons in monthly capacity, or about 22 per cent.

The following table shows the total monthly capacity for each year as reported by the above firms, representing about 83 per cent of the present estimated capacity of the United States, and the increase over the preceding year and over 1913:

	Total Monthly Capacity	Increase over Previous Year	Increase over 1913
1913	163,415	....	....
1914	164,265	850	850
1915	166,500	2,235	3,085
1916	170,900	4,400	7,435
1917	175,935	5,035	12,520
1918	185,060	9,125	21,645
1919	188,800	3,740	25,385
1920	194,675	*5,875	31,260
1921	197,575	2,900	34,160
1922	208,440	10,865	45,025

The increase noted in the year 1922 was largely due to the entrance of ship-building concerns into the fabrication of structural steel. In this connection, the Department of Commerce points out that the capacity of structural steel shops is quite elastic in that, when not busy on structural steel, a shop is often used for tank work, railroad cars, shipbuilding, etc., and, similarly structural work may be turned out in tank shops, shipbuilding plants, etc. The capacity figures given in the report refer to that portion of the fabricating capacity that is usually used for structural work; it is capable of expansion or contraction.

The following table shows the tonnage booked each month by these firms and the percentage of their revised capacities:

	Tonnage Booked	Per Cent of Capacity*
April	193,520	91.5
May	173,588	82.1
June	154,770	73.2
July	143,907	68.0
August	146,621	69.3
September	137,485	65.0
October	121,150	57.3
November	99,040	46.8

* Increased percentages over previous reports for past months due to revision of capacities.

On the basis of these revised capacity reports and of known or reliably estimated capacities of other concerns, the Department of Commerce places the present capacity of the fabricated structural steel shops at 250,000 tons per month.

The capacity as reported for this survey was defined as the amount of structural steel work that actually could be turned out running single turn on the character and class of structural work that the plant ordinarily secures. Structural work was considered for this purpose as all work uses structural shapes.

A considerable seasonal decline occurred in the sales of fabricated structural steel in November, according to reports received by the Department of Commerce through the Bureau of the Census. November sales amounted to 46.8 per cent of shop capacity as against 57.3 per cent reported for October.

These percentages are based on a uniform capacity rating recently reported to the Bureau by almost all the reporting fabricators. Through these new ratings, the total monthly capacity of the 140 identical firms reporting each month from April through November has been reduced from 223,685 tons to 211,510 tons.

Wholesale Prices Rising

The trend of wholesale prices of commodities was upward in November, according to information gathered in representative markets by the U. S. Department of Labor through the Bureau of Labor statistics. Measured by the Bureau's weighted index number, which includes 404 commodities or price series, the increase from the general level of the month before was 1⅓ per cent.

Farm products again lead in price increases, due to advances in grains, cotton and cottonseed, wool, etc. Prices in this group averaged 3½ per cent higher in November than in October. Food articles and cloths and clothing advanced over 2 per cent and chemicals and drugs advanced almost 2½ per cent in average price from October to November. Smaller increases were recorded for building materials, housefurnishing goods, and miscellaneous commodities.

Further decreases took place in the group of fuel and lighting materials, soft coal and coke averaging less than in the month before. Metals and metal products, due to the drop in pig iron and steel billets, also showed a decline from the October level.

Of the 404 commodities or series of quotations for which comparable data for October and November were obtained, increases were shown in 189 and decreases in 71 instances. In 144 commodities no change in price was reported.

INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS OF COMMODITIES
(1913=100.)

	1921 November	1922 October	1922 November
Farm products	121	138	143
Foods	139	140	143
Cloths and clothing	180	188	192
Fuel and lighting	197	226	218
Metals and metal products	114	135	133
Building materials	163	183	185
Chemicals and drugs	129	124	127
Housefurnishing goods	178	176	179
Miscellaneous	119	120	122
All commodities	141	154	156

Comparing prices in November with those of a year ago, as measured by changes in the index numbers, it is seen that the general level has increased over 10½ per cent. Farm products show the largest increase, 18¼ per cent, with metals and metal products coming next with an incresae of 16¾ per cent. Building materials increased 13½ per cent, fuel and lighting materials 10¾ per cent, and cloths and clothing 6¾ per cent in average price in the year. Foods and miscellaneous commodities each show an increase of over 2½ per cent. A slight increase is shown for housefurnishing goods, while chemicals and drugs were cheaper than in November of last year.

Change in Examination of Immigrants Proposed

Selection of immigrants seeking admission to the United States by examination before they leave their foreign home countries was proposed by Secretary of Labor Davis in a recommendation which would revolutionize the present system of immigration examination, as set forth in the Secretary's annual report recently made public. Secretary Davis declared that the present system gives to foreign nations the privilege of selecting the immigrants whom they will permit to come to the United States.

The Secretary stated, in part, that "the passport system at the present time is, with reference to immigration, ill adapted to our needs. It is time that we ourselves had something to say—if we are to continue to rely upon alien labor for the development of our resources—about the kind of emigrants to be given the privilege of taking part in our national affairs. Instead of accepting the passport given by foreign Governments we should set a standard. Those qualified to enter should be selected on the other side and given our certificate of qualification. To accomplish this purpose legislation should be enacted providing for the examination abroad of prospective emigrants by giving the following tests:

"1. Blood: To determine the general condition of health, latent diseases, etc.

"2. A physical inventory of the strength and condition, brawn and muscle, affecting ability to earn a living.

"3. Mental: That our public institutions may not be filled with men, women, and children to whom we owe no national duty, while our own are not properly cared for; but further still, that our good American blood shall not become polluted with imbecility, insanity, and idiocy. We must keep the American race sturdy in mind as well as in body."

Texas Highway Contracts Reach Two Million in Three Months

Approximately $2,000,000 worth of paving contracts have been let during October, November and December for construction of state highways between San Antonio, Texas; points on the Rio Grande River and on the Gulf Coast, according to T. R. Spence, division engineer of the State Highway Department, in charge of State District No. 6, in which San Antonio is located. Contracts let during the week of Dec. 22, called for construction of twenty-five miles of highway in Medina County by the Kuykendall & Shelton Company of Temple, Texas, at a cost of $149,388.15; and building of two miles of road in Atacosa County, at Lytle, Texas, by the C. M. Kelly Company of San Antonio, at a cost of $16,348.32. Both contracts call for grading, graveling and drainage work. Completion of the Medina County construction will be followed by letting of contracts for placing rock asphalt topping. When the two miles in Atacosa County are finished the San Antonio-Laredo highway will be completed to the La Salle County line and contracts for hard surfacing will be let.

Extensive Improvements Announced by M., K. & T.

An extensive program of improvement involving a total expenditure of approximately $15,000,000 will soon be put into execution by the Missouri, Kansas and Texas Railway Co., according to W. H. Landman, commercial agent at Ft. Worth, Texas. The undertaking is the greatest to be announced by any of the Southwestern roads in recent years and will include vast additions and improvements along the Katy's lines. New locomotive shops are to be built at Waco, Texas at a cost of $1,500,000; the Ray freight terminal at Denison, Texas, started a year ago, will be completed at a cost of $350,000; and new freight depots will be erected at Ft. Worth, Waco, and Wichita Falls, Texas. New freight depots have recently been completed at Dallas, Texas and Oklahoma City, Oklahoma.

Lumber Industry Approaches End of 1922 in Good Condition

A composite of the views of the different softwood lumber manuacturing associations, received by wire Dec. 21, by the National Lumber Manufacturers' Association, as to the present business position of the industry, indicates a sound condition at the close of the year. On the whole transportation conditions are much improved; labor is more plentiful, although there is still a tendency toward higher wages; and demand seems to be unusually strong for what is ordinarily a dull season in the lumber industry. As weather conditions compel a degree of suspension of production in the north and on the West Coast, the new business is keeping step with production.

SHIPMENTS IMPROVED

The Southern Pine Association wires from New Orleans that although the orders of Southern Pine manufacturers have piled up heavily because of the car supply stringency, "this situation has been generally alleviated and shipments during November were approximately 25 per cent higher than in October, and this tendency appears to be continuing. Last week's reports show record-breaking demand and reflect more favorable conditions than in any similar period of any previous year. Although it is customary for mills to let up at this time of year, our 'barometer' shows that orders received were 78 per cent higher than the average of the same week for the past four years, shipments 40 per cent larger, production 19 per cent greater. December sales prices for Southern Pine show little change from prices of sales in the preceding month but represent an advance of about 30 per cent over January 1, 1922."

The West Coast Lumbermen's Association telegraphs from Seattle: "Heavy snow and cold weather of the past ten days are responsible for the decreased production of mills. For past three days weather has been warmer with chinook wind rapidly removing snow; if it continues a few days will permit resumption of logging operations immediately after Christmas. The available log supply in the water is limited. Both domestic rail and water-borne shipments demand is good. The offshore demand continues steady and heavy inquiries are reported from lumber yards. The car supply has been slightly better for the past three weeks but is now being curtailed by middle western snow and cold weather which are retarding the movement of empties as well as of loaded cars. It is the general understanding that demand and stock conditions will cause a shortening of customary Christmas shut-down."

The Northern Pine Manufacturers' Association wires from Minneapolis: "Of the nine mills reporting this week only four are sawing. Stocks are rather broken and two mills report them to be below normal; with the others they are normal. There is a scarcity of lower grade boards. The car supply is about sufficient to meet requirements. There is still a shortage of labor in the woods but conditions are improving and the weather is favorable to logging operations. Total shipments of Northern pine for 1922 will exceed production by from 30 to 35 million feet."

From San Francisco, the California Redwood Association wires that the labor supply is satisfactory, the car supply short but slightly better and weather conditions unfavorable, but orders and shipments still well above normal. The California and foreign demand is heavy and the eastern demand is satisfactory.

Telegraphing from San Francisco also, the California White and Sugar Pine Manufacturers' Association reports the labor supply to be normal and likewise the car and log supply. "But most mills in the California pine region are closed as usual at this season on account of weather conditions. Stocks are below normal. The largest demand is from Missouri River points."

The total number of mills reporting to the National Lumber Manufacturers' Association for the week ending Dec. 16 was 395, as against the revised number of 406 for the preceding week. Due almost, if not wholly, to weather conditions, both of a seasonal and exceptional nature, the production of these mills fell off about 18,000,000 feet from that of the preceding week.

Weekly Construction Market

THIS limited price list is published weekly for the purpose of giving current prices on the principal construction materials, and of noting important price changes on the less important materials. Moreover, only the chief cities are quoted.

Valuable suggestions on costs of work can be had by noting actual biddings as reported in our Construction News section.

The first issue of each month carries complete quotations for all construction materials and for the important cities. The last complete list will be found in the issue of December 7; the next, on January 4.

Steel Products:	New York	Atlanta	Dallas	Chicago	Minneapolis	Denver	San Francisco	Seattle	Montreal
Structural shapes, 100 lb.	$3.14	$3.95	$4.40	$3.02½	$3.15	$3.85	$3.25	$3.80	$3.50
Structural rivets, 100 lb.	3.85	4.60	5.25	3.75	4.00	4.80	4.75	4.25	6.00
Reinforcing bars, ¾ in. up, 100 lb.	3.04	3.85	3.45	2.92½	3.05	3.62½	3.35	3.80	3.25
Steel pipe, black, 2½ to 6 in. lap, discount	54%	52.50%	45%	59½%	57–5%	41%	39.2@51.8%	40%	30.00
Cast-iron pipe, 6 in. and over, ton	—54.50	46.32	+57.00	51.67	+55.50	64.11	—52.00	53.50	55.00
Concreting Material:									
Cement without bags, bbl	2.60@2.70	2.54	2.25	2.20	2.39	2.85	2.71	2.90	2.88
Gravel, ¾ in., cu.yd	2.00	1.75	2.25	2.25	1.75	1.90	2.15	1.00	1.50
Sand, cu.yd	1.00	1.32	1.87½	2.25	1.00	1.00	1.50	1.00	1.25
Crushed stone, ¾ in., cu.yd	1.75	—2.00	1.65	2.25	2.25	3.50	2.15	3.00	1.90
Miscellaneous:									
Pine, 3x12 to 12x12, 20 ft. and under, M.ft	59.00	36.00	40.00	52.00	40.75	39.75	35.00	23.50	90.00
Lime, finishing, hydrated, ton	16.80@17.10	23.00	22.50	18.00	25.50	24.00	22.00	24.00	21.00
Lime common, lump, per bbl.	2.75@3.13½	1.85	2.50	1.40	1.40	2.70	1.75	2.80	11.00
Common brick, delivered, 1,000	+23.50	—10.00	10.90	11.00	18@19	12.00	15.50	14.00	16.00
Hollow building tile, 4x12x12, per block	Not used	.0859	.115	....	.0796	.065	....	.11	.115
Hollow partition tile 4x12x12, per block	.1230	.0859	.115	.0674	....	.065	.108	.11	....
Linseed oil, raw, 5 bbl. lots, gal.	.93	—.97	+1.07	.95	1.01	1.08	1.04	.86	1.02
Common Labor:									
Common labor, union, hour	.60	.35	.30@.50	......	....	.50@.55	.56¼	.50@.60	....
Common labor, non-union, hour	.45@.60	.30	.30@.50	.72½	.35@.50	.35@.50	.47½@.50	....	.30@.35

Explanation of Prices—Prices are to contractors in carload lots unless other quantities are specified. Increases or decreases from previous quotations are indicated by + or — signs. For steel pipe, the prevailing discount from list price is given: 45-5% means a discount of 45 and 5 per cent. Charge is 15c. per 100 lb. for cutting reinforced steel into 2-ft lengths or over.

New York quotations delivered, except sand, gravel and crushed stone, alongside dock; common lump lime, in 280-lb. bbl. net, and hydrated lime f.o.b. cars; tile "on trucks"; linseed oil and cast-iron pipe f.o.b. Cement and concrete laborers' rate, 81¼c.; pick and shovel men, 60c. per hr.

Chicago quotes hydrated lime in 50-lb. bags; common lump lime per 180-lb. net. Lumber delivered on job.

Minneapolis quotes on fir instead of pine. Brick, sand and hollow tile delivered. Cement on cars. Gravel and crushed stone quoted at pit. We quote on brown lime per 180-lb. net; white is $1.55 for Kelly Island and $1.45 for Sheboygan. Common labor not organized.

Denver quotes on fir instead of pine. Cement "on tracks"; gravel and sand at pit; stone on cars; lime, brick, hollow tile and lumber on job. Tile price is at warehouse. Linseed oil, delivered, in wooden bbl. Common lump lime per 180-lb. net.

Atlanta quotes sand, stone and gravel per ton instead of cu.yd. Common lump lime per 180-lb. net.

Dallas quotes lime per 180-lb. bbl. Steel, cement, cast-iron pipe and crushed stone f.o.b. cars, other materials delivered.

San Francisco quotes on Heath tile, 5⅓ x 8 x 11⅓. Prices are all f.o.b. warehouses except C. I. pipe, which is mill price plus freight to railway depot at any terminal. Common lump lime per 180-lb. net. Lumber prices are to dealers in yards at San Francisco, for No. 1 fir common.

Seattle quotes on Douglas fir (delivered) instead of pine. Lump finishing lime per 180-lb. net. Hollow building tile delivered. Hydrated lime in paper sacks. Sand and gravel at bunkers.

Montreal quotes on Douglas fir instead of pine. Sand, stone, gravel and lump lime per ton. Cement, lime and tile are delivered; sand, gravel and stone on siding; brick f.o.b. plant; steel and pipe at warehouse. Hollow tile per ft. Cement price is in Canadian funds (the Canadian dollar stands at 99.15). Bag charge is 80c. per bbl. Discount of 10c. per bbl. for payment within 20 days from date of shipment. Steel pipe per 100 ft. net; 2½-in., $30; 6-in., $110.

Changes Since Last Week

The general situation in the lumber market is at present very firm; with a shortage of cars as the principal factor in holding prices up. The National Lumber Trade Barometer shows production for the entire country at 17 per cent; shipments, 9 per cent and orders, 3 per cent below normal, for the week ending Dec. 22, 1922. This represents a gain of about 2½ per cent in orders; a fraction of one per cent in shipments; and a falling off of 7 per cent in output, during the week. Higher spot coke prices and firmness in pig iron, have combined to force cast-iron pipe quotations $1.50 per ton higher in Dallas and $1, in Minneapolis.

Current business on steel shapes, plates and bars, firm at $2 per 100 lb., Pittsburgh, despite weakening of market in light rails and forging billets. On especially attractive tonnages $1.90 is possible, particularly for car material. The minimum on bars, however, is placed at $1.95, and that to large buyers only.

Common brick advanced slightly in New York market during week due to sustained and unseasonal demand. Quotations now stand at $20 as against $17@20 per M., alongside dock.

Linseed oil market sluggish but prices steady in most cities. Atlanta, however, reports drop of 3c. and Dallas an advance of 2c. per gal., during week.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
July 10	Harrold, S. D.	June 22
July 10	Farmville, Va.	July 6
July 10	Nevada, Ia.	July 6
July 10	West Allis, Wis.	July 6
July 11	New York, N. Y.	June 22
July 11	Benton, Wis.	June 22
July 11	Buffalo, N. Y. Adv. June 22 to July 6.	June 22
July 12	Vero, Fla.	June 29
July 18	Gillett, Ark. Adv. June 29 and July 6.	June 29
July 18	Wilmington, N. C. Adv. June 29 and July 6.	June 29
July 18	Fayetteville, Tenn.	June 29
July 18	Raybrook, N. Y. Adv. July 6 .	July 6
July 19	Saugerties, N. Y. Adv. June 29 and July 6.	June 29
July 20	East Orange, N. J. Adv. June 29 and July 6.	July 6

SEWERS

July 10	Eustis, Fla.	June 15
July 10	Lebanon, Tenn.	June 29
July 10	Hammond, Ind. Adv. July 6.	July 6
July 10	West Allis, Wis.	July 6
July 10	Akron, O.	July 6
July 10	Sioux Falls, S. D.	July 6
July 11	Hartford, Conn.	July 6
July 12	Brooklyn, N. Y.	July 6
July 13	Thiells, N. Y.	June 22
July 17	Yankton, S. D.	July 6
July 17	Barnum, Minn.	June 29
July 18	Lake Forest, Ill.	June 15
July 18	Newark, N. J.	June 29
July 18	Nashville, Tenn. Adv. July 6.	July 6
July 19	Camden, N. J.	June 22
July 24	Hackensack, N. J. Adv. June 29 and July 6.	June 29

WASTE DISPOSAL

July 17	Wash., D. C. Adv. July 6.	July 6
July 18	New Kensington, Pa.	June 29
July 25	Buffalo, N. Y.	June 22

BRIDGES

July 11	Williamsport, Pa.	June 15
July 11	Central Ferry (Penawawa P. O.), Wash.	June 15
July 14	Tennessee Adv. July 6.	June 22
July 14	Long Island City, N. Y.	July 6
July 19	Alabama	June 29
July 20	Alabama	June 29
July 21	Cobleskill, N. Y. Adv. July 6.	July 6
July 25	Alabama	July 6
July 25	North Carolina	July 6
Aug. 4	Seattle, Wash. Adv. June 29 and July 6.	June 29
Oct. 31	Sydney, Australia	Jan. 12

EXCAVATION AND DREDGING

July 10	Austin, Minn.	June 29
July 25	Brooklyn, N. Y. Adv. June 29 and July 6.	June 29

STREETS AND ROADS

Bids Close		See Eng. News-Record
July 10	Eustis, Fla.	June 15
July 10	Los Angeles, Cal.	June 22
July 10	Duluth, Minn.	June 22
July 10	Faribault, Minn.	June 22
July 10	Elk River, Minn.	June 29
July 10	California	June 29
July 10	Minnesota	July 6
July 10	Clairton, Pa.	July 6
July 10	Dayton, O.	July 6
July 10	Long Island City, N. Y.	July 6
July 10	Waseca, Minn.	July 6
July 11	New York, N. Y.	July 6
July 11	Sharon, Pa.	July 6
July 11	Phila., Pa.	July 6
July 11	West Virginia	June 22
July 11	Michigan	June 22
July 11	Newton, N. J. Adv. June 22 to July 6.	June 29
July 11	New York Adv. June 29 and July 6.	June 29
July 11	Quebec	June 29
July 11	Covington, Va. Adv. June 29 and July 6.	June 29
July 11	Louisiana	June 29
July 11	Michigan	June 29
July 12	Michigan	June 22
July 12	Gonzales, Tex	June 22
July 12	Mays Landing, N. J. Adv. June 29 and July 6.	June 29
July 12	Camden, N. J. Adv. June 29 and July 6.	June 29
July 12	Michigan	June 29
July 12	Wash., D. C. Adv. July 6.	July 6
July 12	Clarksville, Tex.	July 6
July 13	Somerville, N. J. Adv. June 29 and July 6.	June 29
July 13	Long Island City, N. Y.	July 6
July 13	Columbus, O.	July 6
July 14	Ohio	July 6
July 14	Idaho	July 6
July 14	Michigan	July 6
July 14	Belvidere, N. J. Adv. June 22 to July 6.	June 22
July 14	Somerville, N. J. Adv. June 22 to July 6.	June 29
July 14	Ann Arbor, Mich. Adv. June 29 and July 6.	June 29
July 14	Tennessee	June 29
July 14	New Jersey Adv. June 29 and July 6.	June 29
July 15	Lynbrook, N. Y. Adv. July 6.	July 6
July 17	Guntersville, Ala.	July 6
July 17	California	June 29
July 17	Ohio	July 6
July 17	Richmond, Va. Adv. July 6.	July 6
July 18	Michigan	July 6
July 18	Quincy, Fla.	June 22
July 18	Moundsville, W. Va.	June 29
July 18	South Carolina	June 29
July 19	Alabama	June 29
July 19	Michigan	June 29
July 19	Rhode Island Adv. July 6.	July 6
July 19	Michigan	July 6
July 19	Columbus, O.	July 6
July 20	Edenton, N. C.	July 6
July 21	Portland, Me.	June 29
July 21	Belvidere, N. J. Adv. July 6.	July 6
July 22	Palatka, Fla.	June 29
July 25	Syracuse, N. Y. Adv. June 29 and July 6.	June 29
July 25	Alabama	July 6
July 25	North Carolina	July 6
Aug. 9	Ft. Myers, Fla.	July 6
Sept. 19	New Orleans, La.	July 6

INDUSTRIAL WORK

July 10	Ada, O.	July 6
July 10	Minneapolis, Minn.	July 6
July 11	Delavan, Wis.	July 6
July 14	New York, N. Y.	July 6
July 15	Winston-Salem, N. C.	June 22
July 18	Quincy, Fla.	June 22
July 28	Homestead, Fla.	June 29

BUILDINGS

July 10	Albany, N. Y.	June 8
July 10	Ft. Madison, Ia.	June 22
July 10	McKeesport, Pa.	June 22
July 10	Newark, N. J.	June 29
July 10	Janesville, Wis.	June 29
July 10	Schofield, Wis.	June 29
July 10	Plymouth, Mich.	June 29
July 10	Cleveland, O.	July 6
July 11	Montclair, N. J	June 22
July 11	Ashland, Wis.	June 29
July 11	New York, N. Y.	July 6
July 12	Brooklyn, N. Y.	July 6
July 12	Saginaw, Mich.	July 6
July 12	Colorado Springs, Col.	June 22
July 12	Cleveland, O.	July 6
July 13	Dayton, O.	June 29
July 15	Hookerton, N. C.	June 29
July 15	Houghton, Mich.	June 29
July 15	Charlotte, N. C.	July 6
July 17	Urbana, Ill.	June 15
July 17	Rock Rapids, Ia.	June 22
July 17	Syracuse, N. Y.	June 29
July 17	Fargo, N. D.	June 29
July 18	Renfrew, Ont.	July 6
July 19	Rosewood, N. C.	July 6
July 20	New York, N. Y.	July 6
July 20	Lincoln, Neb.	July 6
July 30	Westwood, N. J.	June 22

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
July 7	Dredging—Baltimore, Md. Adv. June 8, 15, 29 and July 6.	June 8
July 10	Post Office, etc.—Apalachicola, Fla.	June 15
July 10	Boiler House, etc.—Rantoul, Ill.	June 22
July 11	Post Office—Gilmer, Tex.	June 15
July 12	Extension to Workroom, etc. —Albert Lea, Minn.	June 29
July 14	Alterations—Lowell, Mass.	June 29
July 15	Refrigerating and Ice-Making Plant—Memphis, Tenn. Adv. July 6	July 6
July 17	Metal Work — Louisville, Ky. Adv. June 22 to July 6.	June 22
July 17	Rubble Mound — Ashtabula Harbor, O. Adv. June 22 to July 6.	June 22
July 17	Conduit—Wash., D. C.	June 22
July 17	Steel Ladder, etc. — New Orleans, La. Adv. June 22 to July 6.	June 22
July 18	Piling—Louisville, Ky. Adv. June 22 to July 6.	June 22
July 18	Fire Alarm System—Tuskegee, Ala.	June 29
July 19	Steel Hull — Pittsburgh, Pa. Adv. June 22 to July 6.	June 22
July 19	Cornice, etc. — Oswego, N. Y.	June 29
July 20	Mailing Shed — Sheboygan, Wis.	June 29
July 27	Breakwater Extension — Fairport, O. Adv. July 6.	July 6
July 31	Steel Hull — Montgomery, Ala. Adv. July 6.	July 6
Aug. 2	Dredges—Wash., D. C.	June 15
Aug. 2	Ordnance Buildings, etc.—Pearl Harbor, H. T.	June 15
Aug. 7	Dredging, etc. — New York, N. Y. Adv. July 6	July 6

MISCELLANEOUS

July 8	Limestone—Montreal, Que.	July 6
July 10	Pier Building—Phila., Pa.	July 6
July 10	Turbines, etc. — Cohoes, N. Y. Adv. June 29 and July 6.	June 29
July 11	Asphalt, Gravel, etc.—Phila., Pa.	July 6
July 11	Structural Steel—New York, N. Y.	July 6
July 11	Switchboard, etc.—Atlantic Highlands, N. J. Adv. July 6.	July 6
July 12	Piping, etc. — Whitewater, Wis.	July 6
July 14	Borings—Long Island City, N. Y.	July 6
July 17	Heating, Ventilating, etc. — Urbana, Ill. Adv. June 22 to July 6.	June 22
July 17	Stadium Addition — Madison, Wis.	July 6
July 18	Pier Sheds, etc.—Portland, Me. Adv. June 22 to July 6.	June 22
July 18	Stone Crusher and Elevator —Preston, Minn.	July 6
July 19	Turbine and Accessories — New Orleans, La. Adv. May 18 to July 6.	May 18
July 19	Engine-Generator Unit—Belhaven, N. C.	June 29
July 26	Wharf and Transit Shed Foundation—Tampa, Fla. Adv. July 6.	July 6
Aug. 15	Hydro-electric Development—Dothan, Ala. Adv. June 22 to July 6.	June 29

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Md., Williamsport—Voted $100,000 bonds for water system. Engineer not announced.

Mont., Harlem—Soon takes bids filtration plant and 8,000 ft. 6 in. c.i. mains. $45,000. C. P. Wells, 804 1st Natl. Bank Bldg., Great Falls, engr.

Waterworks (Continued)

Tex., Anson—Voted $80,000 to install and complete waterworks system. Address Mayor.

Tex, Clarksville—Voted $22,000 bond issue for waterworks improvements, $20,000 for additional street paving, and $3,000 for incinerator plant. P. Y. Creager, city engr. Noted June 8.

Tex., Dublin—Voted $25,000 bonds for waterworks. J. S. Daley, mayor.

Tex., McLean—July 18, to vote on $74,000 bonds for waterworks improvements, light and power plant and street improvements. Address Mayor.

Tex., Moran—Voted $35,000 bonds for waterworks improvements. Address Mayor. S. & R.

Okla., McAlester—Bd. Comrs. retained Benham Eng. Co., engrs., Gumbel Bldg., Kansas City, Mo., to prepare plans for Bull Creek water project, incl. dam. E. M. Fry, city mgr.

Utah, Ogden—W. S. Crane, city engr., soon takes bids installing 12, 18 and 20 in. Matheson joint or c.i. mains. $166,000.

Cal., Lakeport—Having plans prepared for water works system, including c. i. pipes, auxilary pumping plant, semi-diesel pumping engine, etc., $65,000; 3 small septic tanks incl. automatic pump and sewer laterials, $32,000. J. Felleman, Lakeport, engr.

BIDS DESIRED

N. Y., Raybrook—July 18, by Bd. Trustees State Hospital at office of State Engineer and Surveyor, Telephone Bldg., Albany, construction and installation of additions and alterations to water supply of New York State Hospital for Incipient Tuberculosis, here. J. Hurley, pres.; adv. this issue.

N. J., Atlantic Highlands — See "Miscellaneous."

N. J., East Orange—July 20, by Bd. Water Comrs., 438 Main St., developing supply of water of not less than 2,000,000 gal. per 24 hrs. from driven wells. N. S. Hill, Jr., and S. F. Ferguson, 112 East 19th St., New York, consult. engrs.; adv. this issue.

Va., Farmville—July 10, by J. A. Davis, mayor, concrete coagulating basin.

Wis., West Allis—July 10, by Bd. Pub. Wks., furnishing and laying mains in Lapham St. from 47th to 56th Aves. and 56th Ave. from Lapham to National Aves., incl. 3,332 ft. 16-24 in. c.i. pipe, 430 ½ ton 16-24 in. bell and spigot pipe, 40 ft. 6 in. c.i. pipe, gates, etc.; laying 16,235 ft. 6-8 in. water pipe in George St., 69th, 67th, 81st, 70th, 47th and Arthur Aves. W. Darby, City Hall, engr.

Ia., Nevada—July 10, rein.-con. storage reservoir, 200,000 gal. capacity, 376 lin.ft. 8-10 in. c.i. mains, 170 lin.ft. 8 in. sewer pipe, etc. $15,000. M. I. Evinger, 202 Davidson Bldg., Des Moines, engr.

CONTRACTS AWARDED

N. Y, Irondequoit — Helendale Water Dist., 704 Union Trust Bldg., Rochester, 30,000 ft. 6 and 8 in. mains, hydrants, valves, etc., here, to W. G. Fritz Co., West Orange, N. J., $48,760. Noted June 15.

N. Y., St. George—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, to M. DeStafano, 257 Glenn Ave., Tomkinsville, mains in Cary, Carter, Columbus Sts., etc., $15,061, in Barton, Bayview, Bedell, Bogardus, Centre, Eagan, etc., $49,892. Noted June 29.

N. J., Clinton—State Reformatory Bd., Trenton, artesian well and pump, State Reformatory for Women, here, to W. Stothoff, Flemington, $8,000.

N. J., New Lisbon—State Hospital Bd., Trenton, well, pump, pump house and tower, State Colony for Feeble Minded, here, to N. A. K. Bugbee Co., 206 East Hanover St., Trenton, $13,500.

Va., Ashland—Settling basin, two 80 gal. steel tanks and tower, filtration plant, 2 triples pumps, to Pittsburg-Des Moines Steel Co., Curry Bldg., Pittsburgh, Pa.

Va., Ashland—Furnishing and laying 4 mi. Class B 8-10 in. iron mains, to J. L. MacGhee Constr. Co., Talboro, N. C.; 125,000 gal. steel tank and tower, to C. D. Cole, Newman.

O., Columbus—See "Streets and Roads."

Wis., Mukwonago—See "Sewers."

Minn., Winona — Extending watermain, 14,774 lin.ft. 6-10 in. Class D. c.i. pipe, 10,812 lb. standard Class D. c.i. castings, etc. to T. Woolley & Son, LaCrosse, Wis., $31,587. Noted June 29.

Mont., Red Lodge—For 13,020 ft. 6-8 and 10 in. c. i. pipe, 8,900 ft. 8 or 10 in. c. i. pipe, 1 clear well and 2 pressure regulators, to McLaughlin & O'Neil, Livingston, $63,106. Noted March 2,

Sewers

PROPOSED WORK

N. Y., Rochester—Plans sewers in Huron and Meriden Sts., $3,300; Bay St., $10,000; Emerson Pl., $1,550; Knickerbocker, Avis and Pullman Sts., $80,000. C. A. Poole, city engr.

Pa., York—Rejected bids opened June 20, additions and improvements to sewage disposal plant. Will readvertise. Fuller & McClintock, 170 Bway., New York, engrs. Noted June 8.

Md., Williamsport—Voted $117,930 bonds for sewerage system. Engineer not announced.

N. Y., North Tonawanda—Plans to extend sewerage system. $25,000. C. T. Oelkers, City Hall, engr.

Fla., Miami Beach—July 25, to vote on $125,000 bonds constructing sewerage system. C. E. McCaskill, city clk.

Mich., Detroit—Had plans prepared 5,358 ft. sewer in Clark and Lovett Aves. from Michigan to Herbert Aves., 11 ft. 6 in. to 11 ft. 3 in. diam., 4,302 ft. Harper Ave. Arm, Sect. 1 of Connors Creek Sewer in Harper and Annsburg Aves. from Connors to Wade Aves., 6 ft. 3 in. to 6 ft. 6 in. diam. 2,813 ft. Harper Ave. Extension of Ashland Ave. Sewer, in Harper and Nelson Aves. from Newport to Wade Aves., 3 ft. 3 in. to 4 ft. 3 in. diam, 3,576 ft. Piquette Ave. Arm of Bates St. Sewer, in Piquette Ave. from John R to Russell Sts., 3 ft. to 5 ft. 6 in. diam. J. W. Reid, city engr.

Wis., Platteville—Having plans prepared furnishing and laying 1.5 mi. 6-8 in. vitr. sewers. $25,000. H. Kleinhammer, Platteville, engr.

Minn., Brainerd — Plans trunk sewer. $35,000. R. T. Campbell, city engr.

Cal., Lakeport—See "Waterworks."

Cal., Modesto—Had plans prepared constructing sewers in Dist. 1, 3,913 lin. ft. 36 in., 1,682 lin. ft. 30 in., 2,576 lin. ft. 24 in. and 2,056 lin. ft. 18 in. rein.-con. pipe, 834 lin. ft. 12 in., 1,363 lin. ft. 10 in. and 2,931 lin. ft. 8 in. vitr. pipe, 15,286 cu. yd. excav., 43,520 sq. ft. pavement replacement, 1,921 lin. ft. 6 in. sewer to be removed, etc. G. Freitas, city engr.

Cal., Sanger—Plans election to vote on bonds to construct sanitary and storm sewerage systems, purchase fire apparatus and construct city jail.

BIDS DESIRED

Conn., Hartford—July 11, by W. F. O'Neil, secy. Bd. Contract & Supply, 1,196 ft. vitr. sewer in Acton St. and 930 ft. vitr. sewer in Wilbur St. R. N. Clark, city engr.

N. Y., Brooklyn—July 12, by E. Riegelmann, boro pres., Boro Hall, repairing sewer in Fort Hamilton Parkway near 60th St. and in 60th St. between Fort Hamilton Parkway and 19th Ave.; constructing sewer in Troy Ave. between Union St. and East New York Ave., Carroll St. from Troy Ave. to point about 370 ft. westerly, Montgomery St. between Troy Ave. and sewer summit west of Troy Ave., West 36th St. between Canal Ave. and Gravesend Bay, 72nd St. between 18th and 19th Aves., East 17th St. from Ave. L to Ave. M, Ridge Blvd. between 92nd and 94th Sts., Fort Hamilton Parkway, west side, between 70th and 71st Sts.; sewer basins in Otsego St. at southwest corner of Beard St. and southeast corner of Halleck St.

Tenn., Nashville—July 18, at office S. H. McKay, city clk., Sect. 4, Browns Creek intercepting sewer. W. W. Southgate, city engr.; adv. this issue.

O., Akron—July 10, by M. P. Tucker, dir. Pub. Serv. 730 ft. 10 in. vitr. clay and 2,025 ft. 30-42 in. segmental block or brick sewer in Crozier St.; 2,210 ft. 12-15 in. vitr. clay or 1,999 ft. 39-54 in. segmental block sewer in Miller Ave., $47,000; 1,165 ft. 18 in. vitr. clay and 1,195 ft. 66 in. segmental block or brick sewer in Sweitzer Ave., $36,000. J. E. Root, Delaware Bldg., engr. Noted June 29.

Ind., Hammond—July 10, by Bd. Pub. Wks., building and equipping sewer pumping station. $236,803. D. Miller, clk. W. F. Bridge, Hammond, engr.; adv. this issue.

Wis., West Allis—July 19, by Bd. Pub. Wks., furnishing and laying sanitary sewers in 14 streets incl. 10,908 ft. of 8-12 in. vitr. pipe; storm sewers in 13 streets, 6,940 lin.ft. 8-24 in. vitr. pipe, 909 ft. of 42 in. rein.-con. circular pipe, 26 manholes, 59 catch-basins, etc. W. Darby, City Hall, engr.

S. D., Sioux Falls—July 10, sewers incl. 1,049 lin.ft. 12 and 36 in. pipe, 520 lin.ft. 10-33 in. pipe, 231 ft. 10-30 in. pipe, 2,035 ft. 10-24 in. pipe, 465 ft. 10-20 in. cobble sewer, 468 ft. 20 in. storm sewer. $30,000. E. C. Leyse, city aud.

S. D., Yankton—July 17, 17,435 lin.ft. 10-36 in. sewer, incl. 3,000 lin.ft. 10 in. connecting pipe, etc. $38,000. C. H. Conrick, city engr.

BIDS RECEIVED

Cal., Long Beach — Sewers in Redondo St., et al., from R. N. Nickcevich, P. O. Box 204, $98,334; P. S. Tomich, 2135 East Anaheim St., $99,480; L. Miletich, Los Angeles, $112,423.

Cal., San Pablo—San Pablo Sanitary Dist. constructing various sewers, from Downer & Mero, 2234 Macdonald Ave., Richmond, $28,391; L. L. Page, 8th & Bissell Aves., Richmond, $29,297; Heafey, Moore & McNair, 2030 High St., Oakland, $30,671. Noted June 15.

CONTRACTS AWARDED

N. J., Morris Plains—B. G. Lewis, comr. State House, Trenton, reconstructing sewage disposal plant at State Hospital, here, incl. 75 x 100 ft. concrete tank, 12 ft. deep, etc., to Sewage Disposal Co., Grand Central Bldg., New York, $25,000. Noted June 15.

Ga., Atlanta—Extending Lloyd St. sewer, to McDonald Constr. Co., Atlanta, $124,650; extending Stewart Ave. trunk sewer, to J. B. McCrary Co., 3rd Natl. Bank Bldg., $11,907; several small sewers in various streets, to Dysard Constr. Co., Austell Bldg., Atlanta, $27,182.

Ky., Paducah — Constructing sewers, 96 and 102 in. rein.-con. monolithic, 42-72 in. clay segment block, 15-36 in. vitr. clay pipe, to E. R. Harding Co., 400 Robinson Bldg., Racine, Wis., $508,000. Noted June 8.

Wis., De Forest—Furnishing and laying 12,226 ft. 8-21 in. vitr. sewers, flush tanks, disposal plant, etc., to J. T. Blake, 611 South Few St., Madison.

Wis., Mukwonago—Furnishing and laying sewer pipe, manholes, flush tank and water pipe, to Gray-Robinson Constr. Co., 8th St., Manitowoc. Engrs. est. $25,000. Noted June 8.

Wis., St. Croix Falls—For 22,238 lin. ft. sanitary and 3,096 lin. ft. storm sewers, inlets, sewage treatment plant, manholes, appurtenances, etc., to Hedborg & Heiner, c/o Toltz, King & Day, engrs., 1410 Pioneer Bldg., St. Paul, Minn., and St. Croix Falls, $57,000. Noted June 1.

Cal., Watts—Sewerage system, to A. W. Phillips, 537 North Hoover St., Los Angeles, and M. G. Brkich, 1506 Pleasant Ave., Los Angeles, $442,775.

Waste Disposal

PROPOSED WORK

Fla., St. Petersburg—Soon takes bids constructing incinerator. $15,000 bonds voted. G. B. Shepard, dir. pub. wks.

O., East Cleveland (Cleveland P. O.)—August 8 to vote on $150,000 bonds for 1 story garbage incinerator, brick, steel and concrete. C. M. Osborn, city mgr. Architect not selected.

BIDS DESIRED

D. C., Wash.—July 17, by Dist. Comrs., 509 Dist. Bldg., additional incinerators to Trash Plant, Mt. Olivet Rd. and Montello Ave.; adv. this issue.

Bridges

PROPOSED WORK

North Carolina—State Hy. Dept., Raleigh, plans steel and rein.-con. bridges between Clinton and Warsaw, Project 274, Sampson and Duplin Counties, $50,000; rein.-con. or structural steel bridge over New River, near Jacksonville, Project 366, Onslow Co., $40,000; rein.-con. or structural steel bridge over Roanoke River, at Roanoke Rapids, Project 169, Northampton and Halifax Counties, $10,000. C. M. Upham, state highway engr.

N. C., Mocksville—Davie Co. receives bids latter part of July constructing 125 ft. steel truss over Hunting Creek, 16 ft. roadway. N. S. Mullican, Winston-Salem, engrs.

Ala., Palos—Jefferson Co., (Birmingham), having surveys made and takes bids in about 90 days, bridge near here, probably steel spans on concrete abutments and piers. $60,000. C. A. Rogers, co. engr.

Bridges (Continued)

Tenn., Nashville—Voted $375,000 bonds, this with $250,000 previously voted will be used for 2 rein.-con. viaducts, one on Church St., other on Meridian St. Freeland, Roberts & Acker, Independent Life Bldg., engrs. Noted April 27.

Neb., Oreapolis—Chicago, Burlington & Quincy R.R., 547 West Jackson Blvd., Chicago, soon takes bids for steel and concrete bridge to replace present bridge over Platte River, near here. $400,000. G. A. Haggander, bridge engr. This corrects report in June 22 issue.

Tex., Brenham—Washington Co. making plans 3,500 ft. bridge over Brazor River between Waller and Washington Counties, 700 ft. steel truss, 2,800 ft. earth approach and fill. $200,000. G. A. Bracher, co. engr.

Cal., San Francisco—San Francisco Transit Co. plans 3,000 ft. suspension bridge, with 1,500 ft. central span, over Carquinez Straits. C. E. Fowler, 25 Church St., New York, consult. engr. E. Duryea and H. L. Haehl, Humboldt Bank Bldg., engrs.

BIDS DESIRED

N. Y., Cobleskill—July 21, by H. L. Sweet, Supt Highways, at office of A. J. Brown, town clerk, steel and concrete bridge, over Cobleskill Creek, on Barnerville-Howe Cave Rd.; adv. this issue.

N. Y., Long Island City—July 14, by G. A. Whalen, comr. Plant & Structures, Municipal Bldg., New York, reconstructing centre pier fender of Meeker Ave. Bridge over Newtown Creek.

North Carolina—July 25, by State Hy. Dept., Raleigh, constructing bridges and culverts on State Project 881, Gates Co., 775 cu.yd. concrete, 96,900 lb. reinforcing, 1,680 ft. untreated timber piles, 195 sq.yd. asphalt wearing surface, etc., $26,000; State Project 888, Yancey Co., 1,362 cu.yd. concrete, 125,750 lb. reinforcing, 1,980 ft. untreated timber piles, etc., $40,000. C. M. Upham, state highway engr. Noted June 15.

N. C., Edenton—See "Streets and Roads."

Ga., Savannah — Comrs. Chatham Co. taking bids bridge, first section 1,490 ft., concrete, incl. draw span; middle section, 1,815 ft., concrete; third section, 7,998 ft., either concrete or treated timber.

Alabama—July 25, by W. S. Keller, state highway engr., Montgomery, constructing bridges on Guin to Walker Co. Line Rd., Marion Co., two 100 ft. arch bridges, remainder girder type except one 80 ft. and one 102 ft. 6 in. steel spans.

Ohio—July 14, by Dept. Highways and Pub. Wks., Columbus, bridges in following counties:

Ottawa Co., Sect. "L" Toledo-Elmore Rd., concrete, 82.6 ft. long, $7,702.

Preble Co., Sect. "Eaton" Dayton-Indianapolis Rd., rein.-con., $27,968.

Ross Co., Sect. "G" Chillicothe-Jackson Rd., bridge, $6,034.

Athens Co., Sect. "E," "C" and "J" Logan-Athens Rd., reconstructing bridge, $14,339.

Erie Co., Sect. "H" Cleveland-Sandusky Rd., timber retaining wall, $5,100. L. C. Herrick, dir. highways.

BIDS RECEIVED

N. Y., Long Island City—G. A. Whalen, comr. Plant & Structures, Municipal Bldg., New York, received bids June 28, piers for bridge over Beach Channel, Jamaica Bay Blvd., Boro of Queens, from P. T. Cox Contg. Co., 154 Nassau St., New York, $268,900; J. Schlesinger, 249 West 30th St., New York, $398,693. Noted June 22.

Pennsylvania—See "Streets and Roads."

Fla., Clearwater—Comrs. Pinellas Co., constructing bridges on (a) Rd. 1, (b) on Rds. 2, 3, 4 and 5, from E. W. Parker, 402 Curry Bldg., Tampa, (a) $59,630; Pensacola Shipbuilding Co., Amer Natl. Bank Bldg., Pensacola, (a) $61,120, (b) $36,394. Noted May 25.

Missouri—State Hy. Dept. at div. office Bloomfield, opened bids June 2, one 40 ft. I-Beam, two 20 ft. rein.-con. slabs, three 50 ft. steel and one 24 ft. and one 30 ft. rein.-con. deck girder spans, on Federal Aid Project 187, Stoddard Co., from Cameron-Joyce & Co., Keokuk, Ia., $30,322; Little & Dean, Paris, Tenn., $31,465; M. E. Gillioz, Monett, $37,192.

Missouri—State Hy. Dept. at div. office Marble Hill, opened bids June 9, one 30 ft. rein.-con. through girder and one 120 ft., one 100 ft. and one 80 ft. steel truss spans, on Federal Aid Project 174, Sect. B, Bollinger Co., from M. E. Gillioz, Monett, $39,080; W. A. Ross, Kansas City, $39,817; Genl. Constr. Co., Arcade Bldg., St. Louis, $[illegible]4,331.

Missouri—State Hy. Dept. at div. office Fredericktown, opened bids June 16, one 24 ft. rein.-con. deck girder, one 60 ft. steel truss and seventeen 10 ft. rein.-con. slab spans, on Federal Aid Project 101 B, Madison Co., from Hogan Humphreys, Little Rock, Ark., $16,923; C. Gove, St. Louis, $17,651; M. E. Gillioz, Monett, $19,249. Noted June 8.

Colorado—State Hy. Dept., Denver, 11 timber bridges in Lincoln Co., from A. R. Mackey, Sterling, $37,738, White & Johnson, Chamber Commerce Bldg., Denver, $37,901, H. C. Lallier Constr. & Eng. Co., Hudson, $39,096; 0.502 mi. bridge on State Rd. 45, new Sante Fe Trail, Pueblo Co., 120 ft. 3 trusses, 20 ft. roadway, from Rogers & Pickard, 302 Tramway Bldg., Denver, $61,264, Pueblo Bridge & Constr. Co., 410 East 8th St., Pueblo, $69,948, Pioneer Constr. & Eng. Corp., 614 Ideal Bldg., Denver, $81,403.

CONTRACTS AWARDED

Va., Clinchport—Bd. Supervs., Scott Co., (Gate City), Stock Creek Bridge, 150 ft. span, open spandrel arch, 16 ft. roadway, 6 ft. sidewalk, to Roehl & Steel, 923 Holston Bank Bldg., Knoxville, Tenn.

Ill., Ottawa—La Salle Co. for East Main Street Bridge, rein.-con., three 73 ft. rein.-con. arch spans, 40 ft. roadway and two 7 ft. sidewalks, incl. complete lighting system, to Koss Constr. Co., 2818 5th St., Des Moines, Ia., $86,000. Noted June 15.

Wis., Ixonia—Jefferson Co., State Road and Bridge Com., (Jefferson), McCall Bridge over Rock River, here, five 45 ft., deck concrete girder spans, 26 ft. roadway with one 4 ft. sidewalk, to McGucken Constr. Co., 425 East Water St., Milwaukee, $22,000. Noted June 15.

Ia., Corning—Adams Co. 2 pony trusses, 1 I-Beam and 52 culverts and extensions, to G. W. Condon, 510 Farnam Bldg., Omaha, Neb., concrete figures $19.50 per cu.yd., structural steel $0.055 per lb. erected; average haul 4.95 mi. total $31,450. Noted May 18.

Railways

PROPOSED WORK

New York—International Ry. Co., 70 West Huron St., Buffalo, plans constructing double track in extension of Bailey Ave. Line into Bailey-Kensington dist., incl. new paving between tracks. $400,000. Work will either be done by day labor or by City of Buffalo. H. E. Riexinger, ch. engr.

Nevada—Eureka-Nevada R.R., c/o J. E. Sexton, genl. mgr., Palisade, plans 50 mi. narrow gauge railroad in Modoc Co., $25,000. C. B. Sexton, Palisade, ch. engr.

BIDS RECEIVED

New York—Transit Comn., 49 Lafayette St., New York, opened bids June 26, installing tracks for portion of 14th St.-Eastern Line, in Boros of Manhattan and Brooklyn, from Slattery Eng. Constr. Co., 10 East 43rd St., New York, $183,320; T. H. Reynolds Constr. Co., 50 Park Pl., New York, $230,000; T. Crimmons Constr. Co., 126 East 59th St., New York, $271,600. Noted June 22.

Pennsylvania—Pennsylvania R.R., Broad St. Sta., Phila., 2 main track lines from West Rochester to Kenwood, to Adam Laidlaw Co., Edgewood.

Louisiana—Morgan & Bird R.R., Shreveport, plans 15 mi. line from Beaucom Spur to Cotton Valley, to connect Haynesville with Shreveport. W. Morgan, pres.

Michigan—Dept. Street Rys., Murphy Bldg., Detroit, track specials, to Lorain Steel Co., 53 West Jackson Bldg., Chicago, $49,481.

Excavation and Dredging

PROPOSED WORK.

Wis., Sheboygan—Plans dredging Sheboygan River from Lake Michigan to 8th St. Bridge. $25,000. J. Steimle, City Hall, clk. Engineer not selected.

N. D., Grand Forks—Grand Forks Co. having plans prepared draining Ditch 12 in Lakeville, Levant, Turtle River and Ferry Twps., incl. 26,400 acres. $33,481. H. Anderson, co. aud.

Cal., Merced—Stevenson Corp., 68 Post St., San Francisco, plans irrigation system, incl. 57,700 ft. ditches, 500 ft. 34 in. wood stave, three 24 in. centrifugal pumps, 25 ft. lift. 450 h.p. motors.

Cal., Oakdale — Oakdale Irrigation Dist. plans election to vote on $50,000 bonds for improvements, incl. constructing canals, enlarging present canals and installing pipe lines. M. Kearney, Oakdale, secy.

CONTRACTS AWARDED

Wis., Lodi—Lodi D. D., Columbia Co., 12,000 lin.ft. open ditch and 2,200 ft. 10-15 in. drain tile, to Wisconsin Drainage Co., Elkhorn. Noted May 25.

Wis., Madison—Dane Co. Drainage Co. furnishing and laying 18,000 ft. 5-10 in. drain tile, to D. Nelson, 1133 Hamilton St., Racine. Engrs. est. $25,000.

Streets and Roads

PROPOSED WORK

N. Y., Rochester—Plans paving Knickerbocker Ave. and Otis St., asphalt, $21,700 and $12,600 respectively; cement walks, Edinburgh St., $1,200; walks and grading Britton St., $3,700. C. A. Poole, city engr.

Pa., Mercer—Mercer Co. making plans and soon takes bids ⅞ mi. rein.-con. road known as Dyes Corner Spur. $25,000. F. P. Graham, Grove City, co. engr.

Pa., Mercer—Mercer Co. will sell $1,000,000 bonds for road work. F. Graham, co. engr.

Pa., Monaca—Voted $32,000 bonds for improving streets.

Pa., New Castle—Lawrence Co. sold $600,000 bonds for road work. A. Lamoree, co. clk.

Pa., Pittsburgh—Plans to improve, grade, pave and curb Manchester Ave., $112,000; East St. from Tripoli to Royal Sts., $82,000. C. A. Finley, dir. pub. wks.

Pa., Wilson—Plans to vote on $107,000 bonds for paving 27 streets. L. A. Weaver, boro. engr.

North Carolina—State Hy. Comn., Raleigh, plans grading, bridging and surfacing 11.5 mi. road from Boone to Caldwell Co. line, State Project 770, Watauga Co., $50,000, 6.5 mi. from McGradys Post Office to Alleghany Co. line, State Project 780, Wilkes Co., $30,000, 11.6 mi. from Mt. Airy to Stokes Co. line via Pilot Mountain, State Project 763, Surry Co., $65,000, 11 mi. from Lillington to Duke on north side Cape Fear River, State Project 437, Harnett Co.; $60,000, 10.7 mi. from Edgecombe Co. line to Green Co. line via Farmville, State Project 188, Pitt Co., $50,000; grading and concrete or asphaltic paving 4 mi. from Duke to Dunn, State Project 438, Harnett Co., $120,000, 8 mi. from Statesville to Rowan Co. line, State Project 643, Iredell Co., $230,000, 2 mi. from Statesville to Junction with Central Highway, State Project 644, Iredell Co., $60,000, 10 mi. from Charlotte to Cabarrus Co. line on Route 27, State Project 659, Mecklenburg Co., $260,000, 5 mi. between Washington and Belhaven, State Project 105 B, Beaufort Co., $150,000, 2 mi. between Belhaven and Leechville, State Project 105 A, Beaufort Co., $60,000, 16 mi. from Wayne Co. line to Warsaw, State Project 220, Duplin Co., $480,000, 9 mi. between Clinton and Williamsons Store, State Project 273, Sampson Co., $270,000, 8 mi. from end of pavement east of Wilson to Greene Co. line, State Project 293, Wilson Co., $240,000, 7.5 mi. between Whiteville and Chadbourne, State Project 328, Columbus Co., $225,000, 8 mi. from Polkton to Wadesboro, State Project 608, Anson Co., $200,000, 5.1 mi. from Mt. Airy to Fancy Gap, State Project 762, Surry Co., $180,000, 3.5 mi. from Yadkin Co. line, via Elkin, to Dobson Rd., State Project 765, Surry Co., $90,000, 8 mi. from Statesville to Allison Bridge on Little Yadkin River, State Project 641, Iredell Co., $200,000, 9.5 mi. from Franklinton to Wake Co. line, State Project 421, Franklin Co., $260,000; grading, bridging and concrete or asphaltic paving 15 mi. from Goldsboro to Duplin Co. line, State Project 282, Wayne Co., $450,000, 10 mi. from forks of road near Castle Hayne to Long Creek, State Project 380, Pender Co., $250,000, 10 mi. from Mecklenburg Co. line to Stanly Co. line on Route 27, State Project 616, Cabarrus Co., $260,000; grading and surfacing 21 mi. between Lenoir and Blowing Rock, State Project 723, Caldwell Co., $65,000, 8.35 mi. between Tarboro and Pitt Co. line, State Project 126, Edgecombe Co., $56,000, 12.2 mi. from Tarboro to Halifax Co. line, State Project 127, Edgecombe Co., $90,000, 17.4 mi. from Tarboro to Pitt Co. line, State Project 128, Edgecombe Co., $175,000, 8.1 mi. between Near Crisp and Wilson Co. line, on Route 2, State Project 129, Edgecombe Co., $50,000, 4 mi. from Berea to Person Co. line,

Streets and Roads (Continued)

State Project 431, Granville Co., $25,000; clearing, grading, bridging and surfacing 20.1 mi. from Whitakers to Halifax, State Project 141, Halifax and Edgecombe Counties. $100,000, 16.8 mi. from Winton to Aulander, State Project 147, Hertford and Bertie Counties. $85,000, 16.5 mi. from Chowan Co. line to Virginia State Line, State Project 134, Gates Co., $85,000, 13½ mi. from Winfall to Road 32, via Belvedere, State Project 177, Perquimans and Chowan Counties, $65,000, 13.2 mi. from Lenoir to Wilkes Co. line, State Project 721, Caldwell Co., $65,000; resurfacing 8.8 mi from Wilmington to Castle Hayne, State Project 351, New Hanover Co., $100,000; grading and surfacing with penetration macadam, concrete or asphalt 9 mi. from Apex to Chatham Co. line, State Project 486, Wake Co., $125,000; grading and gravel surfacing 7.5 mi. from West Jefferson to Baldwin, State Project 714, Ashe Co., $50,000; grading and paving with penetration macadam 8 mi. road, State Project 640, Iredell Co., $120,000; clearing, grading, bridging and topsoiling 17 mi. from Mars Hill to Sands Gap at Tennessee state line, State Project 973, Madison Co., $85,000; clearing, grading, bridging and concrete or asphaltic paving 13 mi. between Burgaw and Duplin Co. line, State Project 381, Pender Co., $360,000; grading and hard-surfacing 2 mi. from Old Westfield to New Westfield Rds., State Project 764, Surry Co., $50,000; dressing and re-surfacing 14 mi. from Boone to Tennessee state line on Route 60, State Project 771, Watauga Co., $25,000; constructing soil road 12½ mi. between Edenton and Hertford, State Project 115, Chowan and Perquimans Counties, $65,000; surfacing 9.5 mi. Old Project 600 with penetration macadam, State Project 602, Alexander Co., $100,000. C. M. Upham, state highway engr.

North Carolina—State Hy. Dept., Raleigh, plans surfacing and re-surfacing Projects 964 and 943, Macon and Haywood Counties. $30,000. C. M. Upham, state highway engr.

N. C., Greensboro — Guilford Co. plans paving with concrete or some asphaltic type, 4 mi. road known as Kivette Rd., from High Point toward Hayworth Springs. $100,000. W. C. Jones, High Point, comr.

N. C., Spencer—Plans paving various streets, concrete or some type of asphalt. $50,000.

Fla., Port Tampa—Voted $25,000 bonds paving 1 mi. Prescott St., incl. two 10 ft. strips with 18 ft. trolley way in center. McElroy Eng. Co., 32-34 Giddens Bldg., Tampa, engrs.

Fla., West Palm Beach—Palm Beach Co., Court cancelled contract awarded to Greynolds & Monroe, Inc., West Palm Beach, surfacing Military Trail Lake Worth Rd. Noted Feb. 9.

Ala., Birmingham — Takes bids about Aug. 30, paving curbing and guttering 1½ mi. 5th Ave. S., formerly Ave. E, 11,000 lin.ft. combined concrete curb and gutter, 30,000 sq.yd. asphalt on concrete. $82,000. A. J. Hawkins, Birmingham, engr.

Ohio — Dept. Highways and Pub. Wks. rejected bids received June 16, grading, bridging and paving 3.593 mi. Sect. D Aurora-Warren Rd., Portage Co. Noted June 22.

O., Columbus—W. H. Duffy, dir. Pub. Serv., rejected bids opened June 27, grading, curbing, laying water mains and paving 2,529 ft. Fair Ave. from Champion Ave. to Franklin Park W., 30 ft., asphalt over present surface. $27,737.

O., Columbus—Franklin Co. plans grading and paving 1.5 mi. Dublin Rd., 24 ft., waterbound macadam. $80,000. C. C. Lattimer, Court House, engr.

O., Tiffin—Plans $25,000 bond issue for street paving. A. Unger, Mayor.

Kan., Hutchinson—Plans paving 8 blocks of 4 ft., 10 blocks of 5 ft., and 2 blocks of 6 ft. sidewalks, 5 blocks curb and gutter, and 1 block 18 ft. concrete paving. B. Lee, city engr.

Neb., Lincoln—T. Berg, city clk., takes bids about July 15, paving 5 blocks, 15th St. from Sumner to South Sts., Dist. 406, 4,357 sq.yd. asphaltic concrete, 2,984 lin.ft. combined curb and gutter, etc.; 4 blocks 32nd St. from Q to R Sts., Dist. 316, 3,190 sq.yd. asphaltic concrete, 2,460 lin.ft. combined curb and gutter, etc. G. W. Bates, city engr.

Missouri—State Hy. Dept., Jefferson City, plans surfacing 3.973 mi. road from King City northward and southward, Federal Aid Project 54, Gentry Co., 1½-2 in. rock asphalt, 2½ in. bituminous macadam, 2 in. asphaltic concrete, all foregoing on 8 in. sledged stone, 1 course cement concrete, 8 in. in center and 6 in. at edges, or 4 in. waterbound intermediate course and 1 in. inverted penetration macadam surface course on 6 in. sledged stone. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., at div. office, New London, rejected bids received May 25, 3.829 mi., State Aid Project 20.168, Ralls Co. Noted June 22.

Texas—State Hy. Comn., Austin, appropriated $3,402,409 for highway projects in forty-seven counties; Jefferson Co. $217,000; Cameron Co. $100,000; Brazoria Co. $90,000; Palo Pinto Co. $100,000; Falls Co. $100,000; Shelby Co. $75,000; Nacogdoches Co. $2,000; Parker Co. $19,750; Guadalupe Co. $35,028; Fannin Co. $100,000; Blanco Co. $61,000; Mitchell Co. $12,469; Houston Co. $68,000; Fort Bend Co. $249,400; Mason Co. $19,000; Rusk Co. $95,712; Williamson Co. $88,154; Eastland Co. $71,000; Limestone $13,602; Bowie Co. $35,552; Morris Co. $13,812; Burnet Co. $3,992; Brooks Co. $6,000; Dalas Co. $40,000; Hood Co., $6,250; Hunt Co., $75,000; Madison Co. $625; Smith Co. $75,000; Terrell Co. $200,000; Lamar Co. $130,021; Tarrant Co. $30,000; Angelina Co. $100,000; Bosque Co. $15,000; Cherokee Co. $16,000; Coke Co. $50,000; Edwards Co. $100,000; Fayette Co. $26,000; Hidalgo Co. $100,000; Jasper Co. $67,500; Jeff Davis Co. $57,000; Jim Wells Co. $100,000; Milam Co. $64,000; Newton Co. $95,000; Nueces Co. $95,000; Orange Co. $175,000; Stephenson Co. $100,000; Uvalde Co. $100,000.

Tex., Abilene—Plans additional street improvements, incl. Hickory and Grape Sts., permanent type pavement. Fund derived from $90,000 bond issue now available. W. A. Rainey, city engr.

Tex., Ballinger—Attorney Generals Dept., Austin, approved $50,000 bond issue voted for extensive street improvement, citizens also voted for assessment of abutting property owners to supplement above issue. J. E. Pirie, city engr.

Tex., Johnson City—Rd. Dist. 2, Blanco Co., voted $40,000, its share toward grading and graveling 22 mi. State Highway 20-A. Total cost $125,000. W. C. Yeager, Blanco City, co. engr.

Tex., McLean—See "Waterworks."

Tex., Muleshoe—Bailey Co. plans grading and surfacing with clay and caliche 17 mi. State Highway 7, 16 ft. $50,000. C. L. Hasie Eng. Co., Muleshoe, engrs.

Cal., Fresno—Had plans prepared improving portions Peralta Way and Moroa Aves., 70,645 sq. ft. grading, 61,060 sq. ft. asphalt, 6,145 sq. ft. concrete gutter, 1,760 lin. ft. concrete curb, 2,703 sq. ft. concrete sidewalks, etc. W. Stranahan, city engr.

Cal., Lodi—Had plans prepared improving portion of Eden St., $83,145 sq.ft. 1½ in. warrenite on 2½ in. asphaltic concrete, 91,425 sq.ft. concrete curb, 5,525 sq.ft. concrete gutters; portion of Flora St., 91,425 sq.ft. 1½ in. warrenite on 2½ in. asphaltic concrete, 100,126 sq.ft. grading, 5,620 lin.ft. concrete curb, 7,025 sq.ft. concrete gutters; portion of Stockton St., 77,352 sq.ft. 1½ in. warrenite on 2½ in. asphaltic concrete, 83,159 sq.ft. grading, 3,604 lin.ft. concrete curb, 4,505 sq.ft. concrete gutters. L. F. Barzellotti, city engr.

Cal., Los Angeles—Bd. Supervs. Los Angeles Co., takes bids about Aug. 1, improving 105th, 106th, 107th and 109th Sts., Budlong, Normandie Aves., et al., 33,655 lin.ft. cement curbing, 2,720 sq.ft. cement gutter, 134,018 sq.ft. cement sidewalks, 19,085 cu. yd. earth excav.

Cal., Modesto—Had plans prepared improving Morris Ave. between McHenry St. and Blocks 605 and 606, Auburn and Castle Sts. between Morris and Lucerne Aves., 168,200 sq.ft. grading, 154,809 sq.ft. 1½in. warrenite on 2½ in. asphaltic concrete, 13,390 sq.ft. concrete gutter, 8,325 lin.ft. concrete curb, 1,258 lin.ft. headers, etc. G. Freitas, city engr.

Cal., Newport Beach—Rescinded contract for concrete paving 368,755 sq.ft. Central Ave., et al. $460,000. Will readvertise. Noted June 1.

Cal., Oakland—Had plans prepared improving 14th St. between Poplar and Wood Sts., 126,819 sq.ft. grading, 537 lin.ft. concrete curb with steel guard, 4,398 ft. concrete curb without steel guard, 5,266 sq.ft. concrete gutter, 21,553 sq.ft. asphaltic concrete pavement, etc. W. W. Harmon, City Hall, engr.

Ont., Ottawa—Bd. Control soon takes bids asphalt pavements on Wellington St. from Garland to Parkdale Aves., $120,373, Gloucester St. from Kent to Bay Sts., $16,455, Nicholas St. from Rideau St. to Laurier Ave. E., $61,039, Waller St. from Rideau St. to Laurier Ave. E., $22,957, Augusta St. from Rideau to Wilbrod Sts. $13,733, Chapel St. from Osgoode to Somerset Sts., $10,328, Cobourg St. from Rideau to Clarence Sts., $17,439; tarvia pavement on Champagne St., $10,000. A. F. Macallum, city engr.

BIDS DESIRED

Rhode Island—July 19, by State Bd. Public Rds., Providence, reconstructing section State Highway, in Tiverton; adv. this issue.

N. Y., Long Island City—July 10, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., (a) grading and paving Bell Ave. from Cocheron to Jackson Aves., preliminary concrete (b) setting curb on easterly side from Wainscott (Warburton) to Jackson Aves. (excluding from both (a) and (b) the right of way of the Long Island R.R.) all in 3rd Ward.

N. Y., Long Island City—July 13, by Park Bd. at office of Dept. Parks, Municipal Bldg., New York, sidewalks along Woodhaven Ave. in Forest Park, Boro of Queens.

N. Y., Lynbrook — July 15, by Village Bd. Trustees, paving certain streets, reinforced cement concrete. P. Stauderman, pres.; adv. this issue.

N. Y., New York—July 11, by W. J. Flynn, acting pres. Bronx Boro, grading, setting curb, laying sidewalks, etc., where necessary in Harrison Ave. from Kingsland Pl. to Burnside Ave.; paving roadway of Harrison Ave. from Tremont to Burnside Aves., sheet asphalt on concrete; sewers in Middletown Rd. between Westchester and Edison Aves. Noted June 29.

N. J., Belvidere—July 21, by Warren Co., Court House, constructing State Highway Route 5, Sect. 8, Great Meadows-Barkers Corner. H. W. Vetter, co. engr.; adv. this issue.

Pa., Clairton—July 10, grading Sycamore and Chambers Sts. from Maple to Boundary Sts., 4th Ave. from Walnut to Wilson Aves., grading, paving and curbing State St. from Boundary to Bway., 6th Ave. from Locust St. to Summit Way, also sanitary sewer in State St. from Boundary to Maple Sts. R. M. Evans, city engr.

Pa., Phila.—July 11, by F. H. Caven, dir. pub. wks., grading Almond St. from Tioga to Venango Sts., Florence Ave. from 54th to 55th Sts., Stillman St. from Thompson to Master Sts., 13,415 cu.yd. excav., $26,000; Delaware Ave. from Columbia Ave. to Dyott St., 12,860 cu.yd. excav., 23,450 sq.yd. granite block, $100,000; paving Chester Ave. from 65th to 66th Sts., Filbert St. from 52nd St. to dead end, Fisher Ave. from 15th to 16th Sts., Franklin St. from Wyoming to Louden Sts., 5,400 sq.yd. asphalt, $29,000; Hutchinson St. from Ruscomb St. to Lindley Ave., Madison Ave. from Cedar St. to Araningo Ave., Mercer St. from Westmoreland to Ontario Sts., Percy St. from Emily St. to Snyder Ave., Snyder Ave. from 23rd to 24th Sts., Tower St. from Roxboro Ave. to Jamestown St., 7,329 sq.yd. asphalt, $30,000; Woodlawn St. from Sprague to Ardleigh Sts., 51st St. from Viola to Leidy Sts., 304 sq.yd. vitr. brick, 2,819 sq.yd. asphalt, $25,000; 58th St. from Woodlawn Ave. to Baltimore & Ohio R.R., 12,542 sq.yd. redressed granite block, $20,000; Marshall St. from Brown to Poplar Sts., 522 sq.yd. vitr. brick, 830 sq.yd. granite block, 2,930 sq.yd. asphalt, $30,000; Indiana Ave. from Broad to 15th Sts., 1,117 sq.yd. granite block, $25,000; Brewster Ave. from 83rd to 86th Sts., 8,250 sq.yd. bituminous macadam, $35,000. F. C. Dunlap, City Hall, engr.

Pa., Sharon—July 11, paving 6,050 sq.yd. Pearl St., Case, Euclid and South Water Aves., brick, sheet asphalt or asphaltic concrete on concrete; repaving 2,330 sq.yd. East State St., brick on concrete, 2,530 sq. yd. North Water and South Water Aves., brick or sheet asphalt on concrete; resurfacing 6,950 sq.yd. South Main Ave. and South Dock St., brick or sheet asphalt. W. M. Stewart, city clk.

D. C., Wash.—July 12, by Dist. Comrs., 509 Dist. Bldg., paving various streets and avenues, asphalt; adv. this issue.

Va., Richmond—July 17, at office of A. J. Saville, dir. pub. wks., grading, curbing and guttering various streets; adv. this issue.

North Carolina—July 25, by State Hy. Comn., Raleigh, improving 15.2 mi. State Project 888, Yancey Co., 72,500 cu.yd. common excav. and borrow, 4,800 cu.yd. rock excav., 2,120 ft. 18-30 in. concrete pipe, 224 cu. yd. concrete, 147,540 sq.yd. waterbound macadam or two course gravel surface, $213,000; 13.54 mi. State Project 183 A, Pitt Co., 17,000 cu.yd. common excav., 21,000 cu.yd. borrow, 124,140 sq.yd. concrete or asphaltic paving, $344,700; 7.78 mi. State Project 535, Guilford Co., 27,500

Streets and Roads (Continued)

cu.yd. common and 1,500 cu.yd. rock excav., 1,384 ft. 15-18 in. concrete pipe, 82,110 sq. yd. concrete or asphaltic paving, 230 cu. yd concrete, 65,000 lb. reinforcing, etc., $248,000; 9.28 mi. State Project 602, Alexander Co., 10,900 cu.yd. excav., 98,040 sq. yd. waterbound or penetration macadam, $175,000; 13.5 mi. State Project 131, Gates Co., 58 acres clearing, 26,300 cu.yd. common excav., 50,600 cu. yd. borrow, 1,344 ft. 18-24 in. concrete pipe, 35,550 cu.yd. topsoil, 13,800 sq.yd. corduroy, 1,300,000 sta. yd. overhaul, $84,000. C. M. Upham, state highway engr. Noted June 15.

N. C., Edenton — July 20, by Comrs. Chowan Co., grading, concrete bridge, and concrete or asphaltic paving, 4½ mi. road, 16 ft. $125,000. Blair & Drane, Edenton, engr.

Fla., Ft. Myers—Aug. 9, by Comrs. Lee Co., clearing, grading and paving on rock base 8.5 mi. New Project Short Cut. R. P. Ranson, Ft. Myers, engr.

Alabama—July 25, by W. S. Keller, state highway engr., Montgomery, grading and gravel surfacing 18.754 mi. highway from Guin to Walker Co. line, via Winfield, Marion Co., 55.16 acres clearing, 133,837 cu.yd. common and 22,000 cu.yd. solid rock excav., 2,620 lin.ft. 18 in. and 650 lin.ft. 24 in. c.i. or triple strength terra cotta pipe, 729.55 cu.yd. concrete, 36,823 lb. reinforcing, 50,000 cu.yd. local gravel surfacing, 10,000 cu.yd. stripping gravel pits.

Ala., Guntersville—July 17, widening 4 mi. Dunlap and Broad Sts., 15,000 lin.ft. concrete curb and gutter, 11,000 sq.yd. vertical fibre, concrete or waterbound macadam. $50,000. R. L. Totten, Jefferson Co. Bank Bldg., Birmingham, engr.

La., New Orleans—Sept. 19, paving 55 streets. A. Klorer, city engr.

Ohio—July 14, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties:

Clinton Co. Sect. "R" Cincinnati-Zanesville Rd., 7.545 mi., brick, $312,440.

Columbiana Co., Sect. "A-1" Lisbon-Canton South Rd., 3.922 mi., brick, $164,310, bituminous macadam, asphalt or tar, $126,307.

Gallia Co., Sect. "A-1" Gallapolis-Crown City Rd., 0.86 mi., plain concrete, $31,909.

Hardin Co., Sect. "L" Lima-Kenton Rd., 2.966 mi., bituminous macadam, asphalt or tar, $81,280, bituminous concrete, $78,003, Kentucky rock asphalt, $78,337.

Henry Co., Sect. "Napoleon" Wauseon-Napoleon Rd., 0.5295 mi., rein.-con., $13,360.

Henry Co., Sect. "B" Ottawa-Napoleon Rd., 4.04 mi., Kentucky rock asphalt, $99,560, bituminous macadam, asphalt or tar, $79,612.

Huron Co., Sect. "E" Barberton-Greenwich Rd., 4.124 mi., rein.-con., $99,704.

Huron Co., Sect. "Greenwich" Barberton-Greenwich Rd., 0.1619 mi., rein.-con., $3,961.

Jefferson Co., Sect. "K-1" Ohio River Rd., 2.157 mi., brick, $103,899.

Lorain Co., Sect. "D" and "E" Cleveland-Elyria Rd., 6.23 mi., brick, $194,572, bituminous concrete, $166,260.

Marion Co., Sect. "H" Marion-Galion Rd., 3.077 mi., bituminous macadam, asphalt, $103,933, tar macadam, $99,923, rein.-con., $106,571.

Marion Co., Sect. "K" Marion-Galion Rd., 3.481 mi., bituminous macadam, asphalt or tar, $96,232, bituminous macadam, $100,373, rein.-con., $103,716.

Morrow Co., Sect. "L" Mt. Gilead-Mansfield Rd., 6.322 mi., Kentucky rock asphalt, $196,895, bituminous concrete, $197,813, rein.-con., $200,904.

Noble Co., Sect. "O" Cambridge-Caldwell Rd., 4.716 mi., rein.-con., $140,049, brick, $172,987, state to furnish brick, $137,086.

Noble Co., Sect. "J" Caldwell-Marietta Rd., 3.257 mi., plain concrete, $152,880.

Ottawa Co., Sect. "L" Toledo-Elmore Rd., 0.992 mi., brick, $41,421, bituminous concrete, $39,369, rein.-con. $35,271.

Sandusky Co., Sect. "A" Toledo-Elmore Rd., 2.278 mi., brick, $104,608, bituminous concrete, $93,370, rein.-con., $83,950.

Pickaway Co., Sect. "New Holland" Cincinnati-Zanesville Rd., 0.923 mi., brick, $32,906, bituminous macadam, asphalt or tar, $21,512, rein.-con., $26,038.

Pickaway Co., Sect. "F-2" Columbus-Washington C. H. Rd., 0.8 mi., bituminous macadam, asphalt or tar, $24,082, brick, $34,585.

Pickaway Co., Sect. "F-2" Columbus-Washington C. H. Rd. 0.19 mi., bituminous macadam asphalt or tar, $43,858, brick, $46,631.

Portage Co., Sect. "D" Aurora-Warren Rd., 3.593 mi., rein.-con., $108,183, brick, $108,063.

Scioto Co., Sect. "R-2" Ohio River Rd., 3.139 mi., monolithic brick, $125,748, rein.-con., $115,500, bituminous macadam, asphalt or tar, $105,851.

Stark Co., Sect. "B-2" and "E" Alliance-Minerva Rd., 3.96 mi., monolithic brick, $167,306, bituminous concrete, $164,392.

Trumbull Co., Sect. "C" Painesville-Warren Rd., 2.62 mi., bituminous macadam, asphalt or tar, $85,369, rein.-con., $85,634.

Trumbull Co., Sect. "Newton Falls" Ravenna-Warren Rd., 0.756 mi., brick, $21,035.

Mahoning Co., Sect. "V" Canfield-Polani Rd., 1.21 mi., resurfacing with bituminous macadam asphalt or tar, $23,598.

Vinton Co., Sect. "A" McArthur-Gallapolis Rd., 0.341 mi., grading and completing bridge, $6,997.

Wayne Co., Sect. "O" Wooster-Mansfield Rd., 3.355 mi., grading and constructing bridges and culverts, $53,515. L. C. Herrick, dir. highways.

Ohio—July 17, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 10.297 mi. Sects. "C-1", "C", "D" and "E" Painesville-Warren Rd., Ashtabula Co., monolithic brick, $299,076, rein.-con., $266,493, bituminous macadam asphalt or tar, $319,936. L. C. Herrick, dir. highways.

O., Columbus—July 13, paving sidewalks. $28,000. R. H. Simpson, City Hall, engr.

O., Columbus—July 19, by Franklin Co. paving 1.34 mi. Boehm Rd., Plain Twp., 16 ft., bituminous macadam, $30,182; reconstructing 0.34 mi. Dodgidge St. from Olentangy River to Delaware Rd., 24 ft., $15,762. C. C. Lattimer, Court House, engr.

O., Dayton—July 10, by G. F. Baker, dir. Pub. Serv., paving 3,000 ft. North Main St. from Bridge to Locust Sts., brick, wood block, sheet asphalt or asphaltic concrete, $100,000; 1,000 ft. Kenwood St. from Grafton to Richmond Sts., rein.-con., $6,000; 1,000 ft. Bellemonte Park from Neal to Five Oaks Sts., brick, $9,694; grading and graveling 800 ft. Yuncker Ave. from Oxford St. W., $7,021. I. E. Houk, city engr.

Michigan—July 14, by State Hy Dept., Lansing, grading and surfacing 7.929 mi. State Trunk Line Rd. 54-1, Newaygo Co., 44,366 cu.yd. excav., 74,407 sq. yd. gravel. L. H. Belknap, ch. engr.

Michigan—July 18, by State Hy. Dept., Lansing, grading and surfacing 2.04 mi. State Trunk Line Rd. 59-2, Oakland Co., 21,525 sq.yd. asphalt, concrete or bituminous concrete; 2.767 mi. State Trunk Line Rd. 59-1, Sect. B, Macomb Co., 9,660 cu.yd. excav., 29,220 sq.yd. asphalt, concrete or bituminous concrete. L. H. Belknap, ch. engr.

Michigan—July 19, by State Hy. Dept., Lansing, grading and surfacing 4.862 mi. Assessment Dist. Rd. 346, Ionia and Barry Counties, 16,412 cu.yd. excav., 34,226 sq.yd. gravel; 4.631 mi. State Trunk Line Rd. 47-3, Saginaw Co., 20,058 cu.yd. excav., 4,994 sq. yd. asphalt, concrete or bituminous concrete and 39,475 sq.yd. gravel; 1.751 mi. State Trunk Line Rd. 47-10, Saginaw Co., 18,272 cu.yd. excav., 23,595 sq.yd. asphalt, concrete or bituminous concrete. L. H. Belknap, ch. engr.

Minnesota—July 10, by State Hy. Dept., St. Paul, 1.22 mi. Federal Aid Project 286, State Project 1-37, Ramsey Co., 4,900 cu. yd. excav., 17,478 sq.yd. concrete base, 16,761 sq.yd. asphaltic concrete surface, $39,000; 13 mi. Federal Aid Project 291, State Project 2-24, Clay Co., 185,573 cu.yd. excav., culverts, two bridges, $40,000. State Hy. Dept., 1246 University Ave., St. Paul, engrs.

Minn., Waseca—July 10, by Waseca Co., 9 mi. Job 2201, State Rd. 5, 11,880 cu.yd. gravel surfacing; 11 mi. Job 2205, State Rd. 3, 13,800 cu.yd. gravel surfacing. $35,000. J. W. Hruska, Waseca, engr.

Tex., Clarksville—July 12, by R. J. Williams, judge Red River Co., grading and gravel surfacing 5.39 mi. State Highway 35, incl., 500 cu. yd. roadway, 500 cu.yd. borrow excav., 8.7 cu.yd. concrete, 8,325 cu.yd. gravel furnished by county. $40,000. J. B. Rieman, resident engr.

Tex., Port Arthur—July 12, by J. P. Logan, mayor, paving 94,000 sq.yd. Houston, San Antonio, Dallas and Ft. Worth Aves., etc., sheet asphalt, asphaltic concrete, warrenite bitulithic or rock asphalt on concrete, incl., 10,000 lin.ft. storm sewers, 10,250 lin.ft. curbing, 32,370 lin.ft. guttering, 20,000 cu.yd. earth excav., 200 cu.yd. structural concrete. $233,000 available, (city's share).

Idaho—July 14 at Office Commissioner Pub. Wks., Boise, grading and crushed rock surfacing 7.78 mi. Idaho Pacific Highway, Sect. A, Federal Aid Project 60, Bannock Co., 39,503 cu.yd. earth and 6,853 cu. yd. rock excav., 15,985 cu.yd. gravel, 161 cu.yd. concrete, etc.

BIDS RECEIVED

Vermont—T. W. Dix, comr. State Highways, Montpelier, opened bids June 27, constructing (1) 5.71 mi. Federal Aid Project 32 in Orange, gravel, (2) 2.15 mi. Federal Aid Project 31 in Concord, (3) 1.97 mi. Federal Aid Project 30 in Lunenberg, (a) gravel, (b) bituminous macadam, from G. L. Gregoire & Co., Barre, (1) $102,069 (2) $46,276; Colburn Constr. Co., Concord, N. H., (1) $112,461 (3e) $41,901 (3b) $48,658; Streeter & Sons Co., 1 Glenwood St., Worcester, Mass., (1) $118,971; Dix & Staples, Springfield, (2) $39,298; A. V. Leo Constr. Co., Thompson, Conn., (2) $43,736; Guild & Douglass, Springfield, (3a) $52,588, (3b) $61,260. Noted June 22.

New York—H. S. Sisson, comr. State Hy. Dept., Albany, opened bids June 30, improving (1) 4.59 mi. Highway 8108, Sinclairville-Cassadaga, Part 1, Chautauqua Co., (2) 2.23 mi. Highway 8109, Piercefield-Tupper Lake, Part 2, Franklin Co., (3) 6.65 mi. Highway 8112, Dansville-Geneseo, Part 3, Livingston Co., (4) 7.16 mi. Highway 8107 and 1634, Jordan-Baldwinsville, Part 2, Baldwinsville Village: Dowmer, Syracuse and Oswego Sts., Onondaga Co., (5) 4.99 mi. Highway 8110 Watkins-Lodi, Parts 1 and 2, Schuyler Co., (6) 8.33 mi. Highways 5674 and 8111, Port Jefferson-Riverhead, Part 2-A and Port Jefferson-Riverhead, Part 2-B, Suffolk Co., (7) 0.93 mi. Highway 1646, Tarrytown Village: White Plains Rd., Westchester Co., (8) 9.38 mi. Highway 8113, Dekalb-Heuvelton, St. Lawrence Co., from H. C. Howe, Sherman, (1) $179,782; E. J. Bailey, Brockton, (1) $184,587; A. V. Leo Constr. Co., Thompson, Conn., (2) $69,325 (7) $36,964; W. T. Thayer & Co., Chateaugay, (2) $70,064 (8) $284,930; E. Ferrin, Tupper Lake, (2) $72,108; C. A. Foote & Son, Mt. Morris, (3) $210,645 ,(4) $279,848, (5) $191,865; W. D. Fote, Olean, (3) $223,843, (5) $193,205; Cleveland & Sons Co., Brockport, (3) $226,515; Fowler & Banks, Inc., Mt. Kisco, (4) $284,224; Stento & Serafini, 84 Court St., Binghamton, (4) $291,736; J. W. Gurnett and S. E. Huston, Watkins, (5) $185,179; Westchester Constr. Co., Yonkers, (6) $260,480, (7) $35,469; W. H. Brown Constr. Co., New York, (6) $264,250; Awixa Corp., Islip, (6) $275,730. Noted June 15.

N. J., Jersey City—J. B. Payton, pres. Blvd. Comn., opened bids repaving with asphalt on concrete 36th St., Bayonne, and Linden Ave., here, from J. E. Donovan, 2205 Richmond Terrace, Port Richmond, 228,139, Clinton Asphalt Paving Co., 308 Charles St., West Hoboken, $232,909, W. T. S. Critchfield, 14th St., Hoboken, $237,544; laying conduits and installing electric lighting system between 56th St., Bayonne, and Terhune Ave., here, from W. J. Coleman, 29 Willow Court. $14,484, Young & Mane, Washington St., Hoboken, $16,300, Gaufunkel Bros., 190 Newark Ave., $16,845. Noted March 9.

Pennsylvania—State Hy. Dept., Harrisburg, opened bids June 27, constructing 6,067 ft. Route 251, Parker City Boro., Armstrong Co., from Jones Constr. Co., Lisbon Rd., Salem, O., $65,399. F. S. Wilson, Kittanning, $78,955, C. E. Walter, Butler, $80,164; 11,215 ft. Route 20, Troy and Columbia Twps., Bradford Co., from Juniata Co., 410 Empire Bldg., Phila., $89,950, A. W. Hinaman, Canton, $100,321, Peconco Eng. & Contg. Corp., 1170 Bway., New York City, $108,990; 13,917 ft. Route 251, Parker Twp., and Bruin Boro., Butler Co., from C. E. Walter, Butler, $131,445, Burns Bros., 343 East Washington St., New Castle, $137,119, Jones Constr. Co., Lisbon Rd., Salem, O., $141,256; 9,596 ft. Route 62, Cambria Twp., Cambria Co., from Lord Constr. Co., Hastings, $74,819, G. T. Morgan, 14 Woolf Blk., Johnstown, $76,345, B. Gigliotti, 810 Huber St., Johnstown, $86,474; 23,751 ft. Route 221, Elder and East Carroll Twps., Cambria Co., from Lord Constr. Co., Hastings, $224,600; 2,510 ft. Route 237, North Bethlehem Twp., Clarion Co., from L. H. Hileman Constr. Co. 217-218 First Natl. Bank Bldg., New Kensington, $17,980, J. Battenfield Sons Co., New Bethlehem, $19,641; 12,815 ft. Route 214, Clarion and Monroe Twps., Clarion Co., from T. W. Munroe & Co., DuBois, $152,668, L. H. Hileman Constr. Co., 217-218 First Natl. Bank Bldg., New Kensington, $153,785, Burd Constr. Co., Cresson, $157,779; 7,057 ft. Applications 1867 and 1868, Cambridge and Rockdale Twps., Crawford Co., from Penn-Erie Constr. Co., Erie, $46,099, E. M. Love & Son, Corry, $52,352, H. E. Bunce, Cambridge Springs, $55,656; 28,323 ft. Route 262, Green, Grant and Montgomery Twps.,

Streets and Roads (Continued)

Indiana Co., from Booth & Flinn Ltd., 1942 Forbes St., Pittsburgh, $205,238, Anderson Constr. Co., Parnassus, $214,904, Torquato Bros. Co., 1317 Midway Ave., Windber, $215,381; 18,709 ft. Route 338 and Applications 995 and 1009, Sykesville Boro and Winslow Twp., Jefferson Co., from Mason & Hanger Co. Inc., DuBois, $164,623, J. C. Devine, Alliance, O., $168,450, T. W. Munroe & Co., DuBois, $170,601; 8,648 ft. Route 322, Application 1632, Scott Twp., Lackawanna Co., from M. and T. E. Farrell Co., 209 West Chestnut St., West Chester, $81,262, H. B. Sproul Constr. Co. Inc., 218 Adams Ave., Scranton, $86,464, M. Rosato & Son Co., 1145 Sloan Ave., Scranton, $88,340; 12,048 ft. Route 4, Salem Twp. and Shickshinny Boro., Luzerne Co., from D. L. Risser, 713 Walnut St., Lebanon, $112,682, R. D. Richardson Constr. Co., 828 Connell Bldg., Scranton, $122,547, W. C. Evans, Ambler, $125,907; 24,042 ft. Routes 100 and 101, Port Allegheny Boro. and Liberty Twp., McKean Co., from G. Metzger, Jr., 12 4th St., Emporium, $197,134, W. J. and J. T. Gephart, 341 Pine St., Williamsport, $200,042, Penn-Erie Constr. Co., Erie, $204,142; 15,659 ft. Route 2, Point Twp., Northumberland Co. and Mahoning Twp. and Danville Boro., Montour Co., from D. L. Risser, 713 Walnut St., Lebanon, $151,328, T. L. Evans Sons, 344 Ferry St., Danville, $158,808, W. C. Evans, Ambler, $172,951; 20,057 ft. Route 174, Harford Twp., Susquehanna Co., from R. D. Richardson Constr. Co., 828 Connell Bldg., Scranton, $190,353, Spruks Co., Cedar and Orchard Sts., Scranton, $204,700, Awixa Corp., Islip, N. Y., $210,054; one rein.-con. bridge with three 42 ft. spans, over Yellow Breeches Creek at Rosegarden, Sta. 495-00, on Route 123, Upper Allen Twp. Cumberland Co. and Carroll Twp., York Co., from G. A. and F. M. Wagman Co., Dallastown, $18,378, G. A. Flink, 222 Market St., Harrisburg, $19,546, Concrete Steel Bridge Co., 608 East Pike St., Clarksburg, W. Va., $22,078. Noted June 8.

Florida—State Hy. Dept., Tallahassee, surfacing (1) Project 32, Nassau Co., (2) Project 17, Manatee Co., with (a) 2½ in. bituminous macadam on crushed stone, (b) 3 in. bituminous macadam on crushed stone, (c) bituminous macadam on crushed stone, Ref. Tar T. P. 6, (d) bituminous macadam on 5 in. cement concrete, (e) bituminous macadam with bituminous material OA 2, (f) bituminous macadam with Ref. Tar T. P. 6, from J. Y. Wilson, Clark Bldg., Jacksonville, (1a) $287,466; Bauman Constr. Co., Folkston, Ga., (1b) $297,967, (1c) $303,247, (1d) $343,785; J. F. Morgan Paving Co., Jacksonville, (1b) $301,546, (1c) $309,466, (1d) $333,284; Maule Paving Co., Ojus, (1b) $302,895, (1c) $313,455, (1d) $349,828, (2e) $113,186, (2f) $123,046; Barber-Fortin, Gainesville, (2e) $143,750, (2f) $153,610. Noted June 15.

Fla., Clearwater—Comrs. Pinellas Co., constructing (1) Rd. 1, (2) Rd. 2, (3) Rd. 3, (4) Rd. 4, (5) Rd. 5, (6) Rd. 6, (7) Rd. 7, (8) Rd. 8, (9) Rd. 9, (10) Rd. 10, (11) Rd. 11, (12) Rd. 12, (13) Rd. 13, (14) Rd. 14, (15) Rd. 15, (16) Rd. 16, from J. G. Yeates, Port Tampa, (1) $866,155, (2) $422,966, (3) $203,170; Lasley Bros. & Harvey, Chattannoga, Tenn., (1) $950,162, (3) $222,653; Mickley & McLeod, Tampa, (1) $439,381, (3) $208,873; W. H. Kendrick, Tampa, (2) $432,925; J. B. McCreary Co., 3rd Natl. Bank Bldg., Atlanta, Ga., (4) $23,192, (5) $75,820, (6) $87,058; Barbar-Fortin Co., Gainesville, Fla. and Warren, O., (4) $24,648, (5) $70,170, (6) $96,938, (7) $50,152 and $77,216, (8) $20,757, and $32,164, (9) $20,639 and $34,129, (10) $158,143 and $222,453, (11) $102,952 and $178,336, (12) $172,826 and $254,756, (13) $43,463 and $79,145, (14) $41,399, (15) $41,001, (16) $58,949; W. P. McDonald, 342 Madison Ave., New York, (4) $25,014, (5) $75,295, (6) $98,527, (7) $53,683, (8) $22,150, (9) $21,464, (10) $180,095, (11) $104,976, (12) $198,858, (13) $41,763, (14) $40,884 and $66,357, (15) $38,543 and $67,891, (16) $55,870 and $99,006. Noted May 25.

O., Columbus—W. H. Duffy, dir. Pub. Serv., opened bids June 27, grading, curbing and asphalt paving, Parsons Ave. from Livingston to Kean Aves., from R. B. Sheridan, 1801 Roxbury Ave., $134,373; Franklin Asphalt Paving Co., 209 South High St., $168,443; Cleveland Trinidad Paving Co., The Arcade, Cleveland, $169,747. Noted June 22.

O., Garfield Heights (Cleveland, P. O.)—Opened bids June 26, grading and paving East 106th St., South Parkway, Summerdale and Homeworth Aves., asphalt, from Enterprise Paving Co., 8436 Bway., Cleveland, $42,489; Cleveland Trinidad paving Co., The Arcade, Cleveland, $43,411. Noted June 22.

Wis., Kenosha—Opened bids June 28 paving 51,000 sq.yd. various streets, (a) Trinidad asphalt, (b) Mexica asphalt, (c) Texica asphalt, (d) asphalt oil, (e) vitr. fibre brick, (f) rein.-con., (g) asphaltic concrete, from White Constr. Co., 68 Wisconsin St., Milwaukee, (a) $2.95, (b) $2.70, (e) $3.44, (f) $2.32, (g) $2.30; Western Impvt. Co., 840 9th St., Racine, (a) $3.08, (b) $2.98, (c) $3.03; Dean Constr. Co., 382 East North Ave., Milwaukee, (d) $3.18, (f) $2.47; J. Cape & Sons, 468 Water St., Racine, (e) $3.44, (f) $2.47. Noted June 22.

Missouri—State Hy. Dept. at div. office Bloomfield, opened bids June 2, 14.841 mi. road north and south through Pike Twp., Federal Aid Project 187, Stoddard Co., (1) 93,969 cu.yd. earth excav., (2) 36,078 cu. yd. borrow, (3) 104,842 sq.yd. gravel surfacing, etc., from Cameron-Joyce & Co., Keokuk, Ia., (1) $0.34, (2) $0.34 (3) $0.50, total $120,002; Little & Dean, Paris, Tenn., (1) $0.35 (2) $0.35 (3) $0.52, $123,572; M. E. Gillioz, Monett, (1) $0.45 (2) $0.40 (3) $2.50, $343,457. Noted June 22.

Missouri—State Hy. Dept. at div. office Carrollton, opened bids June 18, 12.211 mi. road from Ray Co. line to Chariton Co. line. State Aid Project 20.85, Carroll Co., (1) 33,492 cu.yd. earth excav., (2) 51,849 cu.yd. borrow, etc., from A. T. Cook, Ottawa, Kan., (1) $0.26 (2) $0.26, total, $31,136; Cameron-Joyce & Co., Keokuk, Ia., (1) $0.31 (2) $0.31, $35,462; C. T. Pemberton, Wakenda, (1) $0.33 (2) $0.32, $35,873. Noted June 8.

Missouri—State Hy. Dept. at div. office Cassville, opened bids June 9, 7.396 mi. road from Monett to Eureka Springs, Federal Aid Project 124, Barry Co., (1) 31,062 cu.yd. earth excav., (2) 4,889 cu.yd. borrow, (3) 51,802 sq.yd. gravel surfacing, etc., from Short & Bramer, Monett, (1) $0.35 (2) $0.35 (3) $0.23, total $45,696; M. E. Gillioz, Monett, (1) $0.35 (2) $0.35 (3) $0.35, $50,361; Sommerfleld-Jones Co., Springfield, (1) $0.40 (2) $0.35 (3) $0.35, $50,805.

Missouri—State Hy. Dept. at div. office Fredericktown, opened bids June 16, 16.391 mi. road from Farmington to Frederickton and Greenville, Federal Aid Project 101 B, Madison Co., (1) 141,597 cu.yd. earth excav., (2) 5,256 cu.yd. rock excav., (3) 15,547 cu.yd. borrow, (4) 116,442 sq.yd. gravel surfacing, etc., from Riley & Bailey, International Life Bldg., St. Louis, (1) $0.36 (2) $1.75 (3) $0.36 (4) $0.30, $164,344; Davis Constr. Co., Imboden, Ark., (1) $0.37 (2) $1.50 (3) $0.30 (4) $0.30, $165,699; Hogan-Humphreys, Little Rock, Ark., (1) $0.375 (2) $1.90 (3) $0.35 (4) $0.28, total $167,170. Noted June 8.

Missouri—State Hy. Dept. at div. office Greenfield, opened bids June 15, 7.72 mi. road from Springfield to Lamar, Federal Aid Project 159, Sect. B, Dade Co., (1) 34,762 cu.yd. earth excav., (2) 5,769 cu.yd. borrow, etc., from A. T. Bramer & Son, Monett, (1) $0.32 per cu.yd. (2) $0.30, total $27,427; Hodges-Weeks, Springfield, (1) $0.40 (2) $0.40, $33,116; Miller Constr. Co., Springfield, (1) $0.43 (2) $0.43, $33,602. Noted June 8.

Missouri—State Hy. Dept. at div. office Marble Hill, opened bids June 9, 10.045 mi. road from Wayne Co. to Cape Girardeau Co. lines, Federal Aid Project 174, Sect. A, Bollinger Co., (1) 40,627 cu.yd. earth excav., (2) 3,612 cu.yd. rock excav., (3) 23,777 cu. yd. borrow, etc., from W. A. Reynolds, Marble Hill, (1) $0.38 per cu. yd., (2) $1.75 (3) $0.38, total $69,467, M. E. Gillioz, Monett, (1) $0.40, (2) $1.75, (3) $0.35, $79,464, Maloney & Whalen, St. Louis, (1) $0.45, (2) $1.65, (3) $0.40, $80,216; 8.499 mi. road from Wayne Co. to Cape Girardeau lines, Federal Aid Project 174, Sect. B, Bollinger Co., (1) 51,592 cu.yd. earth excav., (2) $8,609 cu.yd. rock excav., (3) 28,892 cu.yd. borrow, etc., from Genl. Constr. Co., Arcade Bldg., St. Louis, (1) $0.38, (2) $2, (3) $0.40, $88,179. M. E. Gillioz, Monett, (1) $0.40, (2) $1.75, (3) $0.35, $88,652, W. A. Ross, Kansas City, (1) $0.43, (2) $1.50, (3) $0.43, $94,613. Noted June 22.

Missouri—State Hy. Dept. at div. office Stockton, opened bids June 8, 10.416 mi. road from Springfield to Eldorado Springs, Federal Aid Project 74 A, Cedar Co., (1) 34,924 cu.yd. earth excav., (2) 931 cu.yd. rock excav., (3) 3,685 cu.yd. borrow, etc., from Easley Bros., Aurora, (1) $0.42 per cu.yd., (2) $2 (3) $0.42, total $32,500.

Missouri—State Hy. Dept. at div. office Unionville, opened bids June 9, 6.357 mi. road eastward and westward from Unionville, State Aid Project 20.167, Putnam Co., from Diemer-Williams Constr. Co., Brookfield, $18,964; Cameron-Joyce, Keokuk, Ia., $19,733; Coopers Constr. Service Co., St. Louis, $21,157. Noted June 15.

Tex., Groveton—Trinity Co. opened bids June 21, grading, gravel surfacing, etc., 16.3 mi. State Highway 19, Federal Aid Project 225, from Smith Bros., Crockett, $172,665; Cook & Arrington, Crockett, $183,063; Harris & Powell, Tyler, $187,799. Noted June 15.

Colorado—State Hy. Dept., Denver, concrete paving 4.405 mi. Lincoln Highway, State Rd. 9, Federal Aid Project 228, Logan Co., from La Nier, Selander & White, Ft. Morgan, $134,986, A. J. Collins, 2363 Blake St., Denver, $136,054, F. Dreher Constr. Co., 525 Cooper Bldg., Denver, $136,106; gravel surfacing 5.797 mi. Delta-Grand Junction Rd., Federal Aid Project 171, Delta Co., from Reeves & Cook, 2202 Adams Ave., Ogden, Utah, $49,693, H. L. Hoffman, 527 Mining Exch. Bldg., Denver, $51,244, Girardet & Hotchkiss Eng. & Constr. Co., Delta, $52,251.

Wash., Seattle—Opened bids June 23, grading, etc., West Marginal Way et al., (a) Proposition A, (b) Proposition B, from J. Mattson, Thompson Bldg., (a) $273,217, (b) $274,307; Puget Sound Bridge and Dredging Co., Central Bldg, (a) $289,475, (b) $283,405; D. H. Traphagen, Walker Bldg., (a) $303,543, (b) $305,543. Noted June 1.

Cal., San Diego—Paving Rosencrans, Dumas, Poe, Canon and Rogers Sts., from California Constr. Co., 528 Granger Bldg., 318,090 sq.ft. 5 in. concrete pavement at $0.252 per sq.ft., 138 lin.ft. 8 in. and 287 lin.ft. 6 in. concrete curbs $0.75, 5,705 sq.ft. oil gutters $0.06, etc., total $85,083; Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles, $96,136; D. H. Ryan, 1615 Fern St., $96,381. Noted May 25.

Cal., Tracy—Improving 11th St., from J. E. Johnston, Stockton Savings and Loan Bank Bldg., Stockton, $84,701; Grant-Smith Co., Balboa Bldg., San Francisco, $105,554; P. H. Hoare, Hayward, $117,700. Noted June 22.

CONTRACTS AWARDED

Massachusetts—Paving 19,430 ft. State Highway in Haverhill and Merrimac, concrete, to Rowe Constr. Co., Malden, $189,082; 20,000 ft. in Cummington and Goshen, bituminous macadam, to T. J. Quinn, Ashton, R. I., $221,952; 7,815 ft. in Windsor and Cummington, to Hanscom Constr. Co., 70 Kilby St., Boston, $119,803; 3,250 ft. in Burlington, gravel and light oil, to A. J. Mitchell, Inc., R. F. D., Cohasset, $4,936. Noted June 29.

N. Y., St. George—M. J. Cahill, pres. Richmond Boro, Boro Hall, repaving roadway of Bradley Ave., to J. E. Donovan, 2205 Richmond Terrace, Port Richmond, $68,095, Engrs. est., $70,000; roadway of Bay St. from Thompson St. to tracks of Staten Island Rapid Transit R.R. and Richmond Terrace from York St. to Sailors Snug Harbor Dock, to Brooklyn Manhattan Contg. Co., 26 Court St., Brooklyn, $270,378 and $266,573 respectively. Noted June 22 and June 15.

New Jersey—State Hy. Dept., Trenton, paving State Highway Route 4, 8th Ave. and Deal Lake Dr., Asbury Park, and State Highway Route 7, Corlies Ave., Neptune Twp., Monmouth Co., to Standard Bitulithic Co., 50 Church St., New York, $45,154. Noted June 8.

Pa., Ebensburg—Bd. Supervs. Lower Yoder Twp., c/o Controller Cambria Co., reconstructing 3,578 ft. St. Clair Rd., 18 ft., to G. T. Morgan, Johnstown, $37,521. Noted June 1.

Pa., Mercer—For 2,500 ft. concrete pavement on East Butler St., to Jamieson & Marell ,Mercer, $26,312.

Pa., Phila.—To Barber Asphalt Paving Co., Land Title Bldg., paving Louden, Tower, Opal, Water and Woodlawn Sts., $29,828, Abington and Godfrey Aves., Bonsall and Hope Sts., $27,200; to Citroni & Mezzola, 703 South Broad St., 22nd St., $41,574, Delaware Ave., $153,904; to A. J. Henderson, 72nd and Ognotz Aves., Banes St., $12,422; to J. Devlin, Jr., Real Estate Trust Bldg., paving and building concrete wall at Belsalem Ave. Bridge, $11,348. Noted June 29.

W. Va., Clarksburg—Comrs. Harrison Co., paving 0.78 mi. Sycamore and Hickman Sts., to W. Allen, Clarksburg, $24,296; Terra Cotta, Park, Orchard and Jarvis Sts., to T. Keenan, Clarksburg, $24,649. Noted May 4.

Streets and Roads (Continued)

Fla., West Palm Beach—Paving Dist. 2, Sects. B and D, 8,488 lin.ft. concrete curb and gutter, 24,631 sq.yd. rock, 2,740 sq.yd. concrete 6,407 cu.yd. grading, 24,631 sq.yd. surface oiling, to Maule Paving Co., West Palm Beach, $51,128; Dist. 2, Sects. A and C, 8,488 lin.ft. concrete curb and gutter, 24,600 sq.yd. rock, 6,407 cu.yd. grading, 24,600 sq.yd. surface oiling, to Greynolds & Monroe, West Palm Beach, $45,618.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties: Ashland Co., Sect. "E" Mansfield-Wooster Rd., 3.468 mi., brick, to F. J. Mann & Sons, Ashland, $147,351; Columbiana Co., Sect. "F-1" Youngstown-Lisbon Rd., 2.324 mi., brick, to R. W. Miller Contg. Co., 3 South Side Savings Bank Bldg., Youngstown, $92,243; Huron Co., Sect. "R" Sandusky-Columbus Rd., 1.717 mi., brick, to Wise Bros. and Burman, Elmore, $50,414; Jefferson Co., Sect. "Brilliant South" Ohio River Rd., 0.902 mi., brick, to H. M. Bates, Steubenville, $39,961; Jefferson Co., Sect. "Brilliant South" Ohio River Rd., 0.902 mi., (federal aid does not participate), brick, to H. M. Bates, Steubenville, $16,243; Jefferson Co., Sect. "P" Ohio River Rd., 1.776 mi., brick, to H. M. Bates, Steubenville, $84,987; Morgan Co., Sect. "I" McConnelsville-New Lexington Rd., 2.061 mi., asphaltic macadam, to S. W. Wrightsel Co., Logan, $62,991; Morrow Co., Sect. "J" Marion-Galion Rd., 2,233 mi., asphaltic macadam, limestone base, to Marifield & Uncapher, Marion, $67,540; Putnam Co., Sect. "N" Lima-Ottawa Rd., 2.718 mi., Kentucky rock asphalt, to Acton Bros., Vaughnsville, $60,575; Madison Co., Sect. "C" Plain City-Dublin Rd., constructing concrete girder bridge, to Bennett & Drum, Celina, $5,141. Noted June 29.

Ohio—Dept. Highways and Pub. Wks., grading, bridging and paving 4.075 mi. Sect. A Cincinnati-Brookville Rd., Hamilton Co., to Gadison Constr. Co., Cincinnati, $181,335. Noted June 22.

O., Akron—M. P. Tucker, dir. Pub. Serv., grading, paving and laying sidewalks on Fultz St. from Manchester Rd. to Hite St. and Eastern alley from Ellwood Ave. to west end, to McAlonan Bros., 506 Woodland Ave., $13,008 and $4,351 respectively; Fernwood Dr. from Work Dr. to Shadeside Ave., to T. E. McShaffrey Constr. Co., 71 South Forge St., $6,428; Bellows St. from Cole Ave. to Firestone Blvd., to Columbus Asphalt Paving Co., 304 Buckeye Bldg., $45,755. Noted June 29.

O., Columbus—W. H. Duffy, dir. Pub. Serv., grading, curbing, laying water mains and paving Pine St. from Sycamore to Siebert Sts., 1,679 ft. long, 26 ft. wide, asphalt, to A. G. Pugh, 401 Commerce Bldg., $27,467; Lazelle St. from Frankfort St. to Reinhard Ave., 1,280 ft. long, 22 ft. wide, asphalt, to Franklin Asphalt Paving Co., 209 South High St., $15,728; Bonham Ave. from 9th St. to Cleveland Ave., 825 ft. long, 26 ft. wide, brick, to R. J. Deinst, 480 South 5th St., $17,499; Winthrop Rd. from High St. to Olentangy Blvd., 1,924 ft. long, 24 ft. wide, asphalt, to B. F. Patterson, 1214 Neil Ave., $32,891; alley north of Buttles Ave., from alley west of Neil Ave. to Harrison Ave., 636 ft. long, 20 ft. wide, concrete, to Yale Constr. Co., 1050 Medill St., $3,752; alley north of Chittenden Ave., from Indianola Ave. to the alley west of Summit St., 478 ft. long, 20 ft. wide, concrete, to R. J. Dienst, 480 South 5th St., Columbus, $2,987; alley west of Harrison Ave. from 3rd to 4th Aves., 633 ft. long, 20 ft. wide, concrete, to Yale Constr. Co., 1050 Medill St., $3,672; alley north of Mithoff St. from Jaeger to Bruck Sts., 732 ft. long, 18.42 ft. wide, concrete, to R. J. Dienst, 480 South 15th St., $4,382; Parsons Ave. from Livingston Ave. to a point 150 ft. north of Kian Ave., 10,540 ft. long, 44 ft. wide, trinidad asphalt, to R. B. Sheridan, 1801 Roxbury Rd., $134,375.

O., Columbus—Franklin Co., grading and paving 4.16 mi. Babbitt Rd., Plain Twp., to T. D. Van Camp, 84 Nims Bldg., $92,070; 5.43 mi. Walker Rd., Norwich and Brown Twps., to E. D. Lawrence, Hilliards, $93,447. Noted June 29.

Michigan—State Hy. Dept., Lansing, grading and surfacing 6.242 mi. Federal Aid Project 44, Sects. C and D, Lenawee Co., to Rockford Constr. Co., Rockford, O., incl. 23,275 cu.yd. excav. $0.58, 82.3 cu.yd. 1:2:4 and 49.4 cu.yd. 1:3:6 concrete $13, 2,067 sq.yd. 7 in. pavement and 65,439 sq.yd. 8 in. pavement $1 and $1.08 respectively, etc., total $91.552; 20.086 mi. State Trunk Line Rd. 26-1, Houghton Co., to Houghton Co. Rd. Comn., Houghton, incl. 811.1 sta. grading $5, and 248.3 sta. $3.25, 14,207 ton stamp sand surface $1.80, 10,757 ton $1.32, 9,923 ton $1.44, $10,669 ton $0.90, total $81,401; 5.97 mi. State Trunk Line Rd. 18-5, Sect. B, Gladwin Co., to A. Jeffrey, Saginaw, $48,991; 5.473 mi. State Trunk Line Rd. 18-17, Gladwin Co., to Gladwin Constr. Co., Gladwin, $47,116; 1.228 mi. State Trunk Line Rd. 20-20, Midland Co., to Geneva Constr. Co. North Bradley, $22,488 plus state cement, $10,153. Noted June 8 and 15.

Michigan—State Hy. Dept., Lansing, grading and surfacing 6.06 mi. Federal Aid Project 78, to Midland Contg. Co., Midland, incl. 31,827 cu.yd. excav. $0.50, 96 cu.yd. 1:2:4 concrete $11, 158.6 cu.yd. 1:3:6 concrete $11.50, 31,111 sq.yd. rein.-con. pavement $1.42, total $180,738, also 4.519 mi. Federal Aid Project 77, Saginaw Co., 35,007 cu.yd. excav. $0.50, 74.8 cu.yd. 1:2:4 and 90.9 cu.yd. 1:2½:5 concrete $11.25, 75.5 cu.yd. 1:3:6 concrete $11.75, 46,825 sq.yd. bituminous pavement $2.10, total $132,658.

Michigan—State Hy. Dept., Lansing, grading and surfacing 7.383 mi. Federal Aid Project 72, Sects. A and B, Cheboygan Co., to W. T. Hill, East Tawas; Sect. A, incl. 11,924 cu.yd. excav., $0.45, 100.6 cu.yd. 1:2:4 and 48.3 cu.yd. 1:3:6 concrete, $15, 20,944 sq.yd. gravel, $0.60, Sect. B, 41,359 cu.yd. excav., $0.42, 109.4 cu.yd. 1:2:4 and 55.7 cu.yd. 1:3:6 concrete, $15, 48,160 sq.yd. gravel, $0.42, total $65,013; 4.516 mi. State Trunk Line Rd. 46-7, Sect. A, Gratiot Co., to F. Haskens, Mt. Pleasant, $30,809; 1.001 mi. State Trunk Line Rd. 31-11, also 1.754 mi. State Trunk Line Rd. 31-5, Huron Co., to Shulz & Liken, Sebewaing, $15,079 and $28,673 respectively; 4.479 mi. State Trunk Line Rd. 19-13, Macomb Co., to Palma Constr. Co., Ypsilanti, incl. 236.2 sta. grading, $25, 97.6 cu.yd. 1:2:4 and 110 cu.yd. 1:3:6 concrete, $15, 52,481 sq.yd. rein.-con. pavement, $1.53, total $90,347.

Mich., Gross Pointe Farms (Detroit P. O.)—Paving Oak St. and Moran Rd., to V. Teetaert, Grosse Pointe, incl. 6,650 cu.yd. excav. $0.60, 12,150 lin.ft. curbing $0.62, 16,225 sq.yd. pavement, total $54,598. Noted Aug. 18.

Ill., Chicago—Bd. Local Impvts., 207 City Hall, grading, paving and building sewers in Blaine Pl., North Francisco, North California, North Fairfield, North Talman and North California Aves., North Mozart, Argyle and Ainslee Sts., to White Constr. Co., 17 North La Salle St., $200,000. Noted May 25.

Ill., Sterling—Grading, curbing and concrete paving 12,000 yd. various streets, to F. G. Giffron, Sterling, $32,010. Noted June 1.

Wis., Madison—Paving various streets with oil asphalt, to Butler Constr. Co., Waukesha, $37,000.

Ia., Adel—Dallas Co., grading 4.985 mi. Primary Rd. Project 196-B, east and south through Redfield, 70,638 cu.yd. excav., to C. O. Mitchell, Des Moines, $0.259 per cu yd. Noted June 8.

Ia., Cherokee—Cherokee Co. grading 13.47 mi. Sects. A and C, Primary Rd. Projects 151, north and south of here, 86,890 cu.yd. excav., to England & England, Murdo, S. D., at $0.249 per cu.yd. Noted June 1.

Ia., Corning—Adams Co. grading 13.765 mi. Federal Aid Project 152 from here east to Union Co. Line, 212,096 cu.yd. excav., to Peterson, Shirley & Gunther, Woodmen of the World Bldg., Omaha, Neb., at $0.215 per cu.yd. Noted May 18.

Ia., Iowa City—Grading, curbing and paving Muscatine Ave., to Moore-Young Constr. Co., Waterloo, 7,600 cu.yd. earth excav. $0.70 per cu.yd., 8,875 ft. 24 in. curb and gutter, $1.05, 13,350 sq.yd. concrete pavement $2.59. Noted May 4.

Ia., Primghar—O'Brien Co., grading 11.291 mi. Sects. A, C and D, Primary Rd., Project 69, to Hartman & Peterson, Laurens, 49,473 cu.yd. excav., $0.219 per cu.yd.; W. W. McCollough, Graettinger, 31,078 cu.yd. $0.219 and 10,392 cu.yd. $0.278. Noted June 8.

Ia., Rock Rapids—Lyon Co., grading 10.997 mi. Primary Rd. Project 146, excavation to C. W. McNamara, Bristol, S. D., 82,366 cu.yd. excav. $0.217 per cu.yd.; 8 mi. County Rd. System, to Ira Cox, Sioux Falls, S. D., 36,860 cu.yd. at $0.21 and 17,903 cu.yd. $0.23. Noted June 8.

Ia., West Union—For 46,000 sq.yd. 7 in. vibrolithic concrete pavement, reinforced with mesh, to A. Carlson, Marshalltown, at $2.58 per sq.yd., total $122,000; curbing to Stark-Schneider, Cedar Rapids, $39,000. Noted June 1.

Minn., Fairmont—Paving 14 blocks, concrete, to F. D. Gould, Fairmont, at $2.19 per sq.yd. Noted May 18.

Minn., Mankato—For (a) 21,425 sq.yd. street paving, (b) 2,645 sq.yd. vitr. brick for laying between car tracks, (c) 20,000 sq.yd. paving in alleys, to Schruth Welsh Co., 704 1st Natl. Soo Line Bldg., Minneapolis, (a) and (b) $3.53 (c) $1.94. Noted May 25.

Minn., Wells—Paving 19,670 sq.yd. various streets, 7 in. concrete, to Miller & Hutchinson, Lamoure, N. D., $2.28 per sq. yd. Noted June 15.

Minn., Worthington—Nobles Co., gravel surfacing 14 mi. Job 2204, State Rd. 4, to S. J. Peterson, 300 West Lake St., Minneapolis, $17,270. Noted May 25.

Neb., Kearney—Improving 14 blocks East 26th and East 27th Sts., Avenues A and E, to E. D. Tyner Constr. Co., 14th and Elmwood Ave., Kansas City, Mo., 22,375 sq.yd. asphalt at $2.55 per sq.yd., 4,500 cu.yd. grading $0.50, 1,400 lin.ft. curb and gutter, $0.55, total $64,024. Engrs. est. $68,524.

South Dakota—State Hy. Comn., Madison, grading 6.7 mi. Federal Aid Project 87, Lake Co., to Tobin & Maloney, Madison; 100 ft. concrete viaduct, to Schreiber Eng. & Constr. Co., Watertown. Noted April 13.

S. D., Redfield—State Hy. Comn., at Redfield, grading 14 mi. Federal Aid Project 84 and 14 mi. on Federal Aid Project 94, to Peterson, Shirley & Gunther, 1102 W. O. W. Bldg., Omaha, Neb.; 60 ft. pony truss, to Iowa Bridge Co., 712 Hubbell Bldg., Des Moines, Ia.; 30 ft. I beam, to Waite Constr. Co., Redfield. Noted April 13.

S. D., Yankton—J. W. Summers, city clk., grading, paving and curbing various streets, incl. 57,806 sq.yd. concrete, 6,227 lin.ft. integral curb, to M. L. Flinn Paving Co., 214 Grain Exch. Bldg., Sioux City, Ia., $2.04 per sq.yd. for paving. Noted June 8.

Tex., Dallas—Dallas Co. grading, surfacing, etc., 19 mi. Seagoville Rd., to Scarbrough & Davis, 100 Gaston Bldg., $164,938. Noted June 22.

Tex., Paris—Lamar Co. paving with 6 in. concrete, 6 mi. State Highway 5, Federal Aid Project 295 and 4 mi. State Highway 19, to J. C. Field & Co., Denison, $143,616 and $93,787 respectively $2.41 per sq.yd. Noted June 29.

Wash., Seattle—Grading and paving Corson Ave. et al., 27,000 cu.yd. earthwork and subgrading, 8,200 lin.ft. concrete curb, type A, 16,800 sq.yd. 7 in. concrete, 2,525 sq.yd. two-course concrete walks, to J. B. Covelo, 1510 16th St., $73,316.

Wash., Seattle—King Co., paving 4.38 mi. Orilla-Kent Rd. along west side White River Valley, to Albertson, Cornell Bros. & Walsh, Provident Trust Bldg., Tacoma, $138,500. Engrs. est. $142,732. Noted June 22.

California—State Hy. Dept., Sacramento, grading 8.5 mi. and concrete paving 5.1 mi. highway between westerly boundary and San Luis Creek, Merced Co., to Pacific Constr. Co., Kennedy and Boehmer Sts., Oakland, 70,800 cu.yd. excav. at $0.72 per cu.yd., 7,750 cu.yd. Class A Portland cement concrete pavement $8.47, 160 cu.yd. Class A Portland cement concrete(culverts and monuments) $25, etc., total $125,587; concrete paving 12.2 mi. highway between San Luis Creek and Los Banos, Merced Co., to Blanco & Taylor, Vallejo, 61,200 cu.yd. excav. $0.80, 18,500 cu.yd. Class A Portland cement concrete pavement $8.40, 391 cu.yd. Class A Portland cement concrete (culverts and monuments) $22.50, etc., total $216,551. Noted May 25.

California—State Hy. Dept., Sacramento, grading and rein.-con. paving 10.7 mi. highway between Upton and Shasta River, Siskiyou Co., to Kaiser Paving Co., Oakland, $163,934.

California—State Hy. Dept., Sacramento, constructing 4.29 mi. state highway between Willow Brook and 1 mi. south of Petaluma, Div. 4, Route 1, Sect. C, Sonoma Co., to A. G. Raisch, San Francisco, $25,885; constructing 5.8 mi. highway between Irvine and Tustin, Div. 7, Route 2, Sect. C, Orange Co., to G. H. Oswald, 405 O. T. Johnson Bldg., Los Angeles, 10,950 cu.yd. Class A Portland cement concrete at $3.95, 590 cu. yd. removal of broken concrete in existing base, $2.50, total $44,728. Noted May 18.

Cal., El Monte—Grading and oiling various streets, from Oswald Bros., 366 East 58th St., Los Angeles, $85,506; W. E. Hall, Riverside, $86,266.

Cal., Merced—Supervs. Merced Co., improving British Colony Rds., to J. J. McHugh, Foxcroft Bldg., San Francisco, $79,949. Noted June 1.

Cal., Modesto—To Standard Paving Co., 9th and N Sts., improving 5th St. between F and H Sts., 48,282 sq.ft. grading, at $0.05 per sq.ft., 45,620 sq.ft. 1½ in. warrenite

Streets and Roads (Continued)

on 2½ in. asphaltic concrete, $0.17, 2,661 sq.ft. gutter, $0.20, 1,767 lin.ft. curb, $0.70, etc., Sycamore Ave. between Needham and Stoddard Aves., 58,134 sq.ft. grading, $0.05, 54,461 sq.ft. 1½ in. warrenite on asphaltic concrete, $0.17, 3,672 sq.ft. concrete gutter, $0.20, 2,302 lin.ft. concrete curb, $0.70, etc. Noted June 8.

BRIDGES

Cal., San Bernardino—Bd. Supervs. San Bernardino Co., curbing, guttering, culverts, and paving with 4 in. concrete, 17,750 ft. Hellman Ave., et al., to H. H. Lienau, 426 Brookside Ave., Redlands, $108,000. Noted June 15.

Cal., San Diego—Bd. Supervs. San Diego Co., paving with 5 in. concrete, 5.92 mi. Mission Rd., 18 ft., to H. H. Peterson, Loma Portal, $96,084. County furnishes rock and cement.

Industrial Works

PROPOSED WORK

Mass., Holyoke—Farr Alpaca Co. plans 70,000 spindle cotton mill. Engineer not announced.

Conn., Hartford—H. A. Sillence, 19 Adelaide St., soon lets contract 4 story, 50 x 60 ft., brick and concrete garage and storage building, plain foundation. $40,000. Toole & Katzenstein, 252 Asylum St., archts.

N. Y., New York—Street & Smith, 79 7th Ave., soon takes bids 9 story, publishing plant, brick, steel and stone, plain foundation, 147 West 15th St. H. O. Chapman, 334 5th Ave., archt. and engr.

N. Y., New York—G. A. Whalen, comr. Plant & Structures, Municipal Bldg., withdrew bids which were to be opened June 23, repair shop, 16th St. and Ave. C, for Dept. Street Cleaning. Will readvertise. Private plans. Noted June 15.

Pa., Franklin—Atlantic Refining Co., Franklin, plans to rebuild refinery recently destroyed by fire. $100,000.

Pa., Mercer—Elliott-Blair Co., East Market St., plans large addition to steel plant. $250,000.

Md., Frostburg — Frostburg Sewer Pipe Co., Inc., plans large plant, in northern section of city. $200,000. Architect not announced.

Ga., Macon—Case-Fowler Lumber Co. plans to rebuild lumber mill recently destroyed by fire. $70,000. Private plans.

La., New Orleans—Ford Motor Co., Highland Park (Detroit P. O.), had plans prepared by A. Kahn, archt., 1000 Marquette Bldg., Detroit, 1 and 2 story, rein.-con. and brick factory, plain foundation, North Peters St., here. $100,000.

O., Akron—M. O'Neil of General Tire & Rubber Co., had plans prepared by Walker & Weeks, archts., 1900 Euclid Ave., 2 story, 96 x 163 ft. brick, steel and concrete garage and service station, plain foundation, West Market St. $75,000.

O., Cleveland—Bd. Educ. having plans prepared by W. R. McCornack, archt., East 6th St. and Rockwell Ave., 4 story, 100 x 200 ft. brick, steel and concrete, plain foundation, East 63rd St. and Waterman Ave. $275,000. F. G. Hogen, dir.

O., Cleveland—See "Buildings."

O., Lima—Pure Oil Co., East Kibby St., plans large warehouse on 2½ acre site, South Metcalfe St. Architect not announced.

Wis., Appleton—G. R. and S. Motor Co., 738 Washington St., plans 1 story, 32 x 100 ft., brick and concrete garage, plain foundation. Architect not selected.

Wis., Boscobel—C. P. and H. F. Miller Co. having plans prepared, 2 story, 50 x 95 ft. garage and repair shop, brick and rein.-con., plain foundation. $40,000. Private plans.

Wis., Rice Lake—Making plans, new power plant, electric distribution system, etc. $75,000. J. H. A. Brahtz, 409 Metropolitan Opera House Bldg., St. Paul, Minn., engr.

Wis., Sheboygan—Keil Oil Co., c/o W. G. Keil, 1516 North 9th St., plans 1 story, 60 x 90 ft., filling station and garage, brick and rein.-con., plain foundation. $40,000. Architect not selected.

Tex., Burkburnett—Bradford Supply Co., 130 Main St., Bradford, Pa., plans large warehouse and machine shop on 5 acre tract, here. Engineer not announced.

Tex., Denison—Missouri, Kansas & Texas R. R., soon takes bids for shop buildings, incl. round house, machine shops, store room, etc., here. $800,000. Address F. K. Tutt., Denison, mechanical supt.

Tex., McLean—See "Waterworks."

Wash., Everett—City plans to form improvement district to finance construction of bridge over Snohomish River. $180,000.

Wash., Wenatchee—Moorhead & Farrell plan car icing and cold storage plant. $250,000.

N. S., Halifax—Premier Paper & Power Co., 91 Hollis St., plans paper mill about 35 mi. from here. $1,500,000. G. F. Hardy, 309 Bway., New York City, engr.

Ont., Stamford—Culp Paper Co., Rochester, N. Y., purchased site and plans to build plant on Winery Rd., here. To exceed $40,000.

B. C., New Westminster — New Westminster Paper Mills Ltd., plans factory on Indian Reserve, near here. $100,000. A. Onkels, dir. Engineer not announced.

BIDS DESIRED

N. Y., New York—July 14, by G. A. Whalen, comr. Plant & Structures, Municipal Bldg., housing station, 132nd St. west of Willow Ave., Bronx, for Dept. Street Cleaning.

Va., Richmond—News Leader Publishing Co., 9 North 8th St., taking bids 4 story, 90 x 140 ft. plant, rein.-con., 4th St. near Grace St. $300,000. Baskerville & Lambert, Travelers Bldg., archts.

O., Ada—July 10, (change of date) by Ohio Northern University, 45 x 75 ft., rein.-con. power house. C. C. Carpenter, Ada, engr. Noted June 22.

O., Cleveland—Standard Envelope Co., 1011 Oregon Ave., taking bids 1 story, 155 x 200 ft. brick, steel and concrete factory. $150,000. J. H. Altman, pres. Christian, Schwarzenberg & Gaeda, 1900 Euclid Ave., archts. Noted May 18.

Mich., Detroit — A. Kahn, archt., 1000 Marquette Bldg., taking bids and opens same about July 20, 4 story, 95 x 259 ft. rein.-con. and brick factory, plain foundation, Clark and Jefferson Aves., for Studebaker Corp., Brush and Piquette Aves.

Wis., Delavan — July 11, by State Bd. Control, Madison, 2 story, 75 x 90 ft., brick, rein.-con. and steel laundry, plain foundation. $50,000. A. Peabody, Capitol, Madison, archt.

Wis., Milwaukee—Lesser & Schutte, archts., 82 Wisconsin St., taking bids 2 story, 40 x 114 ft., brick and concrete laundry addition, plain foundation, Ogden Ave., for Standard Victoria Steam Laundry, 69 Ogden Ave.

Minn., Minneapolis—July 10, by A. L. Westernhagen, mgr. Western Newspaper Union, 200 North 3rd St., 2 story, 46 x 134 ft. rein.-con. and brick printing plant and office, 316 8th Ave. S. $100,000. Magney & Tusler, 126 South 9th St., archts. Noted April 6 under "Buildings."

BIDS RECEIVED

N. Y., Brooklyn—G. A. Whalen, comr. Plant & Structures, Municipal Bldg., New York, opened bids June 26, housing station, Atlantic Ave. between Utica and Schenectady Aves., here, for Dept. Street Cleaning, from J. Young, Jr., 103 Park Ave., New York, $61,578; Rosenthal Engr. Contg. Corp., 228 Jackson St., $62,720; H. A. and R. J. Moore, $63,775. Noted June 22.

CONTRACT AWARD

Mass., Rockland—H. B. Vesper, Buick Agency, 243 Union St., 1 story, 100 x 120 ft., rein.-con., brick and steel garage and service station, plain foundation, West Water and Union Sts., to H. J. Beals, Rockland. Archts. est. $40,000.

Mass., Willimansett—Palmer Steel Co., 316 High St., Holyoke, 1 story, 80 x 329 ft., brick and steel plant, plain foundation, along railroad tracks, here, to D. O'Connell & Sons, 480 Hamden St., Holyoke. Archts. est. $75,000. Noted May 4.

N. Y., Brooklyn—Buick Motor Co. and Oakland Motor Car Co., 1733 Bway., New York, 6 story, brick and concrete automobile service station, 11th Ave. between 55th and 56th Sts., here, to Thompson-Starrett Co., 49 Wall St., New York

Pa., Altoona—Confederated Home Abattoirs Corp., 123 Willow Ave., 3 story, 80 x 140 ft. plant, Eldorado Rd., to L. R. Mathieu Constr. Co., 302 Grant Ave. Noted May 18.

Va., Danville—Dan River Cotton Mills, 4 story, 148 x 300 ft. bleachery and finishing plant, to J. P. Pettyjohn & Co., Lynchburg, $450,000.

O., Cleveland—A. P. and M. J. Herr, 3618 West 25th St., 1 story, 45 x 52 ft., brick and steel garage and store, 2600 Riverside Ave., to Decker Realty Co, 3110 West 25th St. Archts. est. $40,000.

O., Lakewood (Cleveland P. O.)—Shore Acres Land Co., c/o G. H. Ingraham, archt., 1127 Guardian Bldg., Cleveland, 2 story, 72 x 135 ft. and 60 x 105 ft., brick and steel garage and commercial building, plain foundation, Detroit and Wayne Aves., here, to J. C. Schafer, 12005 Osceola Ave., Cleveland. Archts. est. $60,000.

O., Newton Falls — Newton Steel Co., Youngstown, 1 mill, here, mill work to Hyde Park Fdry. Co., Hyde Park, Pa., structural steel work, to McClintic-Marshall Co., Oliver Bldg., Pittsburgh, Pa. Noted May 25 under Newton Falls, Pa.

Ill., Chicago—E. Edelmann & Co., c/o D. S. Klafter, archt., 64 West Randolph St., 2 story, 150 x 250 ft. factory, rein.-con., brick and steel, Logan Blvd. and Holly Ave., to Paschen Bros., 111 West Washington St. Archts. est. $250,000. Noted June 22.

Wis., Madison—Madison Drug Co., 604 University Ave., 4 story, 50 x 120 ft., brick and rein.-con. warehouse, plain foundation, Blount St., to J. H. Findorff Co., 601 West Wilson St. Engrs. est. $150,000.

Wis., Milwaukee—Sewerage Comn., 508 Market St., superstructures of power house and boiler plant, brick and steel, to P. Riesens Sons, 1018 Humboldt Ave., $211,890. Noted June 15.

Minn., Minneapolis—Bd. Park Comrs., general contract 3 story, 43 x 144 ft., brick, and tile shops and warehouse, to Madsen Constr. Co., 848 Builders Exch. Bldg., $41,430. Noted June 29.

Neb., Humboldt—See "Miscellaneous."

Cal., Colusa—California Prune & Apricot Growers Assn., San Antonio and Market Sts., San Jose, 1½ story, brick and frame cannery, to J. L. Webster, Chico, $80,000. Noted June 22.

Buildings

PROPOSED WORK

Me., Lewiston—Gymnasium—Bates College plans 2 story, brick, concrete and steel, on Campus. $400,000. Coolidge & Carlson, 89 State St., Boston, archts. Noted April 20.

Mass., East Boston (Boston P. O.)—Grammar School—City Schoolhouse Dept., 1009 City Hall, Boston, plans 20 room, brick, Emerson Dist. $475,000. Architect not selected.

Mass., Swampscott—Church—First Congregational Church plans 1 story, brick and stone, $200,000. Architect not selected.

Mass., West Rutland—Office, etc.—Rutland Worsted Co. plans 2 story office and recreation building, 30 room hotel, tenement house and new reservoir. $150,000. A. F. Griffin, pres. Architect not announced.

Mass., Worcester — Church — Trinity Church, 650 Main St., plans 1 story, brick and stone. $150,000. Architeect not selected.

Mass., Worcester—School—St. Casimirs Lithuanian Church plans 3 story, brick, Waverly St. $150,000. J. J. Jakaitis, 41 Providence St., pastor. Architect not announced.

Conn., Berlin — High School — Plans 2 story high school. $150,000. B. R. Showalter, supt. of schools. Architect not selected.

Conn., Glastonbury—High School—High School Building Com. plans 2 story, brick and steel. $150,000. Brooks & Glazier, Lewis and Gold Sts., Hartford, archts.

Conn., Groton—Home—Odd Fellows Home having plans prepared by Whiton & McMahon, archts., 36 Pearl St., Hartford, 3 story, 37 x 150 ft. with 37 x 66 ft. ell. brick and steel. $250,000. Noted Nov. 17.

Conn., Hartford—Gymnasium—Bd. Trustees, Trinity College, plans 2 story, brick and steel, Campus. $300,000. Architect not selected.

N. Y., Batavia — Hotel — Mulner Hotel Corp., c/o M. Mulner, pres., plans large modern hotel. To exceed $150,000. Architect not announced.

N. Y., Ithaca—Social Center and Recreation—Cornell University plans social and recreation building. $1,000,000. O. Farrand, pres.

N. Y., New York—Apartment—Old Colony Apartments Corp., c/o L. F. Peck, archt. and engr., 101 Park Ave., having plans prepared 11 story, 59 x 76 ft., brick, steel and stone, plain foundation, 124 East 40th St. $275,000.

N. Y., New York—Office—M. M. Glaser, 1133 Bway., soon takes bids converting hotel into office building, Bway. and 44th St. $300,000. M. Zipkes, 432 4th Ave., archt. and engr.

ROAD WORK—BERKELEY SPRINGS, W. VA.

Following are lowest bids opened by Comrs. Morgan Co., June 12, for constructing Paw-Paw-Great Cacapon Rd., Cacapon Dist., (A) W. J. & J. T. Gephart, Williamsport, Pa. (awarded contract); (B) Bester-Long Co., Hagerstown, Md.; (C) McClure & Bingner, Johnstown, Pa. The unit bids were as follows:

	A	B	C
54,000 cu.yd. unclassified excavation	$0.55	$0.625	$0.76
11 cu.yd. Class A concrete	22.00	20.00	18.00
260 cu.yd. Class B concrete	17.00	16.00	16.00
30 cu.yd. Class C concrete	14.00	14.00	15.00
300 lb. plain steel bars	.06	.06	.06
400 sq.ft. expanded metal	.05	.15	.05
150 lin.ft. stone underdrain	.75	.25	.25
150 lin.ft. 4 in. vitrified pipe underdrain	.85	.50	.65
700 lin.ft. 12 in. reinforced-concrete pipe	2.00	2.40	2.25
1,000 lin.ft. 15 in. reinforced-concrete pipe	2.25	2.75	2.50
400 lin.ft. 18 in. reinforced concrete pipe	2.75	3.50	3.00
150 lin.ft. 24 in. reinforced concrete pipe	4.25	4.00	4.00
100 cu.yd. overhaul (per 100 ft.)	.05	.05	.02
2,900 cu.yd. broken stone base course	3.50	3.00	2.75
21,000 sq.yd. waterbound macadam surface course	.70	.65	.50
100 lin.ft. wire rope guard rail	.75	.75	.55
10,000 gal. bituminous material for cold application	.17	.15	.12
250 tons broken stone cover coat	3.75	2.50	3.25
Extended totals	$68,015	$69,763	$72,440

TUNNEL—SAN FRANCISCO, CAL.

Bids were opened by Bd. Pub. Wks., San Francisco, June 21, for constructing Pulgas Tunnel, Hetch Hetchy Project, Contr. No. 85, from (A) Grant-Smith Co., Balboa Bldg.; (B) Utah Constr. Co., Phelan Bldg.; (C) F. Rolandi, 550 Montgomery St.; (D) Construction Co. of North America, Mills Bldg. (Contractors all of San Francisco). The unit of bids were as follows:

	A	B*	C	D
8,500 lin.ft. concrete lined tunnel	$62.00	$567,375.00	$75.00	$69.35
3,500 lin.ft. permanently timbered tunnel	18.00	45,500.00	6.00	20.25
500 cu.yd. excavation in tunnel and shaft	5.00	1,500.00	4.00	7.00
500 cu.yd. concrete in tunnel and shaft	20.00	1,330.00	13.50	16.00
Constructing one air shaft (lump sum)	1,500.00	1,160.00	4,000.00	1,610.00
15,000 cu.yd. earth excavation in open cut	.75	.60	1.00	2.50
2,000 cu.yd. rock excavation in open cut	1.75	1.25	2.50	3.50
750 lin.ft. 10-ft. 3-in. rein. conc. pipe	50.00	68.50	42.00	48.20
1,000 lin.ft. concrete in canal lining	20.00	23.58	15.00	16.00
100 cu.yd. mass concrete, miscellaneous structures	20.00	23.58	20.00	28.00
100 cu.yd. rein. concrete. miscellaneous structures	25.00	23.58	22.00	30.00
50 cu.yd. for embankment	1.00	.60	.80	2.00
200 bbl. extra cement	4.50	5.23	4.50	4.00
10,000 lb. reinforcing steel	.05	.06	.06	.04
20,000 lb. placing metal work (furnished by city)	.02	.03	.05	.06
Extended totals	$683,050	$710,582	$744,850	$779,300

*Total bid submitted on first five items

Buildings (Continued)

N. Y., New York—School and Convent—St. Agatha Roman Catholic Church, c/o Helmle & Corbett, archts. and engrs., 132 West 42nd St., having plans prepared, brick, steel and stone, plain foundation, 7th Ave. and 46th St. $300,000.

Pa., Ambridge—Memorial—Civic Organizations headed by A. B. Dunn, of Bldg. Com., plans memorial building. Cost between $100,000 and $150,000. Architect not announced.

Pa., Bradford—Church—First Methodist Church, 87 High St., having preliminary plans prepared by E. B. Green, archt., 75 Niagara St., new church here. $150,000. L. O. Langworthy, treas.

Pa., Harrisburg — Hotel — Harrisburg Hotel Co., 3rd St., having plans prepared by W. L. Stoddart, archt., 9 East 40th St., New York, 13 story, brick, steel and stone, plain foundation, 3rd St.

Pa., Johnstown—School—Bd. Educ., c/o O. P. Thomas, having plans prepared by P. Campbell, archt., Park Bldg., 2 story, 122 x 153 ft., brick and tile, in Southmont, near here. $200,000.

Pa., Meadville—Home—I. O. O. F. having plans prepared by W. H. Crosby, archt., Masonic Bldg., Oil City, 2 story, orphans home, brick and steel. $200,000.

Pa., Pittsburgh—Store and Office—Donahoe Co., Inc., 31 Terminal Bldg., having plans prepared by W. E. Snaman, archt., Empire Bldg., 3 story, 30 x 100 x 116 x 120 ft. brick, steel and tile, Diamond St., near Market St. $350,000.

Pa., Sharon—High School—Bd. Educ. having plans prepared by Taylor & Hanna, archts., Sharon, new high school. $440,000. Noted May 11.

D. C., Wash.—Apartment-Hotel—Burlington Hotel Co., 1120 Vermont Ave., N. W., having plans prepared by Sonneman & Justeman, archts., Davidson Bldg., for apartment hotel. $460,000.

W. Va., Charleston—Store and Apartment—J. P. Stotter, 4319 Prospect Ave., having revised plans prepared by M. H. White, archt., Schofield Bldg., 3 story, 100 x 253 ft., brick, steel and terra cotta. $300,000.

W. Va., Wheeling—Business—J. Sentlinger, Jr., 1109 Market St., plans 15-20 story, rein.-con., brick and steel, Market St. $1,000,000. Architect not announced.

N. C., Raleigh—Dormitories—Bd. Trustees Methodist Orphanage plans 2 or 3 brick dormitories. $200,000. J. L. Borden, Goldsboro, trustee. Architect not announced.

N. C., Wilmington—Hotel—Hotel Corp., R. Moore, pres. and mgr., 125 Princess St., receiving competitive plans for hotel. $800,000. Noted April 27.

Ga., Atlanta—Market — Capitol City Building & Market Co., 603 Chandler Bldg., had plans prepared 1 story, 35 x 230 ft., rein.-con. brick and steel, rock foundation, Peachtree and Cain Sts. $250,000. G. C. Gibson, 603 Chandler Bldg., engr. Robert & Co., Atlanta, archts. Noted April 6.

Ala., Montgomery—Schools—July 10. to vote on $1,000,000 bonds for new schools. J. M. Garrett, member of Bd. Educ.

La., Gretna — Schools — Jefferson Parish voted $400,000 bonds to build 5 schools and repair existing schools; J. C. Ellis, Metairie Ridge, New Orleans, secy. Jefferson Parish School Bd. Noted May 11.

O., Bellaire—Bank and Office—Natl. Bank of Bellaire having plans prepared by F. F. Farris, archt., Wheeling Steel Bldg., Wheeling, W. Va., 8 story, 40 x 120 ft., brick, terra cotta and steel, 32nd and Belmont Sts. $400,000.

O., Cleveland—Apartments—L. Abrams Co., Engineers Bldg., plans two 3 story, brick and steel, plain foundation, Euclid Ave. and Ford Drive. $250,000. Architect not selected.

O., Cleveland—Commercial and Apartment—L. B. Koblitz of the Cleveland Builders Supply and Brick Co., Leader News Bldg., plans 3 story, 150 x 200 ft. brick and steel, Euclid Ave. and Eddy Rd. $200,000. Architect not selected.

O., Cleveland—Sanitarium—City plans 3 story, brick, steel and concrete, plain foundation, Warrensville Farm. $295,000. R. Perkins, City Hall, welfare dir. Architect not selected.

O., Columbus — Hotel and Apartment — Columbus Merrill System Co., 501 Brunson Bldg., plans 6 or 7 story, East Broad St. $250,000. C. L. Imcho, pres.

O., Columbus—Office—United Commercial Travelers Assn., Russell and Park Sts., having plans prepared by T. D. McLaughlin, archt., Savings Bldg., Lima, 3 story, North Park St. $250,000.

O., Granville—Chapel—Denison University (Ambrose Swasey Endowment), Denison, having plans prepared by A. W. Brunner, archt., 101 Park Ave., New York, 1 story, brick, steel, stone and concrete, here. $300,000.

O., Lakewood (Cleveland, P. O.)—Apartment—H. Laten, 1121 East 98th St., Cleveland, having plans prepared by M. Weis, archt., Union Bldg., Cleveland, 3 story, 112 x 125 ft., brick and steel, plain foundation, Lake Ave. near Hird Ave., here. $150,000.

O., Newcomerstown—High School—Bd. Educ. having plans prepared by J. Q. Adams, archt., Southern Hotel, Columbus, 2 story, 120 x 137 ft., brick and concrete. $150,000.

O., West Park—Church and School—St. Vincent De Pauls Catholic Parish, 1107 Superior Ave., Cleveland, plans 1 and 3 story, brick, steel and concrete, Lorain Ave. and West 130th St., here. $200,000. M. J. Fannigan, pastor. Architect not selected.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., having plans prepared by Malcomson, Higginbotham & Palmer, archts., 405 Moffat Bldg., 2 story, 151 x 205 ft. rein-con., brick and steel, plain foundation, Brooklyn and Canfield Aves. $150,000.

Ill., Chicago—Apartment—Grossman & Prosskauer, archts., 127 North Dearborn St., preparing plans 7 story, 100 x 150 ft., rein.-con., brick and steel, 418-26 Diversey Parkway. $900,000. Owner's name withheld.

Ill., Chicago—Theatre—Dayton Bros., c/o Orpheum Theatre, Kenosha, Wis., having plans prepared by C. W. and G. L. Rapp, archts., 190 North State St., 3 story, rein.-con., brick and steel, Water and Genesee Sts., here. $250,000.

Ill., South Chicago (Chicago P. O.)—Bank—Union State Bank of South Chicago, plans 2 story, 50 x 140 ft., rein.-con., brick and steel, Houston Ave. and 92nd St. $250,000. Archtect not selected.

Ill., South Chicago (Chicago P. O.)—Hospital—South End Hospital Assn., 11212 South Michigan Ave., plans 4 and 5 story, 125 x 149 ft., rein.-con., brick and steel. $300,000. E. E. Hall, 123 West Madison St., Chicago, archt.

Wis., Clinton—High School—Bd. Educ. having plans prepared by E. Tough, archt., 24 East Mifflin St., Madison, 2 story, 78 x 90 ft., brick, rein.-con. and stone, plain foundation. $150,000. Noted June 29.

Wis., Madison—Church—First Methodist Church, c/o O. W. Taylor, pastor, Wisconsin and Dayton Sts., having plans prepared by Tallmadge & Watson, archt, 189 West Madison St., Chicago, 2 story, 75 x 180 ft., brick, rein.-con. and stone, plain foundation. $160,000. Noted June 8.

Wis., Madison—Store—The University Co-op. Co., 506 State St., having plans prepared by J. R. and E. J. Law, archts., Strand Theatre, 3 story, 30 x 180 ft., brick, rein.-con., steel and stone, plain foundation, State St. $150,000.

Wis., Milwaukee—Apartment—O. Brachman, 425 East Water St., having plans prepared by M. Tullgren & Sons, archts., 425 East Water St., 3 story, brick and concrete, plain foundation, Grand Ave. and 23rd St. $150,000.

Wis., Milwaukee—Store—E. Schuster & Co., 12th and Vliet Sts., plans 150 x 170 ft., brick and concrete addition, plain foundation. Architect not selected.

Wis., Sheboygan—Theatre and Office—E. R. and T. M. Bowler, Bodenstein Bldg., had plans prepared by E. A. Juul, archt., Imig Bldg., 2 story, 70 x 240 ft., brick, rein.-con. and steel, plain foundation, 8th St. $150,000.

Minn., Albert Lea—Bank and Office—Albert Lea State Bank, having plans prepared by Amer. Bank Builders, archts., 126 South 9th St., Minneapolis, 4 story, 44 x 122 ft. rein.-con., brick and tile. $150,000. A. C. Erickson, pres.

Minn., Duluth — Apartments — Fleisher Constr. Co., 608 Builders Exch., Minneapolis, having plans prepared by D. A. Rose, archt. and engr., 500 Builders Exch., Minneapolis, 2 apartments, 3rd St., here. $200,000 each.

Minn., Minneapolis — Lodge — Cataract Lodge 2, A. F. & A. M., c/o J. A. Jenson, chn. building com., 20 University Ave. S. E., having plans prepared by Fallows & Huey, archts., 501 New York Life Bldg., 3 story, steel trusses, limestone exterior, Bank St., near University Ave. S. E. $225,000.

Tex., Dalhart—Courthouse—Dalham Co. voted $150,000 bonds for courthouse. J. M. Reese, co. judge.

Tex., Orange—School—School Bd. had plans prepared by C. H. Page & Bro., archts., Austin Natl. Bank Bldg., Austin, (Anderson School), 3 story, 103 x 148 ft., rein.-con., tile and brick. $160,000.

Buildings—(Continued)

Tex., San Antonio—Schools—Voted $2,000,000 bond issue for new schools and improvements to existing schools. F. Hargis, pres. school board. Noted June 15.

Wash., Seattle—Office—D. Horton Estate, New York Blk., having plans prepared by J. Graham, archt., L. C. Smith Bldg., for (first unit), 12 story, 120 x 127 ft., 3rd and Cherry St., to be followed by second unit 14 story, 108 x 120 ft. Each unit will contain 500 rooms and five stores. $2,500,000.

Cal., Alameda—Apartment—A. A. Cantin, archt., 68 Post St., San Francisco, preparing plans 3 story, frame and brick veneer, San Jose Ave. $150,000. Owners name withheld.

Cal., Sacramento — Office — California State Life Insurance Co., Forum Bldg., having plans prepared by G. C. Sellon & Co., archts., Mitau Bldg., Stockton, 10 story, 100 x 100 ft., granite and terra cotta, 10th and J Sts. $1,000,000. Noted April 27.

Cal., Sanger—Jail—See "Sewers."

Ont., Weston—School—School Bd. plans 2 story, 8 room, concrete, brick and steel. $150,000. Architect not selected.

BIDS DESIRED

Conn., Derby—Theatre, etc.—I. J. Hoffman, Capitol Theatre, Ansonia, taking bids 2 story, 65 x 200 ft. brick, concrete and steel, Elizabeth St. $250,000. E. C. Horn & Son, 1476 Bway., New York, archt. Noted April 28.

Conn., New Britain—Trade School—E. C. Goodwin, chn. building com., taking bids 3 story, 72 x 198 ft. brick and steel, South Main St. $150,000. M. J. Unkelbach, 162 Main St., archt. Noted June 8.

N. Y., New York—Apartment—Lash Realty Co., Inc., c/o M. B. Adler, archt. and engr., 236 West 55th St., 5 story, 100 x 175 ft., brick, steel and stone, plain foundation, West 153rd St. $200,000. Work will be done by separate contracts.

N. Y., Brooklyn—High School—July 12, by C. B. J. Snyder, supt. of School Buildings of Bd. Educ., Concord St., New Utrecht High School, 79th and 80th Sts. from 16th to 17th Aves.

N. Y., New York—Hospital—Hospital for Joint Diseases, 124th St. and Madison Ave., receiving bids and opens same about July 15. 3 story, brick, steel and stone addition, plain foundation. Buchman & Kahn, 56 West 45th St., archts. and engrs. Noted April 20.

N. Y., New York—Museum—July 20, by Park Bd. at office of Dept. Parks, Municipal Bldg., new wing to be known as southeast wing and court building known as Hall of Ocean Life incl. passage to connect court building to southeast wing, for Amer. Museum of Natural History, Manhattan Sq. Bids will also be received for plumbing work, ventilating and humidifying apparatus and steam heating and fume removal apparatus, etc. F. D. Gallatin, pres.

N. Y., New York—Store—July 11 (change of date), by Starrett & Van Vleck, archts. and engrs., 8 West 40th St., 9 story, brick, steel and stone, concrete foundation, 5th Ave. and 50th St., for Saks & Co., Bway. and 33rd St. $2,000,000. Noted June 22.

N. J, Fairview—Mausoleum—Mausoleum Co. of America, c/o G. B. Webb, archt. and engr., 469 5th Ave., New York, granite and marble, plain foundation, here. Archts. est. $200,000. Work will be done by separate contracts under supervision of architect. Noted Nov. 3.

Pa., Phila. — Lodge — Platt & Talley, archts., 1627 Sansom St., taking bids 3 story, 77 x 88 ft. and 35 x 95 ft. brick, steel and stone, plain foundation, Roxboro St., for I.O.O.F. Lodge 66, Roxboro St. $200,000.

Pa., Phila.—Office—Reformed Church of America, 15th and Race Sts., and Marshall & Fox, archts., 721 North Michigan Ave., Chicago, receiving bids 13 story, 120 x 150 ft. brick, steel and stone, plain foundation, 15th and Race Sts. $800,000.

N. C., Charlotte—Hotel—July 15, by J. H. Little, pres. Citizens Hotel Co., 10 story, concrete and steel. $750,000. Noted June 22.

N. C., Rosewood—High School—July 19, by A. H. Edgerton, chn. Bd. Educ., Goldsboro, brick high school, here, for Bd. Educ. Fork Twp. $150,000. G. L. Preacher & Co., Raleigh, and Healy Bldg., Atlanta, Ga., archts.

O., Cleveland—Apartments—July 10, by Aaron Realty Co., 201 Ulmer Bldg., two 4 story, 38 x 60 ft. brick and timber, plain foundation, 1641 East 77th St. $160,000. A. Sogg, 319 Hippodrome Bldg., archt.

O., Cleveland—Apartment, etc.—A. W. Harris, archt., Discount Bldg., taking bids 2 and 6 story, brick, steel and concrete, apartment hotel, store and office building, for Riverview Impvt. Co., Discount Bldg., $750,000.

O., Cleveland—Church—W. C. Jansen, archt., Electric Bldg., taking bids 1 story, 100 x 200 ft. brick, steel and stone, plain foundation, East 109 St. and St. Clair Ave., for St. Aloysius Roman Catholic Church, c/o F. A. Malloy, pastor, 10932 St. Clair Ave. $200,000. Noted Feb. 9.

O., Cleveland—Medical School, etc.—July 12, by Western Reserve University, 10940 Euclid Ave. and Coolidge & Shattuck, archts., 122 Ames Bldg., Boston, Mass., 1, 3 and 4 story, brick, steel and concrete medical school, power house and animal hospital, plain foundation, Adelbert and Abington Rds. $1,750,000. Noted Feb. 9.

Mich., Saginaw — School — July 12, by Secretary Bd. Educ., 2 story, 22 room, rein.-con., brick and steel, plain foundation. $250,000. J. F. Beckbissinger, 114 South Jefferson Ave., archt.

Ill., Chicago—Apartment—D. J. Schaffer, archt., 139 North Clark St., receiving bids 3 story, 84 x 137 ft., rein.-con., brick and steel, Kedzie and Dickens Aves., $150,000. Owner's name withheld.

Ill., Chicago—Apartment—D. J. Schaffner, archt., 139 North Clark St., receiving bids 3 story, 100 x 125 ft., rein.-con., brick and steel, Rockwell and Schubert Aves. $150,000. Owner's name withheld.

Ill., Chicago—Apartment—J. H. Klafter, archt., 127 North Dearborn St., receiving bids 3 story, 93 x 125 ft., rein.-con., brick and steel, Douglas Blvd. and Albany Ave., for Steinman & Larner, c/o architect. $150,000.

Ill., Chicago—Store and Apartment—Rissman & Hirschfield, archts., 139 North Clark St., receiving bids 3 story, 150 x 150 ft., rein.-con., brick and steel, Irving Park Blvd. and Hamilton Ave., for F. W. Dobe, c/o architects. $200,000.

Ill., Chicago—Store and Office—B. Friedman, 1210 Independence Blvd., receiving bids 2 story, 69 x 237 ft., rein.-con., brick and steel, North Blvd. and Park Pl. $175,000. B. J. Bruns, 1548 Belmont Ave., archt.

Neb., Lincoln—Capitol—July 20, by S. A. McKelvie, chn., State Capitol Comn., State Capitol Bldg., constructing superstructure of first section of capitol. G. E. Johnson, secy. B. G. Goodhue, 2 West 47th St., New York, archt. Former bids rejected. Noted June 1.

Ont., Renfrew—Collegiate—July 18, by S. T. C. Chown, chn. Bd. Educ., 3 story, 81 x 160 ft. rein.-con., brick and steel. $200,000. S. B. Coon & Son, 4 St. Thomas St., Toronto, archts. Noted April 6.

CONTRACTS AWARDED

Me., Portland—High School—Deering High School Comn., 3 story, 70 x 400 ft. brick, steel and concrete, plain foundation, Presumpscot Park, to F. T. Ley & Co., Inc., 499 Main St., Springfield. Archts. est. $611,857. Noted May 4.

Mass., Pittsfield—Bank—Berkshire Loan & Trust Co., 24 North St., 1 story, brick, stone and marble, plain foundation, to J. R. Hampson, 14 Taylor St. Archts. est. $175,000. Noted May 11.

Mass., South Hadley—Science—Mount Holyoke College, 2 story, brick, stone and steel, on campus, to Casper Ranger Constr. Co., 20 Bond St., Holyoke. Archts. est. $300,000. Noted July 31.

N. Y., Albany—Restaurant and Office—Childs Co., 200 5th Ave., New York, 6 story, brick, steel and stone, plain foundation, here, to J. Dyer, Jr., 6 South Pearl St. Noted June 22.

N. Y., Long Island City—Schools—Bd. Educ., 500 Park Ave., New York, P. S. 69, Polk Ave. and P. S. 19, 41st and Lake Sts, brick, steel and stone, plain foundation, here, to Putnam Constr. Co., 303 5th Ave., New York, $414,000 and $418,000 respectively. Noted June 22.

N. Y., New York—Church—St. Lukes Evangelical Lutheran Church, c/o E. W. Tilton, archt. and engr., 147 East 45th St., 4 story, brick and stone, plain foundation, 45th St. between 9th and 10th Aves., to F. G. Fearon, 280 Madison Ave. Archits. est. $150,000.

N. Y., New York—Loft—Brown Brand Realty Co., c/o G. and E. Blum, archts. and engrs., 505 5th Ave., 6 story, 25 x 100 ft. brick, steel and stone, 17 East 53rd St., by day labor. Archts. est. $200,000.

N. Y., New York—Loft—H. Wolf Estate, c/o W. Higginson, archt. and engr., 15 Park Row, 2 story, 80 x 220 ft. brick, steel and stone, West 26th St., to Rheinstein & Hass, 21 East 40th St. Engrs. est. $150,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., P. S. 80, East 120th St., to T. A. Clarke Co., 122 Livingston St., Brooklyn, $487,300. Noted June 29.

N. J., Bordentown—School—State Comr. of Educ., Trenton, alterations and additions to Manual Training and Industrial School, 2 story, 39 x 90 ft., general contract to Carroll & Pullen, Branch Ave, Princeton, $96,000. Noted June 15.

N. J., Elizabeth—Hospital—Crow, Lewis & Wick, archts. and engrs., 200 5th Ave., New York, brick, steel and stone, plain foundation, here, to H. Wilhelm Sons, 803 East Jersey St., for Elizabeth Genl. Hospital. Archts. est. $600,000. Noted Jan. 19.

Pa., Connellsville—Church—First Methodist Episcopal Church, brick, rein.-con. and masonry contracts, to J. F. Trumpey, Somerset. Archts. est. $175,000. Noted April 20.

Pa., Nazareth—School—Bd. Educ., brick, steel and stone, plain foundation, to A. G. Stoudt & Son, Inc., Bethlehem. Engrs. est. $180,000. Noted May 25.

Pa., Pittsburgh—Apartment—J. M. A. Addy, 10 story, 44 x 99 ft., rein.-con., brick and steel, 112-114 Sheridan Ave., to Toupet Building Co., 5814 Ellsworth Ave. Archts. est. $150,000.

Pa., Pittsburgh—School—Bd. Educ., general contract for 2 story addition to school, Davis Ave., to Pittsburgh Eng. & Constr. Co., 711 Homewood Ave. Engrs. total est. $150,000.

N. C., Winston-Salem—High School—Mayor, concrete and brick work for Skyland High School, to F. J. Blum under supervision of C. M. Crawford, supt. construction. $110,000. Noted May 18.

Ga., Atlanta—Apartment—J. H. Whisenant, 885 Highland Ave., will build 6 story, 135 x 200 ft., tile and brick, on 13th St., by day labor. $150,000-$175,000. E. C. Siez, Atlanta, archt.

O., Cleveland — Apartment — Terrill & Wensley, c/o M. Weis, archt., 618 Union Bldg., 3 story, 64 x 182 ft., brick and timber, plain foundation, 14600 Euclid Ave., to M. Rosen, 2322 East 61st St. Archts. est. $160,000.

O., Conneaut—High School—Bd. Educ. 2 story, brick, steel and concrete, to H. C. Miller, Erie, Pa., $139,996. Noted May 18.

Ill., Chicago—Apartment—H. F. Bloomfield, 118 North La Salle St., 3 story, rein.-con., brick and steel, 70th Pl. near Crandon St., to Welch-McCarthy Constr. Co., 56 West Washington St. Archts. est. $650,000.

Ill., Chicago—Apartment—M. B. Flynn, c/o E. P. Rupert, archt., 19 South La Salle St., 3 story, 145 x 164 ft., rein.-con., brick and steel, South Shore Dr. and 72nd St., to A. T. Herlin, 6117 Evans Ave. Archts. est. $225,000. Noted June 15.

Ill., Chicago—Apartment—F. P. Jackson, c/o L. C. Bouchard, archt., 30 North Dearborn St., 10 story, 102 x 230 ft., rein.-con., brick and steel, 3318-26 Sheridan Rd., to Schmidt Bros. Constr. Co., 22 East Huron St. $1,500,000.

Ill., Chicago — Apartment-Hotel — Shelbourne Apartment-Hotel Corp., c/o W. P. Doerr, archt., 28 East Jackson Blvd., 10 story, 140 x 170 ft., rein.-con., brick and steel, Hyde Park Blvd. and 53rd St., to Mueller Constr. Co., 179 West Washington St., $2,000,000.

Wis., Mazomanie — High School — Bd. Educ. rejected bids and will build 2 story, 69 x 105 ft., concrete, brick and steel, plain foundation, by day labor. $150,000. Balch & Lippert, Gay Bldg., Madison, archts.

Minn., Stillwater—Schools and Gymnasium—Bd. Educ., 3 story, 82 x 144 ft. addition and 2 story, 71 x 112 ft. gymnasium, both rein.-con., brick, tile and stone, to O. H. Olsen, Stillwater, $147,904.

Tex., Mexia—High School—General contract 2 story, brick, stone and rein.-con., containing 600,000 cu. ft. floor space, to Sloan & Spoontz, Ft. Worth, $150,000; heating and power to Modern Plumbing & Heating Co., Denison, $24,096. Noted Feb. 9.

Wash., Seattle—Apartment—L. C. Trouthon, c/o J. A. Creutzer, archt., Leary Bldg., 6 story, 100 x 150 ft. rein.-con. and steel, East Howell and Belmont Sts., to Pacific States Constr. Co., Colman Blk., $225,000. Archts. est. $210,000.

Cal., Long Beach—Bank and Office—Farmers & Merchants Bank, 3rd and Main Sts., Los Angeles, 10 story, 54 x 100 ft., brick and steel, 3rd and Pine Sts., here, to J. V. McNeil, H. W. Hellman Bldg., Los Angeles, $255,000.

Buildings—Continued)

Cal., **Los Angeles**—High School—Bd. Educ., Security Bldg., 2 story, rein.-con. and brick, Boyle Heights, to K. R. Bradley, 1925 East 16th St., $307,157.

Cal., **Redondo Beach**—Office and Store—J. E. Forbes, 2 story, 100 x 600 ft., rein.-con., to Prudential Eng. & Constr. Co., 616 Consolidated Realty Bldg., Los Angeles. Archts. est. $200,000.

Cal., **San Francisco**—Apartment—B. Fair, c/o E. E. Young, archt., 251 Kearney St., 6 story, concrete and steel, Baker and Green Sts., to M. A. Little, 805 Bush St., $150,000.

Cal., **Santa Barbara**—Hotel—Mission City Hotel Co., 4 story, 115 x 180 ft., State St., to United Constr. Co., Baker-Detwiler Bldg., Los Angeles. Archts. est. $250,000.

Que., **Notre Dame de Grace**—School—Protestant Bd. School Comrs., Belmont St., 4 story, 70 x 224 ft. rein.-con., brick and steel, to P. Lyall Constr. Co., 5000 Western Ave., $238,435. Noted April 20.

Federal Government Work

PROPOSED WORK

Md., **Annapolis**—Deferrization Plant, etc.—Spec. 4682—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans deferrization plant at high power radio station, here.

Cal., **Mare Island**—Circulating Loop—Spec. 4684—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans circulating loop, here.

Cuba, **Guantanamo**—Distilling Plant—Spec. 4683—Bureau Yards & Docks, Navy Dept., Wash., plans distilling plant, here.

BIDS DESIRED

N. Y., **New York**—Dredging—August 7, at Office U. S. Engineer, 710 Army Bldg., 39 Whitehall St., dredging and rock removal in Bronx River; adv. this issue.

Ala., **Montgomery**—Steel Hull—July 31, at Office U. S. Engineer, 1 steel hull for dipper dredge Upatoi; adv. this issue.

Tenn., **Memphis**—Refrigerating and Ice-Making Plant—July 15, at Office Mississippi River Comn., 1st and 2nd Dists., Customhouse, 1 Marine type refrigerating and ice-making plant; adv. this issue.

O., **Fairport**—Breakwater Extension—July 27, at Office U. S. Engineer, Buffalo, N. Y., rubble mound east breakwater extension in harbor, here; adv. this issue.

BIDS RECEIVED

D. C., **Wash.**—Boiler—Dept. of Agriculture, 300 hp. Sterling water tube boiler, from Standard Eng. Co., 2129 I St., N. W., (a) $13,670 (b) $8,700 (c) $5,600; Casey & Co., 3207 14th St., N. W., (a) $13,900 (b) $8,304 (c) $5,596; McClintock Bros., (a) $14,020 (b) $11,659 (c) $2,361.

D. C., **Wash.**—Conveyor System—Post Office Dept., for conveyor system, from S. Olsen, Chicago, Ill., $55,000 deduct $950 for U. S. Belting; Mathews Gravity Carrying Co., Elwood City, Pa., $42,000 alternate $40,700 for Goodyear belting; Standard Conveyor Co., St. Paul, Minn., $53,812.80 plus $2,086 for automatic take-off, plus $1,353 for Crocker-Wheeler motors, deduct $349 if Westinghouse motors are used, deduct $1,428.30 if Goodyear Belting is used.

D. C., **Wash.**—Guard House—Constructing Quartermaster, Munitions Bldg., guard house at Walter Reed Hospital, here, from Boyle-Robertson Constr. Co., Evans Bldg., $26,267; A. H. Rogers, Colorado Bldg., $26,500; H. C. Ball Constr. Co., Dist. Natl. Bank Bldg., $27,622.

D. C., **Wash.**—School—Constructing Quartermaster, 2306 Munitions Bldg., 19th and B Sts., Army Medical School, at Walter Reed Hospital, here, (1) work complete, from Boyle-Robertson Co., Evans Bldg., (1a) $431,557 (300 days) (1b) $429,557 (1c) $427,557 (1d) $427,557 (2) $2,809 (3) $4,000 (4) add $968 (5) $2,300 (6) $6,894 (7) $2,800 (8) $1,228 (9) $1,495 (10a) $12.15 (10b) $13.50 (10c) $1.50 (10d) $77 (10e) $2.16 (10f) $0.75 (10g) $0.40 (10h) $0.90; P. F. Gormerly, Union Trust Bldg., (1a) $429,853 except refrigeration 10 months (2) $4,500 (5) 2,300 (6) $5,000 (7) $3,985 (8) $2,795 (9) $1,300; G. A. Fuller & Co., Munsey Bldg., (1a) $440,000 (240 days) (1b) $440,000 (1c) $440,000 (1d) $440,000 (2) $2,500 (3) $4,000 (4) add $1,000 (5) $2,400 (6) $5,000 (7) 2,985 (8) $2,795 (9) $1,300. Noted June 1.

Mo., **Jefferson Barracks**—Hospital—Treas. Dept., Wash., D. C., construction U. S. Veterans Hospital, here, from J. Stewart & Co., Inc., 30 Church St., New York, $779,350, Westlake Constr. Co., Ry. Exch. Bldg., St. Louis, $787,000, W. M. Sutherland, 4412 Lindell Blvd., St. Louis, $814,900, mechanical equipment for above, from W. Wilby, Selma, Ala., $307,976, S. Faith & Co., 2427 Pennsylvania Ave., Phila., Pa., $311,000, J. A. McBride, 1607 Olive St., St. Louis, $316,000.

California—Roads—Bureau Pub. Rds., 881 Mills Bldg., San Francisco, grading and building structures on 10.4 mi. Big Bear Valley Rd., in Los Angeles National Forest (1) using concrete pipe, (2) corrugated pipe, from Utah Constr. Co., Phelan Bldg., San Francisco, (1) $246,388 (2) $237,799; Johnson Contr. Co., Lumber Exch. Bldg., Portland, Ore., (1) $273,382 (2) $255,782; C. H. and A. W. Gorrill, Oakland (1) $304,417 (2) $294,922. Noted June 8.

CONTRACTS AWARDED

N. J., **Manasquan**—Radio Compass Station—Spec. 4663—Bureau Yards & Docks, Navy Dept., Wash., D. C., radio compass station, here, to N. B. Smyth, Inc., 417 East 34th St., New York, $4,900 (60 days). Noted June 15.

Pa., **Phila.**—Removal etc.—Spec. 4670—Bureau Yards & Docks, Navy Dept., Wash., D. C., removal and relocation inflammable storehouse, here, to C. Gilpen, 911 Harrison Bldg., $20,948 (75 days).

D. C., **Anacostia**—Repairs—Spec. 4648—Bureau Yards & Docks, Navy Dept., Wash., repairs to barracks, here, to A. H. Rogers, Colorado Bldg., $13,000 (90 days). Noted June 8.

Miscellaneous

PROPOSED WORK

Generator and Transmission Line—Cumnock, N. C.—Rocky River Power & Light Co., High Point, had plans prepared and soon takes bids installing 500 kw. generator on Rocky River, and 12,000 volt transmission line from Rocky River plant to Cumnock. W. E. Woody pres. Mees & Mees, Charlotte, engrs.

Electric Distribution System—Rice Lake, Wis.—See "Industrial Works".

Transmission Line—Basin, Wyo.—Midwest Refining Co., Greybull, and City of Basin, plan 66 mi. transmission line from Cody Dam to Greybull and from Greybull to Basin. $50,000.

Seawall—Aransas Pass, Tex.—Attorney General's Dept., Austin, approved $213,000 bond issue for seawall. Address Mayor.

Tunnel—Denver, Col.—Moffatt Tunnel Dist. soon takes bids 6 mi. tunnel, 24 ft. high, 16 ft. wide, under James Peak, $6,700,000. L. B. Blauvelt, State Capitol Bldg., ch. engr.; Moffatt Tunnel Comm.

Gas Main Extensions, etc.—Lodi, Cal.—Sacramento Gas Co., 21 South School St., plans additional mains and extensions, additional storage capacity and pressure boosting apparatus. $35,000.

BIDS DESIRED

Borings—Long Island City, N. Y.—July 14, by Transit Comn., 49 Lafayette St., New York, land and river borings along Roosevelt and 40th Aves. and in Flushing River, Boro of Queens, Agreement "BW." G. McAneny, chn.

Structural Steel—New York, N. Y.—July 11, by Bd. Purch., Municipal Bldg., structural steel to Dept. Plant & Structures. G. A. Whalen, comr.

Switch Board, etc.—Atlantic Highlands, N. J.—July 11, by mayor and Boro Council, installing 6-panel switch board, instruments, etc., and sinking 2 wells, each 18 in. in diameter, 110 to 125 ft. deep, two 400 gal. pumps. H. A. Kridel, clk.; adv. this issue.

Pier Building—Phila., Pa.—July 10, by F. H. Caven, dir. pub. wks., 1 story, pier building, Allegheny Ave. and Delaware River, also improving and enlarging Allegheny Wharf 127, for Dept. Wharves, Chestnut St. Pier. $100,000.

Asphalt, Gravel, etc.—Phila., Pa.—July 11, by F. H. Caven, dir. pub. wks., 13,000 ton asphalt surface and binder course, $26,000; 7,500 ton gravel, $15,000; 8,500 ton crushed stone $15,000; 3,000 bbl. cement $25,000; mixed concrete $7,500. F. C. Dunlap, City Hall, engr.

Wharf and Transit Shed Foundation—Tampa, Fla.—July 26, constructing rein.-con. wharf and transit shed foundation. R. D. Martin, city engr.; adv. this issue.

Retaining Wall — Sandusky, O. — See "Bridges under Ohio."

Stadium—Madison, Wis.—July 17, by University of Wisconsin, rein.-con. and steel addition to stadium and athletic field. $60,000. A. Peabody, 2114 Chadbourne Ave., engr.

Piping, etc.—Whitewater, Wis.—July 12, by State Normal School Bd., Madison, furnishing and installing (1) pipe work, etc., in new boiler and pump rooms, (2) concrete steam conduit, (3) smoke connections from boiler, (4) building foundation for boilers, etc. A. Peabody, 2114 Chadbourne Ave., Madison, engr.

Stone Crusher and Elevator — Preston, Minn.—July 18, by J. Dunford, aud. Fillmore Co., stone crusher and elevator, capacity not less than 12 ton nor more than 25 ton per hr., with portable bins from 12 to 18 yd.

Limestone—Montreal, Que.—July 8, 6,000 ft. limestone. L. O. Pion, purch. agt.

Electric Lighting System—Jersey City, N. J.—See "Streets and Roads."

BIDS RECEIVED

Ramp, etc.—Brooklyn, N. Y.—J. H. Delaney, comr. Docks, Pier "A" North River, New York, opened bids June 30, building ramp and dumping board at foot of West 23rd St., Coney Island Creek and completing dredging, here, from Riverside Contg. Co., 164 Montague St., $27,667; Shelbourne & Blake, $28,055; A. M. Hazell, Inc., 26 Cortlandt St., New York, $28,437. Noted June 22.

Underground Fire Alarm System—Brooklyn, N. Y.—T. J. Drennan, Fire comr., Municipal Bldg., New York, opened bids June 27, constructing portion of underground fire alarm system, here, from Crocker Natl. Fire Prevention Eng. Co., 22 West 30th St., New York, (a) $52,967; G. E. Eng. Co., 449 West 42nd St., New York, (a) $55,000, (b) $98,000; Hickey Contg. Co., 841 Bway., New York, (a) $57,255; Standard Underground Cable Co., 50 Church St., New York, (b) $89,228; J. Sugden Co., 110 5th Ave., New York, (b) $96,131. Noted June 8.

Miscellaneous Construction, etc.—New York, N. Y.—Transit Comn., 49 Lafayette St., opened bids June 29, miscellaneous construction and station finish for Rapid Transit Railroads in Boros of Manhattan, Bronx, Brooklyn and Queens, Agreement "BV," from E. Balaban, 51 East 42nd St., $10,835; C. Meads & Co., 217 West 14th St., $12,159, N. A. Deiser, 296 Fenimore St., Brooklyn, $16,145. Noted June 22.

Elevated Railway Equipment, etc.—Phila., Pa.—W. S. Twining, dir. Dept. Transit, 1112 Chestnut St. received low bid for Contr. 661 comprising 28 items of miscellaneous work necessary to complete construction and equipment of Frankford Elevated Ry. and Bustleton surface lines, incl. connection to the Market St. subway incline at Front and Arch Sts., from F. J. Boas Co., Commercial Trust Bldg., $534,180. Noted June 22.

CONTRACTS AWARDED

Athletic Field—New Britain, Conn.—Bd. Park Comrs., developing "Memorial Field," South End Park, incl. baseball field, football field, tennis court, track, etc., to Miller Bros., Bloomfield. Engrs. est. $50,000.

Asphaltic Cement—St. George, N. Y.—M. J. Cahill, pres. Richmond Boro, furnishing and delivering 400 ton Natural Lake asphaltic cement, to J. E. Donovan, 2205 Richmond Terrace, Port Richmond, $31 per ton; 400 ton oil asphaltic cement, to Standard Oil Co. of New York, 26 Bway., New York, $18.75. Noted June 22.

Foundation—Detroit, Mich.—Art Comn., 704 East Jefferson Ave., excav. work and concrete foundations for art institution, to A. J. McLean Co., 302 Bldg., $103,852. Noted June 29.

Stadium—Detroit, Mich.—University of Detroit, East Jefferson Ave., rein.-con. stadium, to Bryant & Detwiler Co., 2336 Dime Bank Bldg., $200,000.

Bulkhead—Chicago, Ill.—South Park Comrs., 57th St. and Cottage Grove Ave., bulkhead from opposite 11th Pl. to Randolph St., along easterly front of Grant Park, to Great Lakes Dredge & Dock Co., 104 South Michigan Ave. Noted May 11.

Stadium — Chicago, Ill. — South Park Comrs., 57th St. and Cottage Grove Ave., stadium on Lake Front between Roosevelt Rd. and 16th St., to Blome-Sinek Co., 139 North Clark St. Noted Jnue 15.

Mill Elevator, etc. — Humboldt, Neb. — O. A. Cooper Mills, mill elevator, crib construction, and concrete and brick power plant, to Birchard Constr. Co., Terminal Bldg., Lincoln, $50,000.

Tunnel—San Francisco, Cal.—Bd. Pub. Wks., constructing Pulgas Tunnel, Hetch Hetchy Project, Contr., 85, to Grant-Smith Co., Balboa Bldg., San Francisco, $683,050. Noted June 29.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: July 11.

County Road Work

Newton, N. J.

Notice is hereby given that sealed bids will be received by the County of Sussex for the following work.

No. 1. Paving Fredon Newton Road. Estimated amount of surface pavement 7,800 sq.yd. reinforced concrete.

No. 2. Paving Branchville Dingmans Road. Estimated amount of surface pavement 10,983 sq.yd. reinforced concrete.

And opened and read in public at Freeholders Office, Newton, N. J., on July 11th, 1922, at ten-thirty (10:30) a.m., Standard Time.

"Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Harvey Snook, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said Engineer at Newton, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to The County of Sussex and must be accompanied by a Surety Company Certificate and a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and on the hour above named. The Standard proposal form is attached to the specifications, copies of which will be furnished on application to Engineer. The right is reserved to reject any or all bids.

"By order of the County of Sussex."
(Signed) WILLIAM S. VOUGHT, Clerk.

Bids: July 14.

Curb, Gutters and Sewers

Ann Arbor, Mich.

Sealed proposals will be received by the Board of Public Works, Ann Arbor, Michigan, through the City Clerk, on or before 7:30 p.m., Eastern Standard Time, July 14, 1922, for the construction of concrete curb and gutter in curb and gutter Districts Nos. 24 to 49 inclusive, also for the construction of lateral sewer in Lateral Sewer District No. 112 and for a storm sewer on Brooks St., from Pearl St. to Miller Ave. Approximate quantities are as follows:

53,200 lin.ft. combined curb and gutter.
680 lin.ft. 10 in. vitrified pipe.
1,200 lin.ft. 12 in. vitrified pipe.
1,240 lin.ft. 15 in. vitrified pipe.
250 lin.ft. 18 in. vitrified pipe.
480 lin.ft. 22 in. vitrified pipe.
2,000 cu.yds. excavation and backfilling.

Plans and specifications are on file in the City Engineer's Office. A certified check for 5% of the bid must accompany each bid as guarantee of good faith of bidder and the Board of Public Works reserves the right to reject any and all bids.

ISAAC G. REYNOLDS,
City Cerk.

OFFICIAL PROPOSALS

Bids: July 12.

Highway Work

Camden, N.J.

Notice is hereby given that sealed bids will be received by Charles F. Wise, Chairman of the Road Committee, for the construction of a portion of King's Highway, in the Township of Delaware, in the County of Camden, with a reinforced concrete surface estimated amount of concrete surface pavement required is 20,784 square yards and opened and read in public at the Court House, Camden, N. J., on Wednesday, July 12th, 1922, at a.m. Daylight Saving Time.

"Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by John J. Albertson, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at the Court House, Camden, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Charles F. Wise, Chairman of the Road Committee, and must be accompanied by a Surety Company Bid Letter and a Certified Check for not less than ten (10) per cent of the amount of bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders,
FRED. W. GEORGE, Clerk.

Bids: July 21.

Steel and Concrete Bridge

Cobleskill, N. Y.

Sealed bids and proposals will be received by the undersigned, at the office of the Town Clerk, in the village and town of Cobleskill, N. Y., until one o'clock in the afternoon of July 21, 1922, at which time they will be publicly opened and read, for the building of a new steel and concrete bridge over the Cobleskill Creek, on the Barnerville-Howe Cave road in said town.

Plans and specifications of said bridge may be seen and examined at the office of the town clerk in said village and town, and also at the office of Lawyer Wright, Superintendent of Highways of Schoharie County, at Schoharie, N. Y.

The right to reject any and all bids is hereby reserved.

Dated June 27th, 1922.

HERBERT L. SWEET,
Superintendent of Highways.
LEWIS UTTER,
Supervisor.
WILLIAM H. WHITE,
Justice of the Peace.
WILLIAM H. GOLDING,
Justice of the Peace.
GEORGE CHICKERING,
Justice of the Peace.
LELAND C. JONES,
Justice of the Peace.
AURA J. BROWN,
Town Clerk of the Town of Cobleskill, N. Y.

OFFICIAL PROPOSALS

Bids: Aug. 4.

Bridge Superstructure, Machinery and Electrical Equipment

Seattle, Wash.

Sealed proposals will be received by the Board of Public Works of the City of Seattle, up to 10 o'clock a.m., Friday, August 4th, 1922, in room 234, County-City Building, for the fabrication and erection of the Super-structure, Machinery and Electrical Equipment of a Steel Bascule Bridge and two Side Spans over the West Waterway at West Spokane Street, under authority of Ordinance No. 43397.

The structure will comprise a double-leaf bascule span 288 feet center to center of trunnions, 2 approach spans each about 140 feet long and a steel girder span about 136 feet long. The width of the bascule span will be 45 feet center to center of trusses and of the side spans 52 feet center to center of trusses, and of the girder span about 40 feet.

No proposal will be considered except as same is made strictly in conformity with the advertisement therefor and upon the forms of proposals furnished by the Board of Public Works, bound together with the specifications, general clauses and form of contract which must be submitted unbroken and unaltered in every particular.

This improvement shall be made in accordance with the respective plans and specifications now on file in the offices of the Secretary of the Board of Public Works and the City Engineer, respectively.

The successful bidder will be required to file with the City Comptroller a bond in the sum specified in the specifications.

Each bid must be accompanied by money, a satisfactory surety company bid bond approved by the Mayor and City Comptroller as to sufficiency and the Corporation Counsel as to form, or a certified check payable to the order of the City Comptroller of the City of Seattle for a sum not less than five (5) per cent of the total amount of bid, and no bid will be considered unless so accompanied.

A deposit of Ten Dollars ($10.00) will be required for each set of plans and specifications, which will be returned upon return of the plans in good order.

Special attention of bidders is called to the State Law and City Charter regarding the number of hours constituting a day's work, minimum wage scale, American citizenship and heads of families.

The Board of Public Works reserves the right to reject any or all bids.

By order of the Board of Public Works:
C. B. BAGLEY,
Secretary.

First publication June 20, 1922.

Bids: July 19.

Turbine and Accessories

New Orleans, La.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans, up to 12 o'clock noon, Wednesday, July 19, 1922, for furnishing one 6,000 kw. turbine and accessories.

Specifications and blank forms of proposals may be obtained at Room 303, No. 526 Carondelet Street, New Orleans.

The right is reserved to reject any or all bids. A. G. MOFFAT, Secretary
GEO. G. EARL, General Superintendent.
May 11, 1922.

Bids: July 11.

Street Paving

Covington, Va.

Sealed proposals will be received by the Mayor of Covington, Va., up to 7:30 p.m. Tuesday, July 11th, 1922, at the Council Chamber, Masonic Building, Covington, for furnishing all labor and materials and constructing the following amount of Paving; approximate estimate:

4300 Cubic Yards Grading,
8480 Square Yards Sheet Asphalt, concrete base and 3 inch top,
1450 Square Yards Hill-Side Brick Paving, concrete case,
280 Square Yards Plain Vitrified Brick Paving, concrete base,
5050 Lin. Feet Plain Concrete Curb, 20 inches deep, set on Slag,
320 Lin. Feet Armored Circular Curb, 20 inches deep, set on Slag,
5350 Lin. Feet Concrete Gutter 18 inches wide,
92 Lin. Feet Concrete Gutter 24 inches wide,
244 Lin. Feet Concrete Margin Curb,
9 30-Inch Cast Iron Frames and Grates for Inlets.
60 Vertical Feet of Brick Work for Inlets,
220 Lin. Feet 12 in. T. C. Pipe Connecting Inlets.

Specifications and information concerning the work may be obtained on application to C. P. Barnett, Consulting Engineer, Covington, Virginia. A deposit of $5.00 will be required for each copy of specifications and on return of same the deposit will be refunded.

A certified check for $500.00 made payable to the order of B. R. Hoper, Mayor of Covington, Va., must accompany each bid.

The Town reserves the right to reject any or all bids. Bids will be made on a basis of cash payments for all work done.

C. P. BARNETT,
Consulting Engineer.

Bids: July 25.

Barge Canal Terminals

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, July 25, 1922, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and amendatory laws, and Chapter 402 of the Laws of 1920, as follows:

—1—

TERMINAL CONTRACT NO. 89

For paving a portion of the terminal site, constructing railroad and crane tracks, electrical work and details incidental thereto, at Syracuse.

Contract plans, sheets 1 to 4 inclusive.

—2—

TERMINAL CONTRACT NO. 90

For dredging a portion of the Henry Street slip at Gowanus Bay, Borough of Brooklyn, New York City.

Contract plans, sheet No. 1.

Plans may be seen and detailed specifications, engineer's estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate at fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE,
Superintendent of Public Works.
June 22, 1922.

Bids: July 10.

Equipment for New York Canals

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Monday, July 10, 1922, at which place and hour they will be publicly opened and read, for furnishing certain equipment for the New York State canals pursuant to the provisions of Chapter 532 of the Laws of 1922, as follows:

A—1—

CRESCENT POWER HOUSE,
COHOES, N. Y.

For furnishing and delivering two hydraulic turbines with governor equipment and extra parts for proposed power house at Crescent dam, Cohoes, N. Y.

Sheets 1 and 2 inclusive.

A—2—

CRESCENT POWER HOUSE,
COHOES, N. Y.

For furnishing two water wheel driven generators and other electrical equipment in the proposed power house at Crescent dam, Cohoes, N. Y.

Sheets 1 and 2 inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantity, proposal blanks, forms of contract and bonds required, and other information for proposers, may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Eastern Division, Wedgeway building, Schenectady, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposit of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE,
Superintendent of Public Works.
June 21, 1922.

Bids: July 15.

Reinforced Cement Concrete Pavement

Lynbrook, N. Y.

Notice is hereby given that sealed bids will be received by the Board of Trustees of the Incorporated Village of Lynbrook, N. Y., for the construction of a reinforced cement concrete pavement on certain streets of the Village of Lynbrook until 3.00 P.M. on Saturday, July 15, 1922.

The Engineer's estimate of the quantities is as follows:

55,000 sq.yds. Reinforced Cement Concrete Pavement.
8 Standard Drainage Basins.
50 lin.ft. Additional depth of Drainage Basins.
16 Catch Basins.
250 lin.ft. 8-inch Vitrified Pipe.
500 sq.ft. Concrete Sidewalk.
100 lin.ft. Concrete Curb.

Plans and specifications will be on file in the office of the Clerk, 21 Broadway, after July 1, 1922, and copies of same will be furnished to prospective bidders upon payment of Ten Dollars ($10.00), which amount will be refunded upon return of the plans and specifications before the time specified for the opening of bids. The Board of Trustees reserves the right to reject any or all bids and to waive any defect or informality in any bid, should it be deemed to the best interests of the Village so to do.

By order of the Board of Trustees.
PHILIP STAUDERMAN, President.
FRANK H. JOHNSON, Clerk.
June 22, 1922.

Bids: July 14.

Sub-structure and Approach Spans

Nashville, Tenn.

SEALED BIDS will be received by the Department of Highways, State of Tennessee, at Nashville, Tennessee, until ten o'clock A.M., Friday, July 14th, 1922, and opened publicly at that place and hour for the construction of the concrete sub-structure and the reinforced concrete approach spans of Federal Aid Project 16, being a bridge over Cumberland River near Clarkesville, having approximately 1,392 feet aggregate of span.

Plans and specifications are on file in the office of the Chief Engineer, Department of Highways, Nashville, Tennessee, and in the office of the Division Engineer, Department of Highways, Nashville, Tennessee.

D. Q. McCOMB,
Chief Engineer.

Bids: July 20.

Developing Water Supply

East Orange, N. J.

Notice is hereby given that sealed bids will be received in accordance with the law by the Board of Water Commissioners of the City of East Orange, New Jersey, at 8:00 o'clock p.m., Daylight Saving Time, on Thursday, the 20th day of July, A.D. 1922, at the office of the Board of Water Commissioners, 438 Main Street, East Orange, New Jersey, for furnishing materials and performing the labor required for developing a supply of water of not less than two million (2,000,000) gallons per twenty-four (24) hours from driven wells, in accordance with plans and specifications on file in the office of the Board of Water Commissioners, 438 Main Street, East Orange, New Jersey, and also in the office of the Consulting Engineers, Nicholas S. Hill, Jr., and S. F. Ferguson, 112 East 19th Street, New York City.

Copies of the plans and specifications may be obtained either from the office of the Board of Water Commissioners or from the Consulting Engineers, upon depositing Twenty-five ($25.00) Dollars, which sum will be refunded upon the return of the plans and specifications in good condition within ten (10) days after the 20th day of July, 1922, or else the entire deposit will be forfeited.

The work to be done includes all materials and labor, tools, plant and equipment necessary for construction, installing and completing ready for operation the following elements:

A. BUILDINGS AND STRUCTURES.
  (1) Brick and concrete addition to the existing White Oak Ridge pumping station, having slate roof on steel trusses, approximately 24′ x 50′ x 30′ high.
  (2) Three (3) or more reinforced concrete well houses of the dimensions specified to be erected on the property of the City of East Orange known as the Dickinson Farm.
  (3) One (1) reinforced concrete weir charmber.

B. MACHINERY AND EQUIPMENT.
  (1) 1—Water tube steam boiler of approximately 132 horsepower capacity.
  (2) 2—Unaflow steam engine driven alternating current electric generators, 3 phase, 60 cycle, 2300 volts, of 120 KVA. capacity each.
  (3) 1—Steam turbine driven centrifugal pumping unit of 2 M.G.D. capacity complete with condensing equipment.
  (4) 3—or more motor driven centrifugal or reciprocating deep well pumps with a capacity of 0.75 to 1 M.G.D. each.
  (5) 2—Condensers and vacuum pumps for unaflow steam engines.
  (6) All piping and appurtenances incidental and necessary to the installation of the above equipment.

C. ELECTRIC EQUIPMENT.
  (1) Electric transformers, switchboards, interior and exterior wiring and appurtenances.
  (2) Electric transmission wood pole line, approximately twelve thousand (12,000′) feet in length, complete with twenty-three hundred (2,300) volt power cable, and cable and wires for distant control and telephone circuits.

D. DRIVEN WELLS.
  (1) Three (3) or more driven wells of a depth of approximatey one hundred and twenty-five (125′) feet and of diameters specified.

E. PIPE AND APPURTENANCES.
  (1) Furnishing and delivering eight thousand (8,000′) feet of twenty (20″) inch reinforced concrete or cast iron pipe together with special castings, valves, etc.
  (2) Laying and installing complete eight thousand (8,000′) feet of reinforced concrete or cast iron pipe complete with specials, valves, etc.

The work to be performed under the specifications is divided into fourteen sections, classified according to the character of the work and materials to be furnished.

Bidders will be allowed to bid on one or more sections.

Proposals must be accompanied by a certified check or bid bond from a reliable surety company authorized to do business in the State of New Jersey and satisfactory to the Board of Water Commissioners, in amount equal to twenty-five (25%) per cent of the proposal. The certified check will be retained to pay for any damage or loss to the City, or the liability of the bond will accrue, in case the successful bidder shall neglect or refuse to enter into a contract in accordance with his proposal.

The Board of Water Commissioners reserves the right to consider bids for ten (10) days after their receipt before awarding any contract and the right is reserved to accept any bid or combination of bids, or to reject any or all bids.

Board of Water Commissioners, City of East Orange, New Jersey.

By ROSWELL M. ROPER,
Secretary.

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these advertisers through *Engineering News-Record's* large NATIONAL circulation, reaching almost every contractor, dealer, and manufacturer in the country interested in bidding on public work contracts. It is the DOMINANT MEDIUM for advertising contracts for work, material, and supplies for towns, cities, counties, state and government departments, and private organizations.

Bids: July 19.

State Highway Work

Providence, R. I.

Sealed proposals for the reconstruction of a section of State Highway 2,450 feet in length, located upon the Riverside Drive, so-called, in the Town of Tiverton, will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 m. (Daylight Saving), 11 a.m. (Eastern Standard), on Wednesday, July 19, 1922, at which time they will be opened and read in public.

The principal quantities involved are as follows:

Earth Excavation, 250 cu.yds.

Clearing, scarifying, harrowing and reshaping, 3,700 sq.yds.

Laying culvert pipe (12 to 24 inch), 444 lin.ft.

Catch basins, 4 each.

Crushed stone, 1,100 tons.

Applying asphalt, 13,000 gals.

Bids must be made upon blank forms to be furnished by the Board.

No bids will be accepted unless accompanied by a certified check for the sum of $200.00 payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids, and to give preference to towns or cities, in accordance with Section V of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Wednesday, July 5th, 1922, every week day (except holidays and Saturdays), between the hours of 9 a.m. and 5 p.m., Saturdays 9 a.m. to 12 m.

State Board of Public Roads.
ABRAM L. ATWOOD,
BENJAMIN F. ROBINSON,
FRANK COLE,
J. HENRY WOODARD,
ALTON HEAD.

Bids: July 14.

Highway Route No. 16
Section No. 2

Somerville, N. J.

Notice is hereby given that sealed bids will be received by the County of Somerset for the following: The construction of State Highway Route No. 16, Section No. 2, from Mine Mount Road to Bedminster Corner, consisting of 38,419 square yards of "Surface Type C One Course Reinforced Cement Concrete Pavement," with drains and appurtenances.

Work is to be performed under County Reimbursement Act, Chapter 183, Laws of 1918 and amended by Chapter 317, Laws of 1920.

Bids will be received at the Court House at Somerville on Friday, July 14, 1922, at 11 A.M., Daylight Saving time (10 A.M., Eastern Standard time).

Drawings, specifications and form of contract and bond for the proposed work are on file in the office of H. C. Van Emburgh, County Engineer, at Somerville Court House and in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars ($10.00) upon application to H. C. Van Emburgh, County Engineer. Bids must be made on the standard proposal forms in the manner designated therein as required by the specifications, enclosed in sealed envelopes, addressed to the Board of Chosen Freeholders of the County of Somerset and bearing the name and address of the bidder and the name and section of the route on the outside. Bid must be accompanied by a certified check drawn to the order of Edwin Garretson, County Treasurer, for not less than ten per cent (10%) of amount of the bid, provided that said certified check shall not be less than Five Hundred Dollars ($500.00) nor more than Twenty Thousand Dollars ($20,000.00), and be delivered at the above place on or before the hour named. Copies of the standard proposal form will be furnished on application to H. C. Van Emburgh, County Engineer.

Each Bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and the specifications. Each bidder must also accompany his bid with a statement of equipment properly filled out.

By order of a resolution of the Board of Chosen Freeholders of the County of Somerset passed at a meeting held on Tuesday, June 13, 1922.

WM. S. WOODRUFF, Clerk.

Bids: July 11.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m. on Tuesday, the 11th day of July, 1922, advanced standard time which is twelve o'clock noon eastern standard time, for the improvement of highways in the following counties:

Cattaraugus	(one highway: 4.15)
Chenango	(one highway: 8.82)
Delaware	(two highways: 7.59 & 7)
Madison	(one highway: 1.60)
St. Lawrence	(one highway: 10.14)
Washington	(one highway: 0.62)
Wyoming	(one highway: 4.68)
Yates	(one highway: 2.92)

ALSO FOR THE RECONSTRUCTION OF THE FOLLOWING:

Chenango	(one contract: 1.27)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner

J. C. FINCH,
Secretary.

Bids: July 18.

Water Supply for Fire Protection

Raybrook, N. Y.

Under the provisions of Chapter 106 of the Laws of 1922 sealed proposals for the construction and instalation of additions and alterations to the water supply of the New York State Hospital for Incipient Tuberculosis at Raybrook, N. Y., including intake pipes, pumps, force mains, hydrants, hydrant houses, fire hose and appurtenances, will be received by the Board of Trustees of said State Hospital at the office of the State Engineer and Surveyor, Telephone Building, Albany, N. Y., until 12 o'clock noon (Eastern standard time) on Tuesday, July 18, 1922, when they will be publicly opened and read.

Each proposal must be addressed to the Board of Trustees of the New York State Hospital for Incipient Tuberculosis, care of the State Engineer and Surveyor, Telephone Building, Albany, N. Y., and on the outside of the envelope must be clearly and conspicuously written "Sealed proposal for water supply construction at Raybrook."

Proposals shall be made on blank forms furnished for the purpose and shall be accompanied by a draft or certified check in the sum of five per cent (5%) of the amount of the proposal. The person or persons whose proposal shall be accepted will be required to execute the contract and furnish a "faithful performance bond" in an amount of not less than thirty per cent (30%) and a "labor bond" in an amount of not less than ten per cent (10%) of the amount of the contract within ten (10) days of the notice of award of the contract in accordance with the terms of the specifications.

The right is reserved to reject any and all bids.

Plans, specifications and forms of proposal and contract may be examined in the offices of the Board of Trustees of the New York State Hospital for Incipient Tuberculosis at Raybrook, N. Y., of the State Engineer and Surveyor, Telephone Building, Albany, N. Y., and of the State Engineer and Surveyor, Pier 6, East River, New York City, and specifications and forms of proposal and contract may be obtained from the State Engineer and Surveyor, Telephone Building, Albany, N. Y.

Blueprint copies of plans, consisting of sheets 1 to 8 inclusive, may be obtained from the State Engineer and Surveyor, Telephone Building, Albany, N. Y., upon payment of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints that may be returned.

The deposits of bidders, other than the one to whom the award of contract shall be made, will be returned immediately after the award has been made.

The award, if made, will be to the lowest responsible bidder and the successful bidder will be required to satisfy the Board of Trustees of his ability to provide suitable equipment and materials for the proper performance of the work.

Board of Trustees, New York State
Hospital for Incipient Tuberculosis,
By JOHN HURLEY, President.
Dated, July 1, 1922.

Bids: July 13.

Highway Work

Somerville, N. J.

Notice is hereby given that sealed bids will be received by the Borough of Somerville for the following: Construction of State Highway, Route No. 9, Section 0,7, Main Street, Somerville. Estimated amounts are as follows: Reinforced Cement Concrete Pavement, 12,933 sq.yd.; Armored Cement Concrete Curbing, 5,283 lin.ft. New Granite Block on a cement concrete foundation is 3,076 sq.yd.

Work is to be performed under Reimbursement Act, Chapter 246, laws of 1921.

Bids will be received at the Borough Hall at Somerville, N. J., on Thursday, July 13, 1922, at 7 p.m. (Standard Time).

Drawings, specifications and form of contract and bond of the proposed work are on file in the office of W. J. Hardin, Borough Engineer, at Newton, N. J., and Borough Collector's Office, Somerville, N. J., and in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of ten dollars ($10) upon application to W. J. Hardin, Borough Engineer. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, enclosed in sealed envelopes, addressed to the Mayor and Council of the Borough of Somerville, and bearing the name and address of the bidder and the name and section of the route on the outside. Bids must be accompanied by a certified check drawn to the order of J. K. Brokaw, treasurer, for not less than ten per cent (10%) of amount of the bid, provided that said certified check shall not be less than $500 nor more than $20,000, and be delivered at the above place on or before the hour named. Copies of the standard proposal form will be furnished on application to W. J. Hardin, Borough Engineer, or J. K. Brokaw, Borough Treasurer.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a statement of equipment properly filled out.

By order of a resolution of the Common Council of the Borough of Somerville passed at a meeting held on Monday, June 19, 1922.

(Signed) J. B. VARLEY,
Borough Clerk.

Bids: July 18.

Street Paving

Kennett, Mo.

Sealed bids will be received by the Mayor and Council of the City of Kennett, Missouri, at the Office of the City Clerk, up to 7 o'clock p.m. on the 18th day of July, 1922, and will then be publicly opened and read.

The approximate quantities on this work are as follows: 6,520 cu.yds. earth excavation, 30,225 sq.yds. reinforced concrete pavement, 15,545 linear feet of concrete integral curbing 390 cu.yds. concrete for manholes and sewers, 36,430 lbs. of reinforcing steel, 3,910 lbs. of iron castings, 780 feet 12" vitrified pipe.

Plans and Specifications are on file at the office of the City Clerk or at the office of the Engineers, and copies of same can be obtained from the Engineers on receipt of $3.00.

A certified check or bidder's bond in the sum of One Thousand Dollars must accompany all proposals, check or bond to be made payable to the order of the Mayor.

All bids must be made on forms furnished by the Engineer; informal bids will not be considered.

The right is reserved to reject any or all bids:

J. W. KARSTEN, Mayor.
DAVE STROUD, Clerk.
C. E. SMITH & CO., Engineers,
Cape Girardeau, Mo.

Bids: July 18.

Paving

Miami, Fla.

Sealed proposals will be received by "The Commission of the City of Miami, Florida," at the City Hall in Miami, Florida, until 11 a.m., at the regular meeting of the Commission, Tuesday, July 18th, 1922, for the construction of Bituminous Macadam Pavement.

The work will consist of: 170,819 square yards of bituminous macadam paving, and will be divided into 8 contracts. The bidder can bid on any or all of these contracts.

The improvements are to be constructed and payment therefor is to be made under Section 56 of the City Charter.

All bids must be upon blank forms provided in the proposal, specifications and contract.

Each bid must be accompanied by a certified check for 2½ per cent of the amount of the bid to insure the execution of the contract as provided by Section 56 of the City Charter.

The City reserves the right to reject any or all bids.

Plans and specifications will be on file at the City Hall in the office of the City Manager.

Copies of proposals, specifications and contract can be obtained from the office of Chas. W. Murray, Director of Public Service, on deposit of $10.00, which will be refunded to those who submit bona fide bids.

F. H. WHARTON,
City Manager.

Bids: July 11.

Concrete Filter Plant Substructures Contract No. 1

Buffalo, N. Y.

Sealed proposals for the construction of a coagulating basin, clear water reservoir, filter boxes, substructure of pumping station, conduits and other appurtenances in connection with the filter plant for the City of Buffalo, N. Y., will be received by the Commissioner of Public Works at his office in the Municipal Building, Buffalo, N. Y., until eleven a.m., daylight saving time, on Tuesday the eleventh day of July, 1922.

Copies of the plans and specifications may be seen at the office of the Engineer of the Filtration Division, Bureau of Water, Porter Avenue, Buffalo, N. Y., and copies of the plans, specifications, contract and form of proposal may be obtained at this office upon the deposit of $25.00 for each set furnished, which sum will be refunded if the plans and specifications are returned within 30 days after bids have been received and acted upon. Plans and specifications may also be seen at the office of Fuller & McClintock, Consulting Engineers, 170 Broadway, New York.

Proposals must be made on the blank forms furnished and must be sealed and endorsed—"Proposal for Filter Plant Substructures." Each proposal must be accompanied by a certified check in the amount of $150,000.00.

The principal estimated quantities are approximately as follows:

Earth excavation, 350,000 cu.yds.
Earth embankment, 110,000 cu.yds.
Rock excavation, 7,000 cu.yds.
Concrete masonry, 50,000 cu.yds.
Steel reinforcement, 3,500 tons.
Placing piping and iron and steel work furnished by the City, 580 tons.

The principal structures are a reinforced concrete coagulating basin about 304 ft. x 408 x 26 ft. average depth, a reinforced concrete clear water reservoir 330 ft. x 510 ft. x 25 ft. average depth, and 40 reinforced concrete filter boxes each about 33 ft. x 50 ft. x 9 ft. deep.

The work is located in the City of Buffalo, on the water front south of Jersey Street.

The City reserves the right to reject any or all bids in case this is deemed to be for the interest of the City.

GEORGE C. ANDREWS,
Engineer, Filtration Division.

Bids: July 17.

Alterations and Repairs to Office Buildings

New York City.

Sealed proposals for Alterations and Repairs, etc. (Painting Work) to Office Buildings, Department of Labor, New York City, will be received by Hon. Henry D. Sayer, Industrial Commissioner, 124 East 28th St., New York City, until 1 o'clock p.m. (Standard Time), on Monday, July 17, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3921. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Office of the New York State Industrial Commissioner, 124 East 28th St., New York City, at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: June 30, 1922.

Bids: July 14.

Highway—Route No. 1
Section No. 14

Trenton, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commission of New Jersey for the construction of the following:

Route No. 1—Section No. 14 from Stelton Road to Metuchen, Middlesex County; estimated amount of Warrenite Bitulithic Pavement on a nine (9) inch Portland Cement Concrete foundation, 49,855 Square Yards.

Bids will be received at the office of the State Highway Commission, at the Broad Street Bank Building, Trenton, New Jersey, on Friday, July 14th, 1922, at 11 A.M., Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars ($10.00) upon application to the State Highway Department, 9th floor, Broad Street Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated therein and as required by the 1922 specifications, same to be enclosed in sealed special addressed envelopes bearing the name and address of bidder and the name and section of the route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that said certified check shall not be less than $500.00 or more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal from and special addressed envelope will be furnished on application. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: July 11.

Street Paving

Newton, N. J.

Notice is hereby given that sealed bids will be received by the Town of Newton for the paving of High Street in the Town of Newton, Sussex County, with a reinforced concrete pavement. Estimated amount of surface pavement required is 8,355 square yards and opened and read in public at the Freeholders office, Newton, N. J., on July 11, 1922, at 10:30 a.m., Standard Time.

"Drawings, specifications and forms of bid, contract and bond for the proposed work prepared by W. J. Hardin, Town Engineer, and approved by the State Highway Commission have been filed in the office of the said Engineer at Newton, N. J., and of the said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specification and blue prints of the drawings by the Engineer on proper notice and payment of the cost of preparation. Bids must be made on the Standard proposal form in the manner designated therein and required by the specifications. Must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of the road on the outside. Addressed to the Town of Newton, Newton, N. J., and must be accompanied by a Surety Company Certificate and a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and on the hour above named. The Standard Proposal Form is attached to the specifications, copies of which will be furnished on application to Engineer.

"By order of the Town Committee of the Town of Newton."

(Signed) J. R. CORNELL, Clerk.

Bids: July 12.

Road Work

Atlantic City, N. J.

Sealed bids will be received by the Board of Chosen Freeholders of Atlantic County, N. J., at 12 o'clock noon (Daylight Saving Time) on July 12, 1922, during a regular meeting of said Board at the Freeholders' meeting room in the Guarantee Trust Bldg., Atlantic City, N. J., for the reconstruction of a section of Mays Landing-Downstown Road known as Hamilton Township Section, in the County of Atlantic and State of New Jersey, with a Warrenite-Bitulithic pavement on a six inch 1-3-5 concrete base; estimate amount of surface pavement and concrete base required is 88,070 sq.yd., together with gravel shoulders, excavation and embankment, drainage provisions, guard rail and other items; said bids to be opened and read in public at the aforesaid time and place.

Drawings, specifications and form of bid, certificate of surety, contract and bond, covering proposed work, are on file in the office of the County Engineer at 636 Guarantee Trust Bldg., Atlantic City, N. J., where they may be inspected and a prospective bidder may secure a copy of the specifications and blueprints of the plans upon the deposit of $10, and this deposit will be refunded provided the plans and specifications are returned to the County Engineer's Office in good condition by noon on July 12, 1922. Each bid must be made on the standard proposal form in the manner required by the specifications and must be accompanied by a certified check, or cash, in the amount of $20,000.

A contract will be awarded, if awarded at all, within one month of the date of receiving bids and such award will be made subject to the sale and delivery of bonds to be issued for the purpose of financing the reconstruction. The right is reserved to reject any or all bids.

By Order of the Board of Chosen Freeholders of Atlantic County, N. J.

F. W. WILLETTS, Clerk

This Advertising Costs Little

The cost of giving contracts NATIONAL publicity through the Official Proposal Columns of *Engineering News-Record* is only 40 cents a line an insertion. Figured on a circulation basis, the cost per line per thousand readers (1⅓ cents) is extremely small, compared with the cost of other forms of publicity and the possibility of large waste distribution through publications of limited or general circulations. A single lower bid may save the cost of the advertising many times over.

Bids: July 17.

Heating, Plumbing and Electrical Work

Urbana, Ill.

Sealed proposals for the Heating and Ventilating, Plumbing and Electrical Work on the New Agricultural Building to be erected for the University of Illinois at Urbana, will be received at the office of James M. White, Supervising Architect, 256 Administration Building, Urbana, up to 3:00 p.m., Monday, July 17, 1922.

Plans and specifications may be obtained after June 30th from the office of the Supervising Architect upon deposit of Ten Dollars ($10.00).

Bids: July 18.

Concrete Flood Gate and Appurtenances

Little Rock, Ark.

Sealed proposals will be received by the Secretary of the Farelly Lake Levee District at the Marion Hotel, Little Rock, Ark., until 2 p.m., Tuesday, July 18, 1922, for the construction of a Concrete Flood Gate and Appurtenances at Big Bayou Meto, Gillett, Arkansas County, Ark. Following are the approximate quantities:

Excavation	50,000	cu.yd.
Round foundation piles	24,000	lin.ft.
Steel sheet pile cut off walls	20,000	sq.ft.
Concrete	6,500	cu.yd.
Reinforcing steel	200	tons
Gates and accessories	150	tons
Hand rail, 2-in. GI pipe and fittings	1,500	lin.ft.
Hand rail, 1½-in. GI pipe and fittings	1,000	lin.ft.
Hoisting apparatus	30	tons

Detail plans, specifications and blank forms of proposal are on file at the office of A. W. Dobyns, Attorney, Little Rock, Ark., and at the office of Ayres & Miller, McCall Building, Memphis, Tenn.

Detail plans, specifications and proposal forms will be furnished upon application accompanied by a certified check for twenty ($20) dollars.

Each proposal shall be accompanied by a certified check for fifteen thousand ($15,000) dollars made payable to the Secretary of the Board.

This check is to be conditioned that, if the bid is accepted, a contract will be entered into and the performance of same secured within ten (10) days after notification of acceptance of bid. Successful bidder will be required to furnish a surety bond in an acceptable surety company in the sum of fifty (50%) per cent of the contract price.

The right is reserved to reject any or all bids and to waive any technical defects, as the interests of the district may require.

The Engineers, or their assistants, will be at Gillett, Ark., from July 10 to July 15 to show prospective bidders over the work.

JOHN M. GRACIE, Chairman
Board of Commissioners.

J. B. QUINN, Secretary,
Gillett, Arkansas.
AYRES & MILLER, Engineers,
McCall Building, Memphis, Tennessee.

Bids: July 19.

Excavation of Reservoir

Saugerties, N. Y.

Sealed proposals for the excavation of about thirty thousand cubic yards of material, the cleaning and necessary additional excavating for and the laying of an eighteen inch temporary water main for a distance of about eight hundred feet, the construction of a cofferdam across the inlet and other work incidental to the increasing the present storage capacity of the Saugerties Village Reservoir situated at Blue Mountain in the Town of Saugerties, County of Ulster, N. Y., will be received by the Board of Water Commissioners of the Village up to two o'clock daylight savings time, in the afternoon on the 19th day of July, 1922, at their office on Market Street, Saugerties, N. Y., at which place and hour the bids will be publicly opened and read.

Specifications, proposal blanks, forms of contract and bond and information for bidders may be seen at the Board of Water Commissioners, Market Street, Saugerties, N. Y., and copies of same may be obtained upon application to J. F. Loughran, Civil Engineer, Kingston, N. Y., upon deposit of five dollars, which deposit will be refunded when specifications are returned in good condition.

A certified check of five per cent (5%) of the amount of the bid made payable to the Board of Water Commissioners, Saugerties, N. Y., must accompany the bid as a guarantee that the contract will be entered into if awarded.

A bond in the sum of one hundred per cent (100%) of the contract price will be required.

The Board of Water Commissioners reserve the right to reject any or all bids as it may deem to be for the best interest of the Village of Saugerties, N. Y.

J. CHARLES SUDERLEY,
President.
E. CLARK REED, Secretary.
J. F. LOUGHRAN, Engineer.
Dated: June 9, 1922.

OFFICIAL PROPOSALS

Bids: July 24.

Disposal Works

Hackensack, N. J.

The Hackensack Improvement Commission, the governing body of the City of Hackensack, Bergen County, New Jersey, request proposals for the construction and equipment of disposal works, flotation basins, force mains, a pumping station and certain other works, establishments and fixtures appurtenant thereto.

The foregoing works are more particularly described and set forth in the plans and specifications on file with Lemuel Lozier, Engineer of the Commission, and with the Clerk of the Commission.

The plans and specifications, information for bidders, forms of proposals and contracts, forms of bonds required, and other information can be seen at the office of Lemuel Lozier, Engineer of the Commission, Room 3, Bank Building, Main and Mercer Streets, Hackensack, New Jersey; copies of such plans and specifications may be obtained by bidders on making a dèposit of $100, which deposit will be refunded upon the return of the plans and specifications in good condition.

All bids must be made upon a form of proposal to be obtained from the Engineer of the Commission, and must give the prices both in writing and figures, and must give such other information and be signed in the manner indicated on the form of proposal. All bids shall be accompanied by a certified check for $10,000 payable to the "Hackensack Improvement Commission."

Checks of the unsuccessful bidders will be returned immediately upon the award of the contract. The check of the successful bidder will be returned to the bidder upon the execution of the contract and the furnishing of the bonds required, within ten days after the date of the award thereof, or within such extended time as may be determined by the Commission. In case of failure to execute the required contract, and furnish the required bonds within such time, such check shall be forfeited to the Hackensack Improvement Commission as liquidated damages.

The proposals herein required shall be presented to the Hackensack Improvement Commission, at the Municipal Building, 346 State Street, Hackensack, Bergen County, New Jersey, on Monday, the 24th day of July, 1922, at 8 p.m., Daylight Saving time, 7 p.m. Standard Time.

No bids will be received prior to said hour, and none thereafter. The proposals shall be submitted in sealed envelopes or packages as follows:

"Proposal for Sewage Disposal Plant, Contract No. 1."

The Hackensack Improvement Commission reserves the right to reject any or all bids.

HACKENSACK IMPROVEMENT COMMISSION,
SPENCER D. BALDWIN, Mayor.
WILLIAM SCHAAF, Clerk.

Bids: July 18.

Water Works Improvements

Wilmington, N. C.

Sealed proposals will be received until 12 o'clock noon on the 18th day of July, 1922, at the office of the Commissioner of Public Works, Wilmington, N. C., for furnishing materials for and the work of constructing additions to the present water purification plant and extending the water intake line approximately two miles.

The work will include approximately 650 ft. of 24 in. cast iron ball and socket pipe laid under the Cape Fear River at a depth of 36 ft. and also 10,350 ft. of 42 in. wood, cast iron, or concrete pipe laid at an average depth of approximately 9 ft. below water level to Toomers Creek.

Bids will be considered on parts of the work separately or on the furnishing of materials independent from the construction work.

A certified check to the amount of 5% will be required with each bid and the right is reserved to reject any or all bids.

Plans and specifications may be obtained upon a deposit of $10.00 from the Carolina Engineering Co., Engineers, 412 Southern Building, Wilmington, N. C., or from

R. C. CANTWELL,
Commissioner of Public Works.
June 21, 1922.

OFFICIAL PROPOSALS

Bids: July 11.

Wells and Switch Board

Atlantic Highlands, N. J.

Sealed bids will be received by the Mayor and Council of the Borough of Atlantic Highlands, New Jersey, at their regular meeting, Tuesday evening, July 11th, at 8 o'clock p.m. for the installation of a 6-panel Switch Board with instruments, bus bars and necessary wiring, to work in conjunction with our present switch board, and to be so equipped as to take care of outside current that may be purchased. Also for the sinking of two wells, each 18 inches in diameter of an approximate depth of from 110 to 125 feet, complete with necessary piping and strainer, with a guarantee flow of water of at least 800 gallons per minute from each; also for the installation of two 400 gallon pumps, to be set on above stated wells.

Plans and specifications for the above can be had by applying to D. S. Miller, Consulting Engineer, Room 359, 50 Church St., New York City.

The Mayor and Council is also open for any other proposition that will guarantee a supply of water sufficient for our requirements, the bidders to furnish complete plans and specifications of what they will install.

The Mayor and Council reserve the right to reject one or all bids, according to specifications furnished by the Consulting Engineer and also reserve the right to reject any or all bids that may be furnished on any other nature, and they also reserve the right to accept any one particular proposition that they may deem advisable for the betterment and the safety of the public welfare of the Borough of Atlantic Highlands.

All bidders, whether bidding on all or a part of the above, will be required to furnish a 10% certified check of the amount of their bid.

HARRY A. KRIDEL, Clerk.

Bids: July 14.

Highway Route No. 9
Section 9a

Belvidere, N. J.

Notice is hereby given that sealed bids will be received by the County of Warren for the following: Construction of State Highway Route No. 9, Section No. 9a, Still Valley to Bloomsbury. Estimated amount of reinforced coment concrete pavement is 35,050 square yards.

Work is to be performed under County Reimbursement Act, Chapter 183, laws of 1918, and amended by Chapter 317, laws of 1920.

Bids will be received at the Court House at Belvidere, N. J., on
FRIDAY, JULY 14, 1922, AT 1 O'CLOCK P.M., STANDARD TIME.

Drawings, specifications and form of contract and bond for the proposed work are on file in the office of Harry W. Vetter, County Engineer, at Belvidere, N. J., and in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of ten dollars ($10.00) upon application to Harry W. Vetter, County Engineer. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, enclosed in sealed envelopes, addressed to the Board of Chosen Freeholders of the County of Warren and bearing the name and address of the bidder and the name and section of the route on the outside. Bid must be accompanied by a certified check drawn to the order of H. O. Carhart, County Treasurer, for not less than ten per cent (10%) of amount of the bid, provided that **said certified check** shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form will be furnished on application to Harry W. Vetter, County Engineer.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a statement of equipment properly filled out.

By order of a resolution of the Board of Chosen Freeholders of the County of Warren passed at a meeting held on June 14, 1922.

MORRIS S. FAUST, Clerk.

OFFICIAL PROPOSALS

Bids: July 18.

Pier Sheds and Grain Conveyor Gallery

CONTRACT No. 10

Portland, Maine.

Sealed bids for the construction of the North and South Sheds and Grain Conveyor Gallery at and near the State Pier, Portland, Maine, will be received by the Directors of the Port of Portland and by the Grand Trunk Railway Company of Canada at the office of the Directors, 67 Commercial Street, Portland, Maine, until 1 p.m., Eastern Standard Time (2 p.m. Daylight Saving Time) on Tuesday, July 18, 1922, at which time and place the bids will be publicly opened and read aloud.

The pier sheds will have steel frames with wooden roofs and the North Shed will have a wooden floor on steel stringers. The Grain Conveyor Gallery will have steel frame and concrete floor. The siding of both sheds and the Grain Conveyor Gallery will be of asbestos protected metal.

Before the award of the contract any bidder may be required by the Directors to show that he has the necessary experience, ability, equipment and financial resources to perform the work within the time stipulated and in a manner satisfactory to the Engineer.

The bid must be accompanied by a properly certified check for the sum of twenty thousand ($20,000) dollars.

A bond in the sum of one hundred fifty thousand ($150,000) dollars of a surety company satisfactory to the Directors, will be required for the faithful performance of the contract.

A more complete description of the work to be done is given in the Notice to Bidders, the forms of Bid, Contract, Bond, the Specifications and the Contract Drawings.

Copies of the foregoing may be inspected at the office of the Directors of the Port of Portland, at Portland, and may be obtained from the Engineers, Fay, Spofford & Thorndike, Boston, Mass. The address of the Engineer up to and including June 30 is 15 Beacon Street, Boston 9, Mass., and on and after July 1, 200 Devonshire Street, Boston 9, Mass.

A charge of fifteen ($15) dollars will be made for a complete set of the Notice to Bidders, forms of Bid, Contract, Bond, the Specifications and the Contract Drawings.

Receipt of bids will be subject to the conditions stated in said Notice to Bidders.

The right is reserved to reject any or all bids.

HENRY F. MERRILL, President.
BERTRAND G. McINTIRE,
FRED W. BUNKER,
JAMES Q. GULNAC,
ALEXANDER T. LAUGHLIN,
Directors of the Port of Portland.
FAY, SPOFFORD & THORNDIKE,
Engineers.
June 17, 1922.

Bids: July 18.

Sewer

Nashville, Tenn.

Office of the Board of Public Works, Nashville, Tenn., June 27, 1922.

Notice is hereby given that sealed proposals will be received at the office of the City Clerk until 2 o'clock p.m., Tuesday, July 18, 1922, for constructing section 4 of the Brown's Creek interceptor sewer, from the upper end of section 3, thereof (station 67 plus 90.0) and extending thence southerly, approximately parallel with Brown's Creek to the outfall of Sandy Bottom trunk sewer on the west bank of said Creek (station 34 plus 00.0) as per plans and specifications to be seen in the office of the City Engineer. Consisting of about 3,400 lineal feet of circular brick sewer ranging in diameter from 66 inches to 45 inches.

Approximate excavation 8,300 cubic yards (both earth and rock).

Approximate brick work 824 M.
and necessary interceptor bleeders, manholes, connections, etc.

Specifications and proposals will be furnished to bidders upon application to City Engineer, W. W. Southgate.

A certified check for $1,500.00 or cash equivalent, must accompany each bid. Said check or money will be returned to unsuccessful bidders upon award of contract, and to successful bidders when they have made approved bond for the faithful performance of their contract. The right is reserved to eject any and all bids. By order of the Board of Public Works.

FELIX Z. WILSON, Mayor.
Attest: S. H. McKAY, City Clerk.

OFFICIAL PROPOSALS

Bids: Aug. 15.

Hydro-Electric Project

Dotham, Ala.

Sealed proposals will be received by the Mayor and City Council of the City of Dothan, Alabama, until 2 o'clock p.m., Tuesday, August 15th, 1922, for constructing a Hydro-Electric Project with appurtenances, and furnishing materials and equipment, at High Bluff on the Choctawhatchee River about eight (8) miles from Hartford, Ala., in sections 9 and 4 of township 2N, Range 23E, Geneva County, Alabama. The work consists of the construction of an earth dam, a concrete spillway, abutments and power house, and the furnishing and placing of machinery.

The principal approximate quantities involved are the following:

51,000 cu.yds. of excavation.
380,000 cu.yds. of embankment.
18,500 cu.yds. of concrete of different classes.
1,900,000 pounds of reinforcing steel.
354,000 pounds of structural steel work.

Turbines, generators, transformers and auxiliary power house equipment for a present installation of approximately 3,000 bhp. capacity in two units.

A transmission line twenty-one and one-half (21½) miles long at 44,000 volts pressure.

Plans and specifications are on file at the office of the City Clerk at Dothan, Alabama, and at the office of The Ludlow Engineers at Winston-Salem, N. C., where they may be examined by prospective bidders.

Copies of the plans covering the construction details of this project and two copies of the specifications attached to the form of proposal and contract will be furnished by The Ludlow Engineers, Winston-Salem, N. C., upon application by prospective bidders accompanied by a check for twenty-five ($25.00) dollars to cover the cost, or, separate prints, and extra copies of specifications and form of proposal, etc., at one ($1.00) dollar each.

Each bid must be accompanied by a certified check for approximately five (5%) per cent of the bid.

Proposals will be received at the City Hall, Dothan, Alabama, and opened publicly wih the right reserved to accept any bid or to reject any or all bids as the best interests of the City may appear.

Plans and supervision by THE LUDLOW ENGINEERS, INC. Winston-Salem, N. C.
E. O. JONES, Mayor.
R. W. LISENBY, City Clerk.

Bids: July 17.

Curb and Gutter

Richmond, Va.

Sealed proposals will be received at this office until 12 o'clock noon, July 17th, for the following work which may be awarded in whole or in part; grading and the construction of curb and gutter in various streets covering an expenditure of approximately $30,000. Before plans and specifications are delivered a check for $10.00 must be deposited with the Director of Public Works which will be returned provided a bona fide bid is made by the bidder at the opening date.

Forms of proposals can be obtained on application.

A certified check for amount stated on proposals must accompany each bid as a guaranty of execution of contract. The Director of Public Works reserves the right to reject any and all bids.

ALLEN J. SAVILLE,
Director of Public Works.

Bids: July 10.

Sewer Pumping Station

Hammond, Ind.

The City of Hammond, Indiana, through its Board of Public Works will receive bids up to 2 o'clock p.m., July 10th, 1922, for building and equipping a Sewer Pumping Station.

Plans and specifications may be gotten from W. F. Bridge, Engineer, Hammond, Indiana.

Estimate, $236,802.62.

DELLA MILLER, Clerk.
Board of Public Works, City of Hammond, Indiana.

OFFICIAL PROPOSALS

Bids: July 26.

Concrete Wharf and Transit Shed Foundation

Tampa, Fla.

Sealed bids will be received by the City Commission of the City of Tampa until twelve o'clock noon on the 26th day of July, 1922, for furnishing all materials, labor and equipment necessary to construct a reinforced concrete wharf and transit shed foundation at the municipal slip on the Estuary in the City of Tampa, according to the plans and specifications on file in the office of the City Manager, copies of which may be obtained upon application, for the sum of Ten Dollars ($10.00), payable in advance.

Each bid must be accompanied with a certified check for five percent (5%) of the amount of the bid, payable to the City Clerk of the City of Tampa, to be retained by the City Commission until the contract is awarded and acceptable bonds filed, at which time checks will be returned to the unsuccessful bidders.

The right to reject any or all bids within forty-five (45) days from the date herein specified is reserved by the Commission.

Bidders are requested to examine the location before submitting bids.

Following are the estimated approximate quantities:

(a) Wood sheet pile bulkhead, length 2,288 lineal feet.
(b) Wood piles for retaining wall and pedestal foundation. Number of piles 879.
(c) Lumber for bulkhead caps, wales and flooring. Number of feet B. M. 102,614.
(d) Concrete for bulkhead, retaining wall and foundation pedestals. Number of cubic yards 2,186.
(e) Concrete platform piles. Lineal feet 19,526.
(f) Straight concrete plaform, thirty (30) feet wide, with railroad track. Number of lineal feet 1,476.
(g) Straight concrete platform, thirty (30) feet wide, without railroad tracks. Number of lineal feet 695.
(h) All concrete platform other than straight work. Number of square feet of platform 3,848.
(i) Rock fill. Number of cubic yards 15,000.
(j) Earth fill. Number of cubic yards 40,000.
(k) Sewer outlet 36 in. cast iron pipe. Number of lineal feet 84.

R. D. MARTIN, City Engineer.
A. W. D. HALL, City Manager.
SIGNED: C. H. BROWN,
Mayor-Commissioner.
ATTEST: WM. E. DUNCAN,
City Clerk.

ATTENTION CONTRACTORS

EXCAVATION TO SUB-LET

46,000 yards Unclassified Excavation Northern West Virginia. About half Steam Shovel work. Job 8 miles long. Two miles side hill relocation.

KENNEDY CONSTRUCTION CO.
Parkersburg, W. Va.

OFFICIAL PROPOSALS

Bids: July 21.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m., advanced standard time which is twelve o'clock noon eastern standard time, on Friday, the 21st day of July, 1922, for the improvement of the following in Cattaraugus County.

Highway No. 8018-A. Bradford-Carrollton, Part 2 (Carrollton Bridge). The work to be done under this contract includes seven spans of steel trusses weighing approximately 1,150,000 lbs. with six concrete piers and two abutments. The approximate length of steel structure is 895 feet and the roadway is 20 feet in width, surfaced with wood block on a reinforced concrete floor. Also for the improvement of the following highways:

Allegany......	(two highways: 2.77 & 8.35)
Fulton...............	(one highway: 4.23)
Oneida...............	(one highway: 2.75)
St. Lawrence.........	(one highway: 7.73)
Steuben..............	(one highway: 1.01)
Wayne...............	(one highway: 1.65)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.

J. C. FINCH,
Secretary.

Bids: July 18.

Sidewalk Construction

Miami, Fla.

Sealed proposals will be received by "The Commission of the City of Miami, Florida," at the City Hall in Miami, Florida, until 11 a.m. at the regular meeting of the Commission, Tuesday, July 18th, 1922, for the construction of Concrete Sidewalks.

The work will consist of: Approximately 24,683 square yards of concrete sidewalk, and will be divided into 2 contracts. The bidder can bid on any or all of these contracts.

The improvements are to be constructed and payment therefor is to be made under Section 56 of the City Charter.

All bids must be upon blank forms provided in the proposal, specifications and contract.

Each bid must be accompanied by a certified check for 2½ per cent of the amount of the bid to insure the execution of the contract as provided by Section 56 of the City Charter.

The City reserves the right to reject any or all bids.

Plans and specifications will be on file at the City Hall in the office of the City Manager.

Copies of proposals, specifications and contract can be obtained from the office of Chas. W. Murray, Director of Public Service, on deposit of $10.00, which will be refunded to those who submit bona fide bids.

F. H. WHARTON,
City Manager.

Inefficiency Is As Unnecessary As It Is Unwelcome

¶Have you any idea what it costs to have an inefficient Contract Bond Service? ¶Have you ever needed a Bid or Contract Bond in record time and be disappointed in getting it? ¶Have you ever tried to increase the amount of your bond only to find your broker could not do it? ¶These things do not occur when your case is properly prepared and intelligently presented to the underwriters. ¶Proper preparation and presentation means efficiency and requires the services of a Contract Bond Specialist. ¶Swart Service is exactly that and costs you no more than the inefficient sort. ¶There can be but one answer to such an argument. An interview will avail much and cost you nothing.

HARMON V. SWART
Contract Bonds Compensation Insurance
92 William Street, New York

OFFICIAL PROPOSALS

Bids: July 21.

Highway Route No. 5—Section No. 8

Belvidere, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the County of Warren for the following: Construction of State Highway Route No. 5, Section No. 8, Great Meadows—Barkers Corner. Estimated amount of reinforced Portland Cement Concrete Pavement is 34,522 square yards.

Work is to be performed under County Reimbursement Act, Chapter 183, laws of 1918, and amended by Chapter 317, laws of 1920.

Bids will be received at the Court House at Belvidere, N. J., on

FRIDAY, JULY 21, 1922 AT 1 O'CLOCK P.M., STANDARD TIME.

Drawings, specifications and form of contract and bond for the proposed work are on file in the office of Harry W. Vetter, County Engineer, at Belvidere, N. J., and in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of ten dollars ($10.00) upon application to Harry W. Vetter, County Engineer. Bids must be made on the standard Proposal forms in the manner designated therein and as required by the specifications, enclosed in sealed envelopes addressed to the Board of Chosen Freeholders of the County of Warren and bearing the name and address of the bidder and the name and section of the route on the outside. Bids must be accompanied by a certified check drawn to the order of H. O. Carhart, County Treasurer, for not less than ten percent (10%) of amount of the bid, provided that said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form will be furnished on application to Harry W. Vetter, County Engineer.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a statement of equipment properly filled out.

By order of a resolution of the Board of Chosen Freeholders of the County of Warren passed at a meeting held on June 28, 1922.

MORRIS S. FAUST, Clerk.

Bids: July 18.

Sewer

Miami, Fla.

Sealed proposals will be received by "The Commission of the City of Miami, Florida," at the City Hall in Miami, Florida, until 11 a.m. at the regular meeting of the Commission, Tuesday, July 18th, 1922, for the construction of Sanitary Sewers.

The work will consist of: Furnishing and laying approximately

65,000 feet 8" pipe.
4,000 feet 10" pipe.
3,000 feet 12" pipe.
1,500 feet 15" pipe.
with necessary manholes and flush tanks.

and will be divided into 3 contracts. The bidder can bid on any or all of these contracts.

The improvements are to be constructed and payment therefor is to be made under Section 56 of the City Charter.

All bids must be upon blank forms provided in the proposal, specifications and contract.

Each bid must be accompanied by a certified check for 2½% of the amount of the bid to insure the execution of the contract as provided by Section 56 of the City Charter.

The City reserves the right to reject any or all bids.

Plans and specifications will be on file at the City Hall in the office of the City Manager.

Copies of proposals, specifications and contract can be obtained from the office of Chas. W. Murray, Director of Public Service, on deposit of $10.00, which will be refunded to those who submit bona fide bids.

F. H. WHARTON,
City Manager.

OFFICIAL PROPOSALS

Bids: July 14.

Highway—Route No. 1 Section No. 13

Trenton, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commission of New Jersey for the construction of the following:

Route No. 1—Section No. 13 from Highland Park to Stelton Road, Middlesex County; estimated amount of Warrenite Bitulithic Pavement on a nine (9) inch Portland Cement Concrete foundation, 32,811 Square Yards.

Bids will be received at the office of the State Highway Commission at the Broad Street Bank Building, Trenton, New Jersey, on Friday, July 14th, 1922, at 11 A.M. Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract, and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars ($10.00) upon application to the State Highway Department, 9th floor, Broad Street Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated therein and as required by the 1922 specifications, same to be enclosed in sealed special addressed envelopes bearing the name and address of bidder and the name and section of the route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that said certified check shall not be less than $500.00 or more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard porposal form and special addressed envelope will be furnished on application. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: July 31.

Concrete Paving

Greenville, N. C.

Sealed bids will be received by the Pitt County Highway Commission, at their office in Greenville, N. C., on Monday, July 31st, 1922, at noon, for the paving with concrete five miles of Highway 16 ft. width, between Greenville and Falkland, and also for paving 7 miles of highway 16 ft. in width, with concrete between Greenville and Cox Mill. Bids will be received for both projects as a whole, and also each project separately. Grading completed.

The Highway Commission offers its Industrial Railway and paving equipment for these projects, and also Convict labor.

Plans and profiles may be seen at the Highway Office in Greenville, N. C.

Certified check for two thousand dollars to accompany bid. The right to reject any or all bids is reserved by the Commission.

By Order of The Pitt County Highway Commission, Greenville, N. C.

J. B. HARDING,
Engineer.

U. S. GOVERNMENT

PROPOSALS FOR ONE MARINE TYPE REFRIGERATING AND ICE MAKING PLANT.—Office, Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn.—Sealed proposals for furnishing and delivering one Marine Type Refrigerating and Ice Making Plant will be received at this office until 11 a.m., July 15, 1922, and then opened. Further information on application.

U. S. GOVERNMENT

PROPOSALS FOR STEEL LADDER, PIPE, ETC.—U. S. Engineer Office, 329 Custom House, New Orleans, La.—Sealed proposals will be received here until 11 a.m., July 17, 1922, and then opened, for constructing and delivering steel ladder, pipe, gears and shafting for U. S. dredge "Gulfport." Further information on application.

U. S. ENGINEER OFFICE, Pittsburgh, Pa. Sealed proposals will be received here until 12 noon (Eastern time) July 19, 1922, and then opened, for furnishing and delivering one steel derrick boat hull. Further information on application.

U. S. ENGINEER OFFICE, Buffalo, N. Y. Sealed proposals will be received here until 11 a.m. (Standard Time), July 17, 1922, and then opened, for constructing rubble mound extension of west breakwater, Ashtabula Harbor, O. Further information on application.

U. S. ENGINEER OFFICE, P. O. Box 72, Louisville, Ky. Sealed proposals will be received here until 2 p.m., Central Time, July 17, 1922, and then opened, for furnishing and delivering Metal Work for Navigable Pass for Dam No. 44, Ohio River. Further information on application.

U. S. ENGINEER OFFICE, P. O. Box 72, Louisville, Ky. Sealed proposals will be received here until 2 p.m., Central Time, July 18, 1922, and then opened for furnishing and delivering steel sheet piling for Dam No. 44, Ohio River. Further information on application.

PROPOSALS FOR STEEL HULL.—U. S. Engineer Office, Montgomery, Ala. Sealed proposals will be received here until 11 A. M., July 31, 1922, and then opened, for furnishing one steel hull for dipper dredge Upatoi. Further information on application.

U. S. ENGINEER OFFICE, Buffalo, N. Y. Sealed proposals will be received here until 11 a.m. (Eastern standard time), July 27, 1922, and then opened, for constructing rubble mound east breakwater extension at Fairport Harbor, O. Further infomation on application.

COMMISSIONERS, D. C., WASHINGTON, June 30, 1922. Sealed proposals will be received at Room 509 District Building, until 2 o'clock P.M., July 17, 1922, for the construction of additional incinerators to the Trash Plant, Mt. Olivet Road at Montello Avenue. For detailed information apply Room 427, District Building. Cuno H. Rudolph, James F. Oyster, Charles Keller, Commissioners, D. C.

COMMISSIONERS, D. C., WASHINGTON, June 30th, 1922. Sealed proposals will be received at Room 509 District Building until 2 o'clock P.M., July 12, 1922, for paving streets and avenues with sheet asphalt. For detailed information apply Room 427 District Building. Cuno H. Rudolph, James F. Oyster, Charles Keller, Commissioners, D. C.

PROPOSALS FOR LEVEE WORK—Office, Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn.—Sealed proposals will be received here until 11 a.m., July 20, 1922, and then opened, for constructing about 690,000 cubic yards of earthwork in the White River Levee District. Further information on application.

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y. Sealed proposals will be received here until 12 m., August 7, 1922 (daylight saving time), and then opened, for dredging and rock removal in Bronx River, N. Y. Further information on application.

UNITED STATES ENGINEER OFFICE, Baltimore, Md. Sealed proposals will be received here until 1 p.m., July 7, 1922, and then opened, for dredging Wicomico River, Maryland. Further information on application.

Why?

WHY do Government regulations specify that contracts for construction, equipment and supplies over a certain minimum amount **must** be advertised?

WHY do the laws of most States and Municipalities specifv the same thing?

WHY do so many private **corporations** advertise their big contracts?

WHY do Consulting Engineers, Architects, and others recommend and endorse the advertising of Contracts To Be Let?

And—

WHY are 90% of the advertisements on which **real national competition** is desired published in ENGINEERING NEWS-RECORD?

In the answers to the foregoing ***questions you*** *will find unquestionable proof that*

1—**Advertised Contracts** are the accepted form of **public letting** to insure the awarding of contracts free of prejudice.

2—**Advertised Contracts** guarantee the greatest possible saving through maximum competition and that—

3—ENGINEERING NEWS-RECORD is universally recognized as the one dominant medium of **national** circulation for advertising Contracts To Be Let.

Are your contracts advertised?
Are they advertised in Engineering News-Record?
If not—WHY?

0083

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
July 17	Barnum, Minn.	July 13
July 18	Gillett, Ark.	June 29
	Adv. June 29 to July 13.	
July 18	Wilmington, N. C.	June 29
July 18	Fayetteville, Tenn.	June 29
July 18	Raybrook, N. Y.	July 6
	Adv. July 6 and 13.	
July 18	Madison, Wis.	July 13
July 19	Saugerties, N. Y.	June 29
July 19	Peru, N. Y.	July 13
July 20	East Orange, N. J.	July 6
July 25	East Syracuse, N. Y.	July 13
July 28	Ebensburg, Pa.	July 13
July 31	Murdo, S. D.	July 13
Aug. 7	Mitchell, S. D.	July 13
	Adv. July 13.	

SEWERS

July 17	Yankton, S. D.	July 6
July 17	Creston, Ia.	July 13
July 17	Redwood City, Cal.	July 13
July 18	Lake Forest, Ill.	June 15
July 18	Newark, N. J.	June 29
July 18	Nashville, Tenn.	July 6
July 18	Miami, Fla.	July 13
	Adv. July 6 and 13.	
July 18	Phila., Pa.	July 13
July 19	Camden, N. J.	June 22
July 20	New York, N. Y.	July 13
July 21	Mt. Kisco, N. Y.	July 13
July 24	Hackensack, N. J.	June 29
July 24	Annville, Pa.	July 13
	Adv. July 13.	
July 25	Oklahoma City, Okla.	July 13
	Adv. July 13.	
July 25	Gloversville, N. Y.	July 13
	Adv. July 13.	
July 26	Louisville, Ky.	July 13
	Adv. July 13.	
July 26	Miami Beach, Fla.	July 13
July 26	Rye, N. Y.	July 13
	Adv. July 13.	
July 27	Brainerd, Minn.	July 13
July 31	Indianapolis, Ind.	July 13
	Adv. July 13.	
Aug. 1	Lake Worth, Fla.	July 13
	Adv. July 13.	
Aug. 2	Avon, S. D.	July 13
Aug. 4	Gregory, S. D.	July 13

WASTE DISPOSAL

July 17	Wash., D. C.	July 6
July 18	New Kensington, Pa.	June 29
July 31	Chatham, Ont.	July 13
	Adv. July 13.	
July 25	Buffalo, N. Y.	June 22

BRIDGES

July 17	Ripley, W. Va.	July 13
July 18	Missouri	July 13
July 19	Alabama	June 29
July 20	Alabama	June 29
July 21	Cobleskill, N. Y.	July 6
	Adv. July 6 and 13.	
July 21	Nashville, Tenn.	July 13
July 24	California	July 13
July 25	Alabama	July 6
July 25	North Carolina	July 6
July 25	North Carolina	July 13
July 26	South Carolina	July 13
July 28	Tennessee	July 13
July 29	Cleveland, O.	July 13
Aug. 4	Seattle, Wash.	June 29
Aug. 29	Wellington, New Zealand	July 13
Oct. 1	Siam	July 13
Oct. 31	Sydney, Australia	Jan. 12

EXCAVATION AND DREDGING

July 18	Beardstown, Ill.	July 13
July 25	Brooklyn, N. Y.	June 29
	Adv. June 29 to July 13.	
July 25	Lawtell, La.	July 13
July 26	Olivia, Minn.	July 13
Aug. 10	Wooster, O.	July 13
	Adv. July 13.	
Aug. 15	Ft. Lauderdale, Fla.	July 13
	Adv. July 13.	

STREETS AND ROADS

Bids Close		See Eng. News-Record
July 14	Ann Arbor, Mich.	June 29
	Adv. June 29 to July 13.	
July 17	Guntersville, Ala.	July 6
July 17	California	June 29
July 17	Ohio	July 6
July 17	Richmond, Va.	July 6
July 17	Redwood City, Cal.	July 13
July 17	Leechburg, Pa.	July 13
	Adv. July 13.	
July 17	St. Paul, Minn.	July 13
July 17	San Rafael, Cal.	July 13
July 17	Illinois	July 13
July 17	Fond du Lac, Wis.	July 13
July 17	Oakville, Ont.	July 13
July 18	Farmersville, Tex.	July 13
July 18	Watertown, Wis.	July 13
July 18	Michigan	July 6
July 18	Quincy, Fla.	June 22
July 18	Moundsville, W. Va.	June 29
July 18	South Carolina	June 29
July 18	Kennett, Mo.	July 13
	Adv. July 6 and 13.	
July 18	Westwood, N. J.	July 13
	Adv. July 13.	
July 18	Miami, Fla.	July 13
	Adv. July 6 and 13.	
July 18	Sanford, Fla.	July 13
July 18	Wisconsin	July 13
July 18	Trenton, N. J.	July 13
July 18	Sterling, Ill.	July 13
July 18	St. Joseph, Mich.	July 13
July 19	Alabama	June 29
July 19	Michigan	June 29
July 19	Rhode Island	July 6
	Adv. July 6 and 13.	
July 19	Michigan	July 6
July 19	Columbus, O.	July 6
July 19	Wisconsin	July 13
July 19	Shawano, Wis.	July 13
July 20	Moundsville, W. Va.	July 13
July 20	North Adams, Mass.	July 13
	Adv. July 13.	
July 20	Edenton, N. C.	July 6
July 20	Anderson, S. C.	July 13
July 20	Huntington, W. Va.	July 13
July 20	Michigan	July 13
July 20	Akron, O.	July 13
July 20	Dayton, O.	July 13
July 21	Portland, Me.	June 29
July 21	Belvidere, N. J.	July 6
	Adv. July 6 and 13.	
July 21	Michigan	July 13
July 21	New York	July 13
	Adv. July 6 and 13.	
July 21	Bushnell, Fla.	July 13
July 21	Athens, O.	July 13
July 21	Tyler, Tex.	July 13
July 21	Thibodoux, La.	July 13
July 22	Palatka, Fla.	June 29
July 22	Columbus, O.	July 13
July 23	Ebensburg, Pa.	July 13
July 24	Ripley, W. Va.	July 13
July 24	California	July 13
July 24	Columbia, Mo.	July 13
	Adv. July 13.	
July 25	Syracuse, N. Y.	June 29
	Adv. June 29 to July 13.	
July 25	Cameron, Tex.	July 13
July 25	Louisiana	July 13
July 25	Alabama	July 6
July 25	Maryland	July 13
	Adv. July 13.	
July 25	North Carolina	July 13
	Adv. July 13.	
July 25	Clarksburg, W. Va.	July 13
July 26	Westfield, Mass.	July 13
	Adv. July 13.	
July 26	Delaware	July 13
	Adv. July 13.	
July 26	Michigan	July 13
July 28	Larned, Kan.	July 13
July 28	Tennessee	July 13
July 29	Wheeling, W. Va.	July 13
July 31	California	July 13
July 31	Greenville, N. C.	July 13
	Adv. July 6 and 13.	
July 31	Washington, Pa.	July 13
	Adv. July 13.	
Aug. 1	Minnesota	July 13
Aug. 1	Oil City, Pa.	July 13
	Adv. July 13.	
Aug. 2	Minnesota	July 13
Aug. 4	Roswell, N. M.	July 13
	Adv. July 13.	
Aug. 9	Ft. Myers, Fla.	July 6
Sept. 19	New Orleans, La.	July 6

INDUSTRIAL WORK

July 15	Cleveland, O.	July 13
July 15	Pittsburgh, Pa.	July 13
July 17	Branford, Conn.	July 13
July 18	Quincy, Fla.	June 22
July 28	Homestead, Fla.	June 29

BUILDINGS

Bids Close		See Eng. News-Record
July 15	Pittsburgh, Pa.	July 13
July 15	Vandergrift, Pa.	July 13
July 16	Mentor, O.	July 13
July 17	Urbana, Ill.	June 15
July 17	Rock Rapids, Ia.	June 22
July 17	Syracuse, N. Y.	June 29
July 17	Fargo, N. D.	June 29
July 17	New York, N. Y.	July 13
	Adv. July 6 and 13.	
July 18	Renfrew, Ont.	July 6
July 18	Cleveland, O.	July 13
July 18	Brooklyn, N. Y.	July 13
July 18	New Britain, Conn.	July 13
July 18	Dalton, Ga.	July 13
July 19	Rosewood, N. C.	July 6
July 20	New York, N. Y.	July 6
July 20	Lincoln, Neb.	July 6
July 20	Hamtramck, Mich.	July 13
July 21	Berkeley, Cal.	July 13
July 21	Clinton, Wis.	July 13
July 21	Atlanta, Ga.	July 13
July 28	Dickinson, N. D.	July 13
July 30	Westwood, N. J.	June 22
Aug. 2	Berkeley, Cal.	July 13
Aug. 2	Brunswick, Ga.	July 13
Aug. 5	Belfast, Me.	July 13
Aug. 20	Erie, Pa.	July 13
Sept. 30	Duluth, Minn.	July 13

FEDERAL GOVERNMENT WORK

July 15	Refrigerating and Ice-Making Plant—Memphis, Tenn.	July 6
	Adv. July 6 and 13.	
July 17	Metal Work — Louisville, Ky.	June 22
	Adv. June 22 to July 13.	
July 17	Rubble Mound — Ashtabula Harbor, O.	June 22
	Adv. June 22 to July 13.	
July 17	Conduit—Wash., D. C.	June 22
July 17	Steel Ladder, etc. — New Orleans, La.	June 22
July 18	Piling—Louisville, Ky.	June 22
	Adv. June 22 to July 13.	
July 18	Fire Alarm System—Tuskegee, Ala.	June 29
July 19	Steel Hull — Pittsburgh, Pa.	June 22
	Adv. June 22 to July 13.	
July 19	Cornice, etc. — Oswego, N. Y.	June 29
July 20	Mailing Shed — Sheboygan, Wis.	June 29
July 20	Levee Work — Memphis, Tenn.	July 13
	Adv. July 6 and 13.	
July 22	Dredging—Petaluma, Cal.	July 13
July 25	Wire Mesh, etc.—Memphis, Tenn.	July 13
	Adv. July 13.	
July 27	Breakwater Extension — Fairport, O.	July 6
	Adv. July 6 and 13.	
July 31	Steel Hull — Montgomery, Ala.	July 6
	Adv. July 6 and 13.	
July 31	Hospital, Norfolk, Va.	July 13
	Adv. July 13.	
Aug. 2	Dredges—Wash., D. C.	June 15
Aug. 2	Ordnance Buildings, etc.—Pearl Harbor, H. T.	June 15
Aug. 2	Distilling Plant—Key West, Fla.	July 13
	Adv. July 13.	
Aug. 7	Dredging, etc. — New York, N. Y.	July 6
	Adv. July 6 and 13.	
Aug. 7	Dredging—Camden, N. J.	July 13
	Adv. July 13.	
Aug. 18	Radial Gates, etc.—Riverton, Wyo.	July 13
	Adv. July 13.	

MISCELLANEOUS

July 17	Heating, Ventilating, etc. — Urbana, Ill.	June 22
July 17	Stadium Addition — Madison, Wis.	July 6
July 17	Fabricated Steel Works—Pittsburgh, Pa.	July 13
	Adv. July 13.	
July 17	Paving Materials—St. Paul, Minn.	July 13
July 18	Pier Sheds, etc.—Portland, Me.	June 22
July 18	Stone Crusher and Elevator —Preston, Minn.	July 6
July 19	Turbine and Accessories — New Orleans, La.	May 18
	Adv. May 18 to July 13.	
July 19	Engine-Generator Unit—Belhaven, N. C.	June 29
July 20	Grand Stand — Detroit, Mich.	July 13

Bids Close		See Eng. News-Record
July 20	Asphaltic Paving Cement—New York, N. Y.	July 13
July 21	Lumber, etc. — New York, N. Y.	July 13
July 24	Pier—Sarasota, Fla.	July 13
July 25	Frogs, Switches, etc. — New York, N. Y.	July 13
July 26	Wharf and Transit Shed Foundation—Tampa, Fla... Adv. July 6 and 13.	July 6
July 26	Fill—Tampa, Fla.	July 13
July 31	Paving Brick—Washington, Pa. .... Adv. July 13.	July 13
Aug. 7	Engines and D. C. Generators —Rome, N. Y. .... Adv. July 13.	July 13
Aug. 15	Hydro-electric Development—Dothan, Ala. .... Adv. June 22 to July 13.	June 29
Aug. 15	Foundation — Minneapolis, Minn.	July 13

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Canandaigua—Plans to construct mains incl. 2½ mi. 16 in. pipe from reservoir. $656,000.

N. Y., Jamestown—Dept. Water & Light plans 16 in. iron main in Harrison St. from Winsor to Sprague Sts. $30,000-$40,000. L. Bergman, city engr.

Pa., Braddock—Plans to vote on $18,000 bonds for water supply distribution system for fire purposes.

Va., Scottsville—See "Industrial Works."

N. C., Forest City—Takes bids about Sept. 1, new filter unit. $50,000. Carolina Eng. Co., Wilmington, engrs.

N. C., Lincolnton—Takes bids latter part of July, water and sewer extensions. $75,000. Carolina Eng. Co., Wilmington, engrs.

N. C., Wilmington—Plans to remodel filter plant and pump station, also construct new pipe line to Toomeys Creek, and 48 in. Main under Cape Fear River. $400,000. Carolina Eng. Co., Wilmington, engrs.

O., Columbus—Franklin Co. making plans waterworks system in Clinton Twp. Dist. 2, 12,630 ft. 6 in. cement, 3,570 ft. 8 in. wood and 2,540 ft. 12 in. c.i. pipe, etc. $40,000. E. G. Bradbury, 174 East Long St., engr.

O., Rome—Making plans 13,500 ft. c.i. mains in Perry Twp. Dist. 1. $30,000. E. G. Bradbury, 174 East Long St., Columbus, engr.

Wis., Baraboo—G. McCarthen Co. plans 1 story hydro-electric power plant, brick and rein.-con. $45,000. Architect not selected.

Wis., Taylor—Had plans prepared building and equipping 1 story, pumping station, brick, rein.-con. and steel, plain foundation. $60,000. W. S. Wards, La Crosse, engr. W. E. Bennett, Batavian Bank Bldg., La Crosse, archt.

Kan., Hartford—Plans complete new waterworks and sanitary sewers. E. T. Archer, 209 New England Bldg., Kansas City, Mo., engrs.

Kan., Nortonville—Having plans prepared for waterworks and sewers. Shockley Eng. Co., Graphic Arts Bldg., Kansas City, Mo., engrs.

Kan., Robinson—Plans complete new waterworks and sanitary sewers. E. T. Archer Co., 209 New England Bldg., Kansas City, Mo., engrs.

Mont., Glendive—Making plans extensions to waterworks. $60,000. A. Colin, clk.

Okla., Chickasha—Voted $40,000 bonds for water mains, $10,000 bonds for sewerage system.

Cal., Napa—Plan election to vote on $600,000 bonds to purchase privately owned water system, $240,000 of issue will be used to construct system to bring water from Milliken Canyon to Napa.

Que., Jonquieres—Plans waterworks system. $20,000. F. Grenon, Chicoutimi, engr. in charge.

Ont., Etobicoke—Had plans prepared and soon takes bids for waterworks system in Area 3, incl. 11,700 ft. 8 in. and 7,700 ft. 6 in. c.i. pipe, valves, hydrants, pumps and pumphouse. $60,000. F. Barber, 40 Jarvis St., Toronto, engr.

BIDS DESIRED

N. Y., East Syracuse—July 25, new reservoir. $100,000. S. S. Adcock, 109 West Ellis St., engr. Noted June 29.

N. Y., Peru — July 19, by Bd. Water Comrs. concrete and earth dam, gatehouse, chlorinator and 3.6 mi. pipe line, etc. Former bids rejected. R. L. Signor, Plattsburgh, engr.

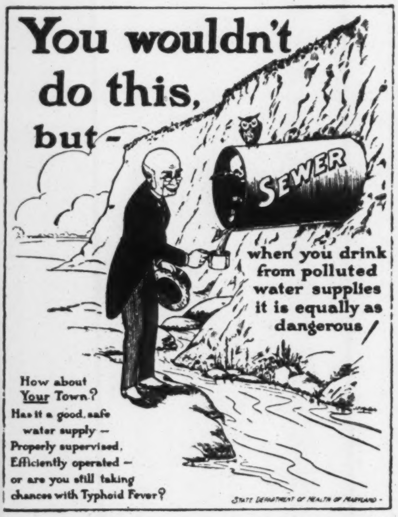
Pa., Ebensburg—July 28, by H. T. Jones, controller Cambria Co., 5,700 lin.ft. 4 in. c.i. pipe from reservoir to storage tank on Camvruc poor farm. H. F. Dorr, Trust Bldg., engr.

Wis., Madison—July 18, deep well and equipment for water supply. Mead & Seastone, State Journal Blk., engrs. Noted May 18.

Minn., Barnum—July 17, by A. D. Dathe, clk., waterworks system, incl. distribution system, pumping machinery, etc., $21,800; sewerage system, 5,000 lin.ft. 8-12 in. vitr. tile sewers, 15 manholes, 3 lampholes, 2 outfalls, $10,300. Druar & Milinowski, 500 Globe Bldg., St. Paul, engrs. Noted June 29 under "Sewers."

S. D., Avon—See "Sewers."

S. D., Mitchell—Aug. 7, at office F. McGovern, city aud., extending mains. F. J. Henson, city engr.; adv. this issue.


You wouldn't do this, but-
SEWER
when you drink from polluted water supplies it is equally as dangerous!
How about Your Town? Has it a good, safe water supply — Properly supervised, Efficiently operated — or are you still taking chances with Typhoid Fever?
STATE DEPARTMENT OF HEALTH OF MARYLAND

S. D., Murdo—July 31, waterworks system incl. 12,740 ft. mains, elevated tank, pumping station and earth dam. Dakota Eng. Co., Western Natl. Bank Bldg., Mitchell, engrs.

BIDS RECEIVED

O., Cleveland—Opened bids June 30, placing 3,750 cu.yd. rubble concrete on crib pocket at Crib 3, 3.8 mi. from Cuyahoga River, from Amer. Constr. Co., Marion Bldg., $81,082; Great Lakes Dredge & Dock Co., Williamson Bldg., $89,332; Cleveland Eng. Constr. Co., 778 The Arcade, $127,770. Noted June 22.

Tex., Childress—Filtration plant, etc., (Item 3), from Brown & Fender, Kaufman, $32,938; Merkle Mchy. & Contg. Co., 1733 Walnut St., Kansas City, Mo., $43,000; Janes Contg. Co., Dallas, $47,900. Noted April 27.

Wash., Walla Walla—Water Comn. opened bids June 27, constructing Div. 2 waterwork system, incl. laying 4 mi. of 20 in. pipe, dirt road along pipe line, telephone system, etc., (a) concrete pipe, (b) steel, (c) wood, from Puget Sound Bridge and Dredging Co., Central Bldg., Seattle, (a) $157,627, (b) $142,244, (c) $106,815; Walla Walla Concrete Pipe Co., Walla Walla, (a) $139,256. Noted June 29.

CONTRACTS AWARDED

Me., Auburn—Extending water system, to F. A. Rumery Co., 21 Portland St., Portland, $17,253; 1,200 ton c.i. pipe, to Donaldson Iron Co., Emaus, Pa., $48.70 per ton, specials, $0.055 per lb. Engrs. est. over $50,000. Noted May 4.

Vt., North Bennington—Water supply system and sewerage system, incl. dam and collecting pond, 2,225,000 gal. distributing reservoir, to J. Long, Leominster, Mass. Temporary address, South Shaftsbury, Vt. Engrs. est. $200,000. Noted May

N. J., Bordentown—Commissioner of Education, State House, Trenton, complete water supply system incl. distribution system, to J. R. Proctor, 16 West 5th St., Bayonne, $6,286; steel tank, tower and pump house, to Chicago Bridge & Iron Wks., 30 Church St., New York, $6,450. Noted June 8.

Pa., Morrisville—Filtration plant and appurtenances, to Simpson, Brown & Co., 90 West St., New York, $29,360. Noted June 15.

Pa., Reading—To G. H. Meinholz, Reading, foundations and suction vault for Pump 4 at Maiden Creek pumping station, Contr. 24, $10,870; to United States Cast Iron Pipe & Fdry. Co., 1421 Chestnut St., Phila., c.i. pipe and specials, Contr. 25, incl. 3,080 lb. 4 in., 10,750 lb. 6 in., 78,600 lb. 36 in. Class C, 75,200 lb. 36 in. and 8,000 lb. 48 in. Class A, "B & S" pipe, prices range from $2.645 to $2.745, specials $7.103 and $7.665, total $9,989; to Acker Drilling Co., Scranton, test borings for Maiden Creek impounding dam, Contr. 26, $2,941. Noted June 22.

N. C., Hendersonville — Constructing reservoir and 1½ mi. pipe line connecting with intake at water shed, to Wilson & Kelly, Asheville, $181,000. Noted June 1.

N. C., Morganton—For 12 mi. 12 in. c.i. bell and spigot water pipe from reservoir to stand pipe, to Boyd, Higgins & Gojorth, Charlotte, $195,000. Noted April 13.

N. C., Mt. Holly—Constructing waterworks and sewerage systems to W. A. Everett, Charlotte. $75,000.

Ill., Maywood—Drilling artesian well to S. B. Geiger, 37 West Van Buren St., Chicago. Noted June 22.

Ia., Storm Lake—General contract for concrete pumping station, to W. F. Park & Co., Storm Lake, $6,523. Noted June 15.

Tex., Childress—Dam, spillway, etc., (Item 1), to F. P. McElwrath, Corsicana, $144,546; pipe line, pump house, etc., (Item 2), to Hamilton Bros. Constr. Co., Taylor, $177,124. Noted April 27.

Okla., Wewoka—Filtration plant, intake and repairing dam, to Yates & Gallamore, Cushing, $38,524. Noted June 22.

Cal., Presidio (San Francisco P. O.)—Pump House, etc.—J. W. Roberts, Post Office Bldg., San Francisco, for pump house, pump equipment and fire protection system, at Marine Hospital, here, from Eng. Structures Co., Call Bldg., $21,580; Schultz Constr. Co., 46 Kearney St., $23,500; Burnham Plumbing Co., 1220 Webster St., $23,900. Above contractors in San Francisco. Noted June 29.

Sewers

PROPOSED WORK

N. Y., Blasdell—Bd. Village Trustees preparing plans sewerage system. $50,000. F. K. Wing Co., Prudential Bldg., Buffalo, engrs.

N. C., Lincolnton—See "Waterworks."

O., Akron—Aug. 8, to vote on $3,000,000 bonds extending and enlarging sewerage system. It is estimated that $852,805 ft. of sewers are needed, and will cost $6,643,590. The $3,000,000 bonds is for a 3 year program of sewer expansion, additional money will be voted on when this is expended. J. E. Root, Delaware Bldg., engr.

Wis Milwaukee—Making plans sewer connections with sewers emptying into Lake Michigan, also 2 sewer ejectors, one at South Shore Park, other at Bradford Beach. $31,000. G. Staal, City Hall, engr.

Kan., Hartford—See "Waterworks."

Kan., Nortonville—See "Waterworks."

Kan., Robinson—See "Waterworks."

Okla., Chickasha—See "Waterworks."

BIDS DESIRED

N. Y., Gloversville—July 25, constructing sanitary sewers. H. J. Hammer, city engr.; adv. this issue.

N. Y., Mt. Kisco—July 21, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, resanding existing filter beds and constructing new filter beds at Mt. Kisco Sewage Disposal Plant, near here, Westchester Co.

N. Y., New York—July 20, by J. Miller, pres. Manhattan Boro, sewer on easterly side of Riverside Dr. from point about 141 ft. south of Plaza Lafayette (West 181st St.) to point about 1,000 ft. south of Plaza Lafayette, 4 ft. circular wooden barrel sewer under Contr. 2 for making

Sewers (Continued)

certain changes to outlet sewer in Roosevelt St. in connection with proposed improvement under Manhattan end of Brooklyn Bridge.

N. Y., Rye—July 26, by Village Trustees, Municipal Hall, c.i. main sewer. G. E. Hill, 45 7th Ave., New York, engr.; adv. this issue.

Pa., Annville—July 24, by Bd. Comrs. Annville Twp., rein.-con. box sewer. J. G. Nye, twp. clk.; adv. this issue.

Pa., Phila.—July 18, by F. H. Caven, dir. pub. wks., sewer in 12th St. from Thompson to Columbia Aves., 2,270 ft. 2 ft. 4 in. x 3 ft. 6 in. brick, 1,400 ft. 6 in. c.i. pipe, $30,000, Tulip St. from Cottman to Friendship Sts., 1,450 ft. 1 ft. 8 in. x 2 ft. 6 in. brick and 2,100 ft. 6 in. vitr. pipe, $25,000, McKean St. from Swanson to Delaware Aves. and Sonnerdale to Oxford Sts., 1,411 ft. 2 ft. 4 in. x 3 ft. 6 in. brick and 731 ft. 6 in. vitr. pipe, $28,000, Henley St. from Manhein to Hansberry Sts., and Marshall St. from Bristol to Cayuga Sts., 1,100 ft. 1 ft. 6 in. x 2 ft. 6 in. brick and 1,240 ft. 6 in. vitr. pipe, $25,000, Gerry St. from 66th Ave. to Eastburn St., 1,463 ft. 2 x 3 ft. brick, 1,920 ft. 6 in. vitr. pipe, $30,000, 4th St. from Chew to Grange Sts. and from Green to Nedro Sts., 1,281 ft. 3 ft. 6 in. brick and 819 ft. 6 in. vitr. pipe, $27,000, Delphine St. from 3rd to American Sts., and Eastburn St. from Wister to Gerry Sts., 1,250 ft. 3 ft. brick, 1,800 ft. 6 in. vitr. pipe, $26,000, branch sewer in American St. from Luzerne St. to Rising Sun Ave., 2,090 ft. 2 x 3 ft. brick, and 940 ft. 6 in. vitr. pipe, $25,000, American St. from Chew to point 303 ft. north, and Charles St. from Harrison to Wakeling Sts., 1,600 ft. 2 x 3 ft. brick and 877 ft. vitr. pipe, $15,000, 400 ft. main concrete sewer in Ognotz Ave. from Washington Lane to 79th St., $25,000, also test borings for sewers, $25,000.

Fla., Lake Worth—Aug. 1, sanitary sewerage system and septic tank. W. Randolph, city engr.; adv. this issue.

Fla., Miami—July 18, sanitary sewers. F. H. Wharton, city mgr.; adv. this issue.

Ky., Louisville—July 26, by Comrs. of Sewerage, constructing Bardstown Rd. Dist. Trunk Sewer. J. B. F. Breed, ch. engr.; adv. this issue.

O., Akron—See "Streets and Roads."

Ind., Indianapolis—July 31, by Bd. Sanitary Comrs., City Hall, constructing Sect. 2, Div. 3, and furnishing and erecting mechanical equipment for sewage disposal plant of Sanitary Dist.; adv. this issue.

Ia., Creston—July 17 for 4,656 lin.ft. 15 in. vitr. clay sanitary sewers. $25,000. P. K. DeVoe, city engr.

Minn., Barnum—See "Waterworks."

Minn., Brainerd—July 27, by city, 5,743 lin.ft. 36-54 in. trunk sewer in East Maple St. north to Mississippi River. $35,000. S. Swanson, clk. Noted July 6.

S. D., Avon—Aug. 2, for 11,020 ft. 8-18 in. sewer, and 6,000 ft. 4 in. c.i. watermain extensions. Dakota Eng. Co., Western Natl. Bank Bldg., Mitchell, engrs.

S. D., Gregory—Aug. 4, for 24,900 ft. 8-18 in. sewers. Dakota Eng. Co., Western Natl. Bank Bldg., Mitchell, engrs.

Mo., Kennett—See "Streets and Roads."

Okla., Oklahoma City—July 25, by C. F. Semmelbeck, city clk., constructing Lee Ave. Sewer Dist.; adv. this issue.

Cal., Redwood City—July 17, 2,611 lin.ft. 8 in., 11,098 lin.ft. 6 in. and 7,956 lin.ft. 4 in. vitr. pipe sewers in Oak Knoll Manor. C. L. Dimmitt, Redwood City, engr.

BIDS RECEIVED

Me., Portland—Opened bids June 26, 2,250 ft. 24-30 in. vitr. sewers in Forest Ave., from Monitor Contg. Co., Portland, $23,133; G. D'Ascanio, Portland, $23,837; Forgione & Romano Co., Fidelity Bldg., Portland, $24,442. Noted June 1.

O., Cleveland—See "Streets and Roads."

O., Akron—M. P. Tucker, dir. Pub. Serv. opened bids July 5, trunk sewer in Tallmadge Ave., incl. 10,900 ft. 8-24 in. vitr. clay pipe, and (a) 3,225 ft. 30-36 in. brick or (b) 3,225 ft. 30-36 in. segmental block pipe, from McAlonan Bros., 506 Woodland Ave., (a) $58,708 (b) $55,307; T. E. McShaffrey Constr. Co., 171 South Forge St., (a) $59,712 (b) $57,244; V. Olson Contg. Co., Herberich Bldg., (b) $68,900.

Mich., Detroit—Opened bids for (1) Clark Ave. Sewer, Sect. 4, (2) Harper Ave. Arm, Sect. 1, Connors Creek Sewer, (3) Harper Ave. extension of Ashland Ave. Sewer, (4) Piquette Ave. Arm of Bates St. Sewer, from G. R. Cooke, 1260 Penobscot Bldg., (1) $404,648; J. A. Mercier, 216 Hammond Bldg. (1) $443,200, (2) $93,827, (4) $59,655; Booth & Flinn, Brush and Frederick Sts., (1) $422,485; Jaynes & Affeld, 1208 Ford Bldg., (2) $99,864; R. D. Baker, 1631 Elmhurst Ave., (2) $99,774, (3) $35,703; J. Wagner, 2735 West Grand Blvd., (3) $37,792, (4) $63,376; W. Blanck & Co., 823 Ford Bldg., (3) $39,780, (4) $61,910.

Mich., Detroit—Opened bids for lateral sewers as follows: (1) 3517 (2) 3571 (3) 3585 (4) 3619 (5) 3660 (6) 3662 (7) 3665 (8) 3666 (9) 3667 (10) 3671 (11) 3674 (12) 3675 (13) 3676 from Hammen & Co., Mankato, Minn., (1) $14,300 (2) $14,290 (4) $31,250 (5) $13,600 (6) $8,230 (7) $3,950 (8) $12,170 (9) $5,250 (10) $9,870 (11) $11,730 (12) $19,680 (13) $17,300; Detroit Contg. Co., 823 Ford Bldg., (1) $13,900 Oakwood Constr. Co., 165 Fort Blvd., (1) $16,000 (2) $14,300 (3) $19,000 (4) $36,870 (5) $10,600 (10) $7,900 (11) $7,200 (12) $17,985; Western Constr. Co., 1208 Ford Bldg., (2) $14,715 (3) $19,433 (12) $20,208; J. Wagner, 2735 West Grand Blvd., (5) $16,000; J. Zuccola, Detroit, (6) $8,540 (9) $4,900; J. Gailat, Detroit, (6) $8,495; Cappello & Fatore, Detroit, (7) $3,280 (9) $4,990; M. Mucci, 1557 St. Joseph St., (7) $3,500; R. D. Baker, 1631 Elmhurst Ave., (13) $16,498; Detroit Drainage Constr. Co., 16 Campau Bldg., (3) $18,775 (13) $16,054.

Wash., Seattle—Bd. Pub. Wks. opened bids June 30, 2,410 ft. 10 in. rein.-con. and 6,609 ft. 8 in. clay pipe in 32nd Ave. S., et al., from Interstate Constr. Co., Seattle, $36,445; King Plumbing and Heating Co., 214 Columbia St., Seattle, $40,917; Romano & Rosello Bros., Seattle, $46,948.

CONTRACTS AWARDED

N. Y., Briarcliff Manor—Municipal Bd. sewerage system, Contr. A, to Orange Eng. Constr. Co., 106 South Essex Ave., Orange, N. J., $43,224; sewage disposal works, Contr. B, to Broadhurst Co., Court St., Hackensack, N. J., $29,096. Engrs. est. $32,808. Noted June 8.

N. C., Mt. Holly—See "Waterworks."

O., Dayton—Montgomery Co., sewers in Lakeside Dist. Sub-Dist. A, to L. A. Marshall, 601 Commercial Bldg., $31,522; Lakeside Dist. Sub-Dist. B, and Westwood Dist, Sub-Dist. B, to Crumley, Jones & Crumley, 2301 Concord St., Cincinnati, $55,193 and $64,669 respectively; Westwood Dist. Sub-Dist. A and Sub-Dist. C, to C. J. Wetzel, 54 Davies Bldg., $54,037 and $39,428 respectively; city main sewer and main outlet sewer, to J. I. Geiger, 409 Dayton Savings & Trust Bldg., $40,617 and $47,212 respectively. Noted June 22.

Neb., Lincoln—Sewage disposal plant in Sanitary Dist. 1, to Kent Eng. Co., 504 First Natl. Bank Bldg., Omaha, $10,000. Noted March 2.

Cal., San Pablo—San Pablo Sanitary Dist., constructing sewers, to Downer & Mero, 2234 Macdonald Ave., Richmond, $28,391. Noted July 6.

Ont., Guelph—Will build 6,000 ft. 24 in. concrete or vitr. tile domestic trunk sewer in Waterloo Ave. from Yorkshire Ave. to sewage works, by day labor. $45,000. F. McArthur, city engr.

Ont., Hamilton—S. H. Kent, city clk., Western Storm Overflow Sewer, Sect. 4 in Barton Ave. and John St., 640 ft. 4 ft. 6 in. diam. brick pipe and 3,100 ft. 6 ft. diam. concrete and brick pipe, to J. Maguire Constr. Co., 196 Spadina Rd., Toronto. $190,000.

Waste Disposal

PROPOSED WORK

O., Portsmouth—Plans to install garbage incinerator, 60 ton daily capacity. $21,000. Invites correspondence from manufacturers of incinerators. O. D. Tatje, 1150 4th St., comr. Health.

BIDS DESIRED

Ont., Chatham—July 31, by C. H. R. Fuller, city engr. and mgr., mixed garbage and refuse incinerator; adv. this issue.

Bridges

PROPOSED WORK

Ia., Ft. Dodge—Webster Co. making plans 590 ft. steel and concrete viaduct over North 15th St. $36,000. J. L. Parsons, Ft. Dodge, engr.

Missouri—State Hy. Dept., Jefferson City, plans one 20 ft. rein.-con. slab and one 36 ft. rein.-con. deck girder spans on State Aid Project 20.189, Morgan Co., $7,700; one 60 ft. pony truss, one 30 ft. and two 40 ft. I-Beam spans on Federal Aid Project 118, Sect. B, Stoddard Co., $18,300. B. H. Piepmeier, state highway engr.

Missouri—See "Streets and Roads."

Cal., Eureka—Humboldt Co. having plans prepared 3 steel bridges, each about 100 ft. long, concrete abutments, over Klamath River. H. J. Brunnier, Sharon Bldg., San Francisco, engr.

BIDS DESIRED

New York—See "Streets and Roads."

Delaware—See "Streets and Roads."

W. Va., Ripley—July 17, by Comrs. Jackson Co., constructing King Bridge 776; Carnahan Bridge 776; Angerona Bridge 778; Cottageville Bridge 779. $25,000. H. E. Snyder, Parkersburg, engr.

North Carolina—July 25, by State Hy. Comn., Raleigh, bridges on State Project 484, Wake Co., 915 cu.yd. concrete, 122,000 lb. reinforcing, etc., $27,000; on State Project 702 A, Alleghany Co., 796 cu.yd. concrete, 137,950 lb. reinforcing, 1,780 lb. plates and bolts, 200 sq.yd. asphalt wearing surface, $26,500; State Project 952 A, Jackson Co., 1,270 cu.yd. concrete, 116,500 lb. reinforcing, 300 sq.yd. asphaltic wearing surface, $37,000; bridges and culverts on Project 569, Moore Co., 816 cu.yd. concrete, 11,590 lb. reinforcing, 2,160 lb. plates and bolts, 2,280 ft. untreated timber piles, 264 sq.yd. asphalt wearing surface, $27,000; State Project 693, Macon Co., 849 cu.yd. concrete, 102,000 lb. reinforcing, 1,020 lb. plates and bolts, $25,000. C. M. Upham, state highway engr.

South Carolina—July 26, by State Hy. Dept., Columbia, approaches to Wateree River Bridge, 24,257 cu.yd. clearing, 13,464 lin.ft. ditching, 10,344 cu.yd. gravel surface, 3,000 lin.ft. treated piles, 35,800 ft. treated lumber, etc.

Tennessee—July 28, by State Hy. Dept., Nashville, rein.-con. bridge with 287 ft. span, over Rockey River on Warren-Van Burne Co. line, Federal Aid Project 79, incl. 973.25 cu.yd. concrete, 12,831 lb. deformed steel bars, 575 sq.yd. bituminous macadam surface course. D. Q. McComb, Nashville, ch. engr.

O., Athens—See "Streets and Roads."

O., Cleveland—July 29, by Comrs. Cuyahoga Co. concrete arch bridge on Highland Rd., 660 cu.yd. excav., 2,900 cu.yd. embankment, 845 cu.yd. concrete and 61,000 lb. reinforcing. $25,870. F. J. Lander, Court House, engr.

Minn., Olivia—See "Excavation and Dredging."

Minnesota—See "Streets and Roads."

Missouri—July 18, by State Hy. Dept. at div. office Bowling Green, bridge over Peno Creek to have one 80 ft. steel and five 20 ft. rein.-con. slab spans, also grading and graveling approaches on road from Peno northward, Federal Aid Project 188, Pike Co. B. H. Piepmeier, Jefferson City, state highway engr.

California—July 24, by State Hy. Comn., Sacramento, constructing bridge over Bear River, 7 mi. north of Auburn, Placer and Nevada Counties, two 100 ft. steel truss spans. A. B. Fletcher, state highway engr.

New Zealand, Wellington—Aug. 29, by Secretary Dept. Pub. Wks., plate girder spans for Marretu section bridges, North Auckland Main Trunk Ry., and for Waikokoyne section bridges for Wiaro-Waikokoyne Ry. Copies of specifications at Dept. of Trades & Commerce, Ottawa, Ont.

Siam—Oct. 1, by Siam State Rys., Bangkok, superstructures of steel railway bridges, 35 spans, total length 1,485 meters, comprising plate girder, plate girder deck, lattice girder through and special plate girder deck spans. Specifications can be seen in the Iron & Steel Division of Bureau of Foreign and Domestic Commerce, Wash., D. C. (Refer to file No. 58674), also at Bureau's Dist. Office, 734 Customhouse, New York City, and may be obtained from C. P. Sandberg, 143 Liberty St., New York City.

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., opened bids July 5, masonry piers for bridge over Hook Creek Canal at Rockaway Blvd., from P. T. Cox Contg. Co., 154 Nassau St., New York, $38,880; M. Paino & Co., $44,495.

Pa., Freeport—Bd. State Comrs., Harrisburg, opened bids reconstructing bridge connecting Freeport and Garvers Ferry, from Independent Bridge Co., May Bldg., Pittsburgh, $109,400; C. M. Nield Constr. Co., Oliver Bldg., Pittsburgh, $125,800; W. S. Rae, Oliver Bldg., Pittsburgh, $171,700.

Bridges (Continued)

North Carolina—State Hy. Dept., Raleigh, rein.-con bridges and culverts on State Project 800, Avery Co., from Olliver & Costello Bros., Knoxville, Tenn., $31,987, J. A. Kreis, Holston Bank Bldg., Knoxville, Tenn., $32,883, O'Brien Constr. Co., Balsam, $33,490; State Project 145, Hertford Co., from Luck Co., Sylva, $37,565, O'Brien Constr. Co., Balsam, $37,997, Atlantic Bridge Co., Roanoke, Va., $38,112; State Projects 386 and 387, Robeson Counties, from J. O. Heyworth, Harvester Bldg., Chicago, $36,601, A. J. Wardrep, 1717 Highland Ave., Knoxville, Tenn., $41,295, Cornell-Young Co., 4th Natl. Bank Bldg., Macon, Ga., $43,041. Noted June 8.

Missouri—State Hy. Dept. at div. office Ironton, opened bids May 26, three 40 ft. rein.-con. arch, four 16 ft. and one 20 ft. rein.-con. slab and two 24 ft. rein.-con. deck girder spans, on Federal Aid Project 107 A, Iron Co., from M. E. Gillioz, Monett, $19,890; C. Gove, St. Louis, $20,653; St. Louis Bridge & Supply Co., Frisco Bldg., St. Louis, $21,360. Noted May 18.

Tex., Colorado—Mitchell Co. bridge across Colorado River, 10,470 cu.yd. concrete, 2,202 lin.ft. concrete piling, 4,209 cu. yd. borrow excav., 383 cu.yd. gravel surfacing, 113,678 lb. reinforcing and 175,000 lb. structural steel, from Brown-Abbott Co., Loraine, $44,327; Austin Bros. Bridge Co., Coombs St., Dallas, $45,484; Illinois Steel Bridge Co., Box 697, Austin $55,057.

CONTRACTS AWARDED

Mass., Allston (Boston P. O.)—Bridge Comrs., 145 ft. through truss concrete and steel bridge, 80 ft., solid concrete floor, wood block pavement, concrete foundation, over Boston & Albany R.R., on Cambridge St., to Boston Bridge Works Inc., 47 Winter St., Boston, $119,679. Noted Dec. 30.

Mass., Boston—Metropolitan Dist. Comn., 1 Ashburton Pl., 790 ft. stone and concrete bridge, 70 ft., over Neponset River, to Crandall Eng. Co., East Boston, $599,150. Noted June 15.

Conn., New Haven — Director of Pub. Wks., 800 ft. concrete and steel bridge, 22 ft., over Quinnipiac River, known at Tomlinson Bridge, general masonry, sandstone piers, asphalt pavement, to C. W. Blakeslee & Sons, Inc., 58 Waverly St., $475,143; steel work, to Phoenix Bridge Co., Phoenixville, Pa., $212,866; electrical work, to New Haven Electric Co., 294 Elm St., New Haven, $22,816. Pile and timber temporary bridge, to C. W. Blarkeslee & Sons, Inc., 58 Waverly St., $43,875. Noted June 22.

N. Y., Devils Hole (Niagara Falls, P. O.)—New York Central R.R., Grand Central Terminal, New York, 120 ft. concrete bridge, 25 ft., over tracks of above railroad, here, to Empire Eng. Co., Tonawanda. Engrs. est. $38,000. Noted May 11.

New Jersey—State Hy. Dept., Trenton, constructing bridge M. P. 25.7 over north branch of Raritan River, Route 16, in municipalities of Bernard and Bedminster, Somerset Co., to Engineering Constr. Corp., Commonwealth Trust Bldg., Phila., $27,393. Noted June 8.

North Carolina—State Hy. Dept., Raleigh, rein.-con. bridges and culverts on State Project 200, Cateret Co., from Batson-Cook Co., West Point, Ga., $27,005; Luck Co., Sylva, $30,668; Porter & Boyd, Realty Bldg., Charlotte, $34,577. Noted June 15.

Ala., Eldredge—St. Louis & San Francisco R.R., Frisco Bldg., St. Louis, Mo.; two 12 ft. concrete arches and 2 concrete boxes for filling trestles, 1,800 cu.yd. plain and 400 cu.yd. rein.-con., to Reid & Lowe, Brown-Marx Bldg., Birmingham, $25,000.

Nebraska—State Hy. Dept., Lincoln, constructing bridge on Hebron-Fairbury Rd., Project 118 B, Jefferson Co., and bridge on Curtis Maywood Rd., Project 176, Frontier Co., to Standard Bridge Co., City Natl. Bank Bldg., Omaha, $22,844 and $3,016 respectively; 6 bridges on Central City-Eldorado Rd., Project 156 A, Hamilton Co., and 3 bridges on Bennett-Adams Rd., Project 175 B, Lancaster Co., to Pioneer Constr. Co., Railway Exch. Bldg., Kansas City, Mo., $21,068 and $14,283 respectively; 3 bridges on Central City-Eldorado Rd., Project 156 B, Hamilton Co., and 2 bridges on Harvard Eldorado Rd., Project 182, Clay Co., to Diamond Eng. Co., Grand Island, $5,757 and $4,769 respectively; bridge on O'Neil-Butte Rd., Project 14 B, Holt and Boyd Counties, 2 bridges on Smiley Canyon Rd., Project 102 A, Sioux Co., and 3 bridges on Elwood Stockville Rd., Project 184, Gosper Co., to Western Bridge and Constr. Co., 748 Bee Bldg., Omaha, $37,139, $17,848 and $12,239 respectively; bridge on Burwell Deverre Rd., Project 34 A, Garfield Co., to Southern Kansas Bridge & Constr. Co., Wichita, Kan., with steel piling, $16,199; 4 bridges on Shelby-Platte River Rd., Project 86, Polk and Butler Counties, to Polk Co. Bd., Osceola, $15,833; bridge on Minden-Newark Rd., Project 196, Kearney Co., to Allied Contractors, Inc., 403 Bee Bldg., Omaha, $6,112. Noted June 29.

Ont., Toronto—C. A. Maguire, mayor, removing existing bridge and constructing 3 span arch bridge with concrete piers, abutments, 759 ft. long, 66 ft. wide, over Don River on Gerrard St., to J. E. Russell Constr. Co., Harbor Bldg., $721,520. Noted April 27.

Dams

PROPOSED WORK

Conn., West Cornwall—Connecticut Light and Power Co., 107-111 West Main St., Waterbury, plans large dam across Housatonic River between here and Limerock; also power station. Private plans.

BIDS DESIRED

Wis., Tomahawk — Wisconsin Valley Impvt. Co., 1st Natl. Bank Bldg., Wausau, taking bids rein.-con. and steel reservoir dam, incl. gravel and earth embankment, protected by sheet piling with gate works of concrete. $100,000. W. E. Brooks, mgr. Private plans. Noted June 22.

S. D., Murdo—See "Waterworks."

CONTRACTS AWARDED

Ariz., Prescott—For gravity type dam, 65 ft. high, 800 cu. yd. rock excav., 9,600 cu.yd. cyclopean masonry, to S. P. Gillis Eng. Co., P. O. Box 454, Phoenix, $79,784.

Railways

CONTRACTS AWARDED

Ohio—Northern Ohio Traction & Light Corp., North Main St., Akron, will lay tracks over new North Ave. viaduct, and pave between car tracks, by day labor. $325,000. A. C. Blinn, genl. mgr.

Ohio—Southern Agricultural Chemical Corp., 61 Bway., New York, 60,000 cu.yd. grading and 1½ mi. rairoad siding, single track, along Cleveland, Cincinnati, Chicago & St. Louis R. R., in Cincinnati, to H. L. Carr Co., Frederick Bldg., Cleveland, $65,000.

Arizona—Magma Copper Co., Phoenix, 34 mi. standard guage railroad between Superior and Magma Junction, to Twohy Bros. Constr. Co., 318 North Central Ave., Phoenix.

Excavation and Dredging

PROPOSED WORK

Ia., Oskaloosa—Mahaska Co. lets contract in October or November for 6.4 mi. open ditch in D. D. 6, 480,000 cu.yd. excav. R. W. Varley, co. aud.

Ore., Eagle Point—Eagle Point Irrigation Dist. having plans prepared irrigation works to supply 8,000 acres, incl. diversion dam in Butte Creek, 18 mi. canal, 1 mi. pipe siphon, etc. $400,000. Engineer not announced.

Ore., Grants Pass—Grants Pass Irrigation Dist. plans 5 mi. ditch and enlarging 1 mi. of old ditch, 167,000 cu.yd. earth and 13,000 cu.yd. rock excav. $100,000. J. H. Fertig, Grants Pass, engr.

Ont., Port Frank—G. A. McCubbin, engr., Chatham, takes bids end of July, drainage system for Bosanquet, Stephen, Williams and McGillivary Twps. $75,000.

BIDS DESIRED

Fla., Ft. Lauderdale—Aug. 15, by Bd. Comrs. Broward Co., constructing inlet from New River Sound to Atlantic Ocean, near here. G. B. Hills Co., Jacksonville, engrs.; adv. this issue.

La., Lawtell—July 25, by C. N. Bertrand, pres. Bd. Comrs. St. Landry Parish, Bank of Lawtell, dredging 600,000 cu.yd. and building gravity drainage system. A. Tate, Opelousas, engr.

O., Wooster—Aug. 10, at office of C. F. Schopf, secy. Joint Bd. Comrs. Wayne and Holmes Counties, Court House, Wooster, draining and dredging Killbuck Creek; adv. this issue.

Ill., Beardstown—July 18, by Comrs. Coal Creek Drainage and Levee Dist., Schuyler Co., at office Glass & Bottenberg, Rushville, levee reinforcement and ditch excavation. G. C. Lowe, engr.; adv. this issue.

Minn., Olivia—July 26, by A. O. Schmidt, aud. Renville Co., Ditch 92, 92,263 cu.yd. excav., 6 timber bridges, 149,500 lin.ft. 5-26 in. tile. $35,000.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, dredging Wallabout and Gowanus Canals, to W. E. Potter, 49 Hudson St., Jersey City, N. J., $13,378 and $9,490 respectively. Noted June 29.

Ala., Fayette—Bd. Drainage Comrs., 42 mi. drainage ditches, Fayette and Lamar Co. D. D. 1, to D. W. Robins, Tupelo, Miss., $0.085 per cu.yd. Noted April 27.

Ia., Cresco—Howard Co. draining 13 mi. Primary Rd. Project 103, to H. Paulsen, Havelock, 103,070 ft. 6 in. tile at $0.109, 22,255 ft. 8 in. $0.152, 2,500 ft. 10 in. $0.24 and 500 ft. 12 in. $0.31. Noted May 11 under Streets and Roads.

Streets and Roads

PROPOSED WORK

N. Y., Bath—Plans $25,000 bond issue to pave Buel, William, Pine and various other streets. Address Bd. Village Trustees.

N. Y., Buffalo—Erie Co. preparing plans paving 3,636 ft. Bailey Ave. south of Main st., 100 ft. wide, concrete or asphalt.

N. Y., Jamestown—Plans repaving Harrison St. between Winsor and South Main Sts., Lincoln St. between 6th and 8th Sts., 11th St. between Main and Washington Sts. and Fulton St. between 6th and 8th Sts., vitr. brick. To exceed $35,000. L. Bergman, city engr.

N. Y., Lockport—Niagara Co. plans constructing 2 mi. Lake Rd. from Olcott west to Wilson town line, concrete. $25,000. T. Brennan, co. engr.

N. Y., Lockport—Niagara Co. soon takes bids resurfacing Shawnee Rd., concrete, $53,174. T. Brennan, Lockport, co. engr.

Pa., Erie—Plans paving Elmwood Ave. $44,500, 25th St. $21,000, both asphalt. F. G. Lynch, city engr.

Va., Norfolk—City passed ordinance by which it agrees to pay interest on loan which business men of Norfolk will make to State for completion of certain highway work in vicinity of Norfolk, loan amounts to $460,000 and provides for construction of following highways: Ridge Route, completion of link in Norfolk-Petersburg-Richmond line to North Carolina line, $260,000; Route 27 (State project) from South Norfolk to connect with Elizabeth City, N. C. highway, $100,000; Peninsula Route, section of road from Old Point to Richmond, near Lee Hall, $100,000. C. E. Ashburner, city mgr.

N. C., Charlotte—Mecklenburg Co. takes bids latter part of July hard surfacing 7 mi. York Rd. $180,000. L. Ross, Charlotte, engr.

N. C., Wilmington—Plans paving various streets, brick and asphalt. $400,000-$500,000. Carolina Eng. Co., Wilmington, engrs.

S. C., Camden—Takes bids latter part of July, extending various streets. $200,000. Carolina Eng. Co., Wilmington, N. C., engrs.

Ala., Birmingham—Jefferson Co. and City plan paving with asphalt on concrete base, combined concrete curb and gutter, 1½ mi. South Bessemer connection, 20-26 ft., $56,000, 2½ mi. from Fairfield to Fairview, 18-24 ft., $68,000, 1½ mi. Vanderbilt Rd., 20-26 ft., $63,000, 3 mi. Gate City-Irondale Rd., 20-26 ft., $108,000; paving with asphalt on concrete 5 mi. Birmingham-Pratt City Rd., $110,000. C. A. Rogers, co. engr. A. J. Hawkins, city engr.

Ohio—Dept. Highways and Dept. Pub. Wks., Columbus, cancelled all bids which were to be opened June 30, grading, bridging and paving roads in following counties:

Clark Co., Sect. "B" Dayton-Longview Rd., 1.545 miles, rein.-con., bituminous macadam, asphalt or tar.

Columbiana Co., Sect. "A-1" Lisbon-Canton Southern Rd., 3.922 mi., brick or bituminous macadam.

Pickaway Co., Sect. "F-2" Columbus-Washington C. H. Rd., 0.8 mi., bituminous macadam.

Tuscarawas Co., Sect. "A" Canton-Canal Dover Rd., 3 mi., Kentucky rock asphalt, rein.-con. or bituminous macadam.

Tuscarawas Co., Sect. "B" Canton-Canal Dover Rd., 2.299 mi., monolithic brick, rein.-con., or Kentucky rock asphalt.

Streets and Roads (Continued)

Tuscarawas Co., Sect. "E" Canton-Canal Dover Rd., 2.093 mi., Kentucky rock asphalt or brick.

Tuscarawas Co., Sect. "P-2" Newcomerstown-Uhrichsville Rd., 1.338 mi., monolithic brick, rein.-con., or Kentucky rock asphalt.

Pickaway Co., Sect. "F-2" Columbus-Washington C. H. Rd., 0.19 mi., constructing steel bridge and concrete culvert. Noted June 22.

Ohio—Dept. Highways and Pub. Wks., Columbus, received no bids June 30, grading, bridging and paving 1.42 mi., Sect. "K" Columbus-Millersburg Rd., Knox and Licking Counties, also 1.80 mi. Sect. "C" McConnelsville-Zanesville Rd., Morgan Co., both rein.-con. Noted June 22.

Ohio—Dept. Highways and Pub. Wks., Columbus, rejected bids opened June 23, grading, bridging and paving roads in following counties:

Huron Co., Sect. "E" Barberton-Greenwich Rd., 4.124 miles, rein.-con.

Huron Co., Sect. "Greenwich" Barberton-Greenwich Rd., 0.1619 mi., rein.-con.

Huron Co., Sect. "S" Norwalk-Mansfield, Rd., 2.504 mi., rein.-con.

Putnam Co., Sect. "O" Lima-Ottawa Rd., 0.58 mi., Kentucky rock asphalt or rein.con.

Putnam Co., Sect. "Columbus Grove" Lima-Ottawa Rd., 1.21 mi., Kentucky rock asphalt or rein.-con. Noted June 29.

O., Lakewood (Cleveland P. O.)—Will sell $14,270 bonds July 17 paving Archdale Ave., $16,160 Baxterly Ave., $17,470 Elbur Ave., $12,350 Overbrook Ave., $38,295 Brown Rd., $15,246 Onondaga Ave., $36,486 St. Charles Ave. E. M. Hutchins, deputy dir. finance.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and gravel surfacing 2 mi. State Trunk Line Rd. 18-19, Sect. B, Cheboygan Co.; grading and surfacing 1 mi. State Trunk Line Rd. 31-12, Sect. B, Huron Co. L. H. Belknap, ch. engr.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and gravel surfacing 4¾ mi. Assessment Dist. Rd. 346, Ionia and Barry Counties. L. H. Belknap, ch. engr.

Mich., Detroit—Having plans prepared paving Golden Gate Ave. from Woodward to Charleston Sts., $19,780, Lawton Ave. from Blaine to Carter Sts., $3,620, 12th St. from Pilgrim to Puritan Aves., $13,950, Walbridge Ave. from Baldwin to Van Dyke Aves., $5,350, Burlingame Ave. from Nardin to Belleterre Aves., $7,870, Lenox Ave. from point 880 ft. north of Charlevoix to Mack Aves., $13,550, 3½ in. sheet asphalt on 8 in. concrete, also 3 alleys with one course concrete, $16,225. J. W. Reid, city engr.

Wis., Appleton—Plans improving College and Pierce Aves., Lawe, Franklin, Mead, Eldorado, Hancock, Atlantic, Bateman, Ida, Richmond, Appleton, John and Superior Sts. O. F. Weissgerber, City Hall, engr.

Wis., Walworth—Making plans paving various streets, 25 ft., asphalt or concrete, also curbing and guttering same. $26,000 bond voted. J. Blaine, clk. Engineer not selected.

Ia., Oskaloosa—Plans paving 3 mi. various streets. $90,000. H. Hawkins, city engr.

Minnesota—State Hy. Dept. had plans prepared grading 17 mi. Minnesota Trunk Highway 1 from Owatonna, to Faribault, Steele and Rice Counties, $100,000; 13 mi. Trunk Highway 2, Clay Co., also 2 bridges, $90,700; 5 mi. Trunk Highway 45 from Stillwater to Lake Elmo, Washington Co., $30,000; concrete paving 1 mi. Trunk Highway 1, Washington Co., $50,000; gravel surfacing 17 mi. Trunk Highway 28 from Morris to Johnson, Stevens Co., $25,900. State Hy. Dept., 1246 University Ave., St Paul, engrs.

Minn., St. Paul—Plans paving Marshall Ave. from Levington to Snelling Aves. $30,000. O. Claussen, city engr.

Kan., Enterprise—Had plans prepared paving 18 blocks asphaltic concrete, asphalt and brick. Shockley Eng. Co., Graphic Arts Bldg., Kansas City, Mo., engrs.

Kan., Ft. Scott—Bourbon Co. plans surfacing 1¾ mi. Garland Brench Rd., 16 ft., 16,000 sq.yd. bituminous macadam. B. Boyle, Ft. Scott, engr.

Wyoming—State Hy. Dept., Cheyenne, opens bids about Aug. 1, grading, surfacing and building structures on 7.973 mi. Yellowstone Highway, Powder River to Waltman, Federal Aid Project 128, 24 ft., Natrona Co., 79,500 cu.yd. earth excav., 150 cu.yd. loose rock and 100 cu.yd. solid rock excav., 200 cu.yd. concrete, 15,000 lb. deformed steel bars, etc. $40,000. Z. E. Sevison, state highway engr.

ROAD WORK—CLEARWATER, FLA.

Bids were opened by Comrs. Pinellas Co., June 14, for constructing Rd. No. 1, from (A) J. G. Yeates, Port Tampa; (B) Lasley Bros. & Harvey, Chattanooga, Tenn.; Road No. 2, (A) J. G. Yeates; (B) W. H. Kendrick, Tampa; (C) Mickler & McLeod, Tampa; (D) Lasley Bros. & Harvey. The unit bids were as follows:

	A	B
50 acres clearing and grubbing	$60.00	$75.00
151,600 cu.yd. regular excavation	.40	.45
5,500 cu.yd. dredged excavation	.50	.75
5,300 cu.yd. rock shoulder excavation	.65	.75
250,000 sq.yd. 5 in. compacted rock base	.85	1.05
263,500 lin.ft. concrete curb 6x15 in.	.47	.53
156,500 sq.yd. plain wire cut brick 3-4-8½ with asphalt filler	2.52	2.55
106,600 sq.yd. taking up, cleaning and relaying old brick with asphalt filler	.69	.73
Extended totals	$866,155	$950,162

	A	B	C	D
16 acres clearing and grubbing	$60.00	$60.00	$57.00	$75.00
60,500 cu.yd. regular excavation	.40	.45	.38	.45
5,000 cu.yd. dredged excavation	.50	.50	.75	.75
3,333 cu.yd. rock shoulder excavation	.65	.65	.80	.75
114,000 sq.yd. 5 in. compacted rock base	.85	.88	.93	1.05
121,100 lin.ft. concrete curb, 6x15 in.	.47	.48	.50	.53
85,755 sq.yd. plain wire cut brick, 3-4-8½ with asphalt filler	2.56	2.55	2.56	2.55
30,000 sq.yd. taking up, cleaning and relaying old brick with asphalt filler	.69	.68	.68	.73
Extended totals	$422,966	$432,925	$439,381	$461,683

ROAD WORK—CALIFORNIA

Following are lowest bids opened by Bureau Pub. Rds., 881 Mills Bldg., San Francisco, June 22, for grading and building structures on 10.41 mi. Big Bear Valley Rd., Los Angeles National Forest, (A) Utah Constr. Co., Phelan Bldg.; (B) Johnson Contracing Co., Portland, Ore.; (C) C. H. & A. W. Gorrill, Oakland. The unit bids were as follows:

	A	B	C
Clearing (lump sum)	$12,370.00	$5,500.00	$12,164.00
325,000 cu.yd. excavation	.615	.68	.795
4,000 cu.yd. overhaul	.04	.10	.05
118 cu.yd. Class A concrete	38.50	60.00	45.00
21,000 lb. reinforcing steel	.08	.12	.08
530 cu.yd. cement rubble masonry	10.30	17.50	10.00
170 cu.yd. dry rubble masonry	7.65	8.50	6.00
4,700 lin.ft. 12 in. concrete pipe	3.10	4.45	3.00
690 lin.ft. 18 in. concrete pipe	4.00	7.00	3.00
260 lin.ft. 24 in. concrete pipe	5.90	10.00	4.00
4,700 lin.ft. 12 in. corrugated pipe (alternative)	1.75	1.00	1.25
380 lin.ft. 15 in. corrugated metal pipe (alternative)	2.00	1.50	1.50
310 ft. 18 in. corrugated metal pipe	2.15	2.00	2.00
260 lin.ft. 24 in. corrugated metal pipe (alternative)	2.40	2.75	2.50
630 cu.yd. hand placed rock fill	3.30	3.50	5.00
140 cu.yd. Class C concrete as alternative for cement rubble masonry	38.50	46.00	40.00
90 cu.yd. Class C concrete as alternative for dry rubble masonry	38.50	46.00	40.00
Extended totals using concrete pipe	$246,388	$273,382	$304,417
Extended totals using corrugated pipe	237,799	255,782	294,922

Missouri—State Hy. Dept., Jefferson City, plans ¼ mi. road from Peno northward, Federal Aid Project 188, Pike Co., 9,263 cu. yd. earth excav., 2,056 sq. yd. gravel surfacing, one 80 ft. steel span with five 20 ft. rein.-con. slab span approaches over Peno Creek. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans 9.943 mi. road from Cairo to Poplar Bluff, Federal Aid Project 118, Sect. B, Stoddard Co., 24,670 cu.yd. earth excav., 4,798 cu.yd. borrow, 164.4 cu.yd. concrete masonry, 22,546 sq.yd. gravel surfacing, etc.; 4.256 mi. road from Cairo to Poplar Bluff, Federal Aid Project 179, Stoddard Co., 22,349 lin.ft. grading, 39,732 sq.yd. gravel surfacing, etc.; 4.694 mi. road from Higginsville eastward and westward, State Aid Project 20.164, Lafayette Co., 38,042 cu.yd. earth and 600 cu.yd. rock excav., 288.7 cu.yd. concrete masonry, etc. B. H. Piepmeier, state highway engr.

Mo., Gallatin—Plans paving 9 blocks, asphaltic concrete. $40,000. Shockley Eng. Co., Graphic Arts Bldg., Kansas City, engrs.

Tex., Brownsville—Cameron Co. making plans grading and paving with 2 course concrete 10.47 mi. State Highway 12 between here and San Benito, incl., 110,700 sq.yd. concrete. $406,866. W. O. Washington, co. engr.

Tex., Cleburne—Johnson Co. plans surfacing 23 mi. Meridian Highway from Burleson south through Cleburne. $225,000 bonds voted, and $200,000 alloted by State Highway Comn. for project. J. G. Lott, Alvarado, engr. in charge. Noted June 1.

Tex., Coleman—Coleman Co. making plans grading, gravel surfacing, etc., 10.58 mi. State Highway 7-A, Federal Aid Project 303, incl. 44.9 acres clearing and grubbing, 49,678 cu.yd. borrow, 21,670 cu.yd. roadway, 4,007 cu.yd. loose and 4,295 cu.yd. solid rock excav., 1,685 cu.yd. concrete, 187,050 lb. reinforcing. $87,477. W. E. Dickerson, co. engr.

Tex., Denison—July 26, to vote on $65,000 bond issue for additional street paving. D. C. Lipscomb, city engr.

Tex., Houston—Harris Co. making plans grading, surfacing with crushed rock, etc., 3.33 mi. State Highway 2, incl. 8,885 cu.yd. excav., 18,284 gal. asphalt, 738 cu.yd. cover material, 4,861 cu.yd. crushed rock, 2,187 cu.yd. shell. $44,705. Howe & Wise, 211 First Natl. Bank Bldg., engrs.

Tex., Paris—Lamar Co. making plans gravel surfacing 9.89 mi. State Highway 19 from county line south, incl., 10,000 cu.yd. borrow, 15,218 cu.yd. gravel surfacing. $63,505. W. M. Fooshee, co. engr.

Tex., Tyler—Smith Co. making plans grading, surfacing, etc., 14.73 mi. State Highway 37, Federal Aid Project 284, incl., 691.9 cu.yd. concrete, 58,149 sq.yd. bituminous macadam, 37,121 sq.yd. concrete pavement, 52,152 lb. reinforcing, 10,296 cu.yd. imported gravel, 11,949 cu.yd. local gravel, 5,148 cu.yd. clay binder, to be furnished by county. $252,000. D. K. Caldwell, co. engr.

Okla., Madill—Marshall Co. authorized $350,000 bond issue for 65 mi. hardsurfaced highways. Engineer not announced.

Wash., Tacoma—Plans resurfacing 17 blocks Bway. and St. Helens Ave. from South 17th to Division Ave., bitulithic. J. C. Manley, city engr.

Wash., Wenatchee—Chelan Co. soon takes bids grading 4 mi. Blewett Pass Highway. $100,000. J. Duff, Wenatchee, engr.

Cal., Bakersfield—Rejected bids paving Oak St. Specifications will be revised for new type of pavement and new bids asked. W. D. Clarke, city engr. Noted June 8.

Cal., Fresno—Takes bids about July 24, improving Bremer Ave. between Forthcamp and San Pablo Aves., 50,300 sq.ft. grading, 45,330 sq.ft. asphalt pavement, 4,745 sq.ft. concrete gutters, etc. W. Stranahan, city engr.

Cal., Lindsay—Having plans prepared improving Lindsay Ave., Harvard and Orange Sts., et al., 10,250 cu.yd. grading,

Streets and Roads (Continued)

507,000 sq.ft. 1½ in. warrenite on 3½ in. bituminous, 46,500 sq.ft. concrete gutter, 5,110 lin.ft. concrete curb, 1,130 lin.ft. corrugated and concrete culverts, 575 sq.ft. concrete walks. H. Watts, city engr.

Cal., Marysville—Yuba Co. had plans prepared grading and shaping road bed, 7½ mi. long, 40,000 cu.yd. excav. L. B. Crook, Marysville, engr.

Cal., Richmond—Had plans prepared 4,100 cu.yd. grading, 33,000 sq.ft. 6-in, asphaltic concrete pavement, 900 lin.ft. concrete curbs and gutters, 2,000 sq.ft. concrete walks, 150 cu.yd. concrete walls and underpinning, 700 lin.ft. 10 in. vitr. and 338 lin.ft. 8-10 in. corrugated pipe, in connection with city subway. H. D. Chapman, city engr.

Cal., Santa Cruz—Received no bids June 26, 341,611 sq.ft. grading, 192,649 sq.ft. 5 in. concrete pavement, 2,730 ft. detached concrete curbs, 4,047 standard concrete sidewalk curb, 4,800 sq.ft. 4 in. concrete sidewalks, 4,526 ft. 10-18 in. drain pipe, etc. J. K. James, city engr. Noted June 8.

Cal., Yuba City—Takes bids about Aug. 7, concrete paving 306 ft. Hawthorne St. and 310 ft. Linden St., both 42 ft. wide, 4 in. thick; 838 ft. Orange St., 367 ft. Walnut St., 367 ft. Olive St. and 367 ft. Chestnut St., all 44 ft. wide, 4 in. thick; 2,769 ft. Cooper Ave., 18 ft. wide, 1,186 ft. Cooper Ave., 42 ft. wide, 2,422 ft. Bridge St., 50 ft. wide, all 5 in. thick. E. Von Geldern, Yuba City, engr.

Que., Montreal—Plans paving 2,250 ft. St. Catherine St. from Harbor to Marlborough Sts., 65 ft., $45,540; 1,687 ft. Marlowe St., 60 ft., $35,023; 2,062 ft. Monk Blvd., from Jolicoeur to Allard Sts., 50 ft., $62,743; 1,125 ft. De Chateaubriand Ave. from Roy to Duluth Sts., 60 ft., $11,823, all asphalt. E. Blanchard, Rd. Dept. engr.

Ont., Ingersoll—Having plans prepared and takes bids about July 24, concrete pavement on Charles and Bell Sts. $92,000. Prices wanted on materials. R. B. Hutt, town engr.

Ont., Ottawa—Had plans prepared resurfacing with asphalt, 7,500 sq.yd. Carter St. from Lisgar to Argyle Sts. $15,500. 2,000 sq. yd. Somerset St. from Metcalfe to O'Connor Sts. $4,400. 2,400 sq.yd. Lyon St. from Gladstone to Catharine Sts., $4,400, Lyon St. from Chamberlain to Pawell Sts. $5,000. A. F. Macallum, city engr.

BIDS DESIRED

Mass., North Adams—July 20, by J. L. Temple, comr. Pub. Wks., City Hall, improving State St.; adv. this issue.

Mass., Westfield—July 26, by Bd. Pub. Wks., City Hall, paving Franklin St., rein.-con. O. E. Parks, supt.; adv. this issue.

New York—July 21, by H. S. Sisson, comr. State Hy. Dept., Albany, improving highways in Allegany, Fulton, Oneida, St. Lawrence, Steuben and Wayne Counties, also 895 ft. steel bridge, 20 ft., in Cattaraugus Co. J. C. Finch, secy.; adv. this issue.

N. J., Trenton—July 18, by Mercer Co. constructing White Horse-Yardville Rd., 7,000 cu.yd. excav. and 23,200 sq.yd. concrete. H. F. Harris, Court House, engr. Noted June 15.

N. J., Westwood—July 18, by Mayor and Boro Council, grading, curbing and paving Center Ave. from Jefferson to Westwood Aves. and 3rd Ave. from Mill St. to Washington Ave. W. G. Clark, Hillside Ave., Tenafly, consult. engr.; adv. this issue.

Pa., Ebensburg—July 23, by Supervs. East Taylor Twp., c/o H. T. Hones, controller Cambria Co., (Ebensburg), paving 4,000 ft. Park Hill Rd., East Taylor Twp., vitr. paving brick on concrete, alternate bids on 280,000 No. 1 repressed brick, $40,000; also by Supervs. Adams Twp., c/o H. T. Hones, controller Cambria Co., (Ebensburg), 18,600 ft. road in Adams Twp. between Dunlo and Salix, vitr. brick on concrete, alternate bids on 1,330,000 No. 1 repressed paving brick, $120,000. O. P. Thomas, Park Bldg., Johnstown, engr.

Pa., Leechburg—July 17, grading, curbing and paving Linden Ave. and portions of 1st St., Center and Floral Aves. C. A. Ehrenfeld, boro, engr.; adv. this issue.

Pa., Oil City—Aug. 1, at office City Controller, resurfacing various streets and grading and paving 2 alleys. B. B. Weber, city engr.; adv. this issue.

Pa., Washington—July 31, by Town Council, 18,000 sq.yd. brick pavement, (brick furnished by boro.), and resurfacing 5,000 sq.yd. with bituminous pavement. J. F. Curran, pres.; adv. this issue.

Delaware—July 26, by State Hy. Dept., Dover, highway and Smyrna Bridges, Contr. 25-A; 1.45 mi. limestone highway, Contr. CN-5; adv. this issue.

Maryland—July 25, by State Rds. Comn., Baltimore, building 8 sections of highways in counties as follows: Anne Arundel Co., Contr. AA-24; Allegany Co., Contrs. A-23 and A-24; Howard Co., Contr. HO-16; Montgomery Co., Contr. M-33; Baltimore City, Contr. BC-40; Baltimore Co., Contr. B-46; Queen Annes Co., Contr. Q-24. J. N. Mackall, chn.; adv. this issue.

W. Va., Clarksburg—July 25, paving 28 streets. $200,000. T. Long, city engr.

W. Va., Huntington—July 20, by Comrs. Cabell Co., grading and hard surfacing Barboursville, Seven Mile and Long Branch Wayne Rds, J. N. Doyle, co. engr. Noted June 8.

W. Va., Moundsville—July 20, paving with cement, brick or block Jefferson and Marton Aves., 9th and 4th Sts. $50,000.

W. Va., Ripley—July 24, by Comrs. Jackson Co., grading 4.5 mi. road from Ripley to Union Dist. line Rd., 16 ft. $50,000. H. E. Snyder, Parkersburg, engr.

W. Va., Wheeling—July 29, by Comrs. Ohio Co., rein.-con. surfacing ¾ mi. Glenns Run Rd., 16 ft. $25,000. A. C. Hoffman, Wheeling, engr.

North Carolina—July 25, by State Hy. Comn., Raleigh, grading and hard surfacing Projects 173, 183 A, 236, 342, 484, 494, 535, 713 and 764; topsoiling, sand clay or gravel surfacing Projects 131, 132, 569, 814, 952 and 963; paving with penetration or waterbound macadam Projects 602, 640, 702 A and 888; constructing bridge Project 694; adv. this issue.

N. C., Greenville—July 31, by Pitt Co. Hy. Comn., concrete paving 5 mi. highway from Greenville to Falkland and 7 mi. highway from Greenville to Cox Mill. J. B. Harding, engr.; adv. this issue.

S. C., Anderson—July 20, by Anderson Co. Hy. Comn., grading, bridging and surfacing 5.26 mi. Honea Path-Kays Bridge Rd., 33,703 cu.yd. common and 500 cu.yd. rock excav., 15,425 cu.yd. topsoil, 1,035 lin. ft. rein.-con. pipe, 140 cu.yd. concrete, etc. W. A. Sanders, Anderson, engr.

Fla., Bushnell—July 21, by Comrs. Sumter Co., clearing, grading and hard surfacing 16 mi. road. $65,000. F. Cotton, Rerdell, engr.

Fla., Miami — July 18. 170,819 sq.yd. bituminous macadam pavement and 24,683 sq.yd. concrete sidewalks. F. H. Wharton, city mgr.; adv. this issue.

Fla., Sanford—July 18, by Comrs. Seminole Co., 181,000 sq.yd. macadam, 45,450 sq.yd. brick, 12,700 sq.yd. rock or other hard surfaced shoulders. F. T. Williams, Sanford, engr.

Louisiana—July 25, by State Hy. Dept., Redmond Bldg., Baton Rouge, gravel surfacing 17.08 mi. Federal Aid Project 79, Sects A and B, Hammond-Baton Rouge Highway, also 9.17 mi. Federal Aid Project 362, Sects. A and B, Greensburg-Fisher Highway, Tangipahoa and St. Helena Parishes. J. M. Fourmy, state engr.

La., Thibodaux—July 21, by Police Jury, LaFourche Parish, for 6.83 mi. hard surface roads from Raceland-Houma Highway, to Beatieville Lane. C. J. Coulon, secy.

Tennessee—July 28, by State Hy. Dept., Nashville, grading, paving and bridging 10.04 mi. road between Rockwood and Kingston, Federal Aid Project 85, Roane Co. incl., 58,663 cu.yd. common, 12,403 cu. yd. solid rock and 3,221 cu.yd. borrow excav., 7,820 sta.yd. overhaul, 106,058 sq. yd. 2½ in. bituminous macadam, 1,127.58 cu. yd. concrete, 98,734 lb. deformed steel bars, 109,004 sq.yd. 8 in. hand placed coarse stone base, bridges over 20 ft. span incl. 137.52 cu.yd. concrete, 14,851 lb. deformed steel bars; 8.54 mi. road between Troy and Union City, Federal Aid Project 54, Obion Co., 97,596 cu.yd. common excav., 99,969 sq.yd. 6 in. cement concrete base, 94,415 sq.yd. 2 in. modified Topeka bituminous concrete surface "A," 792.39 cu.yd. concrete, 72,348 lb. deformed steel bars, bridges over 20 ft. span, 925.93 cu.yd. concrete, 112.282 lb. deformed steel bars. D. Q. McComb, Nashville, ch. engr.

Ohio—July 21, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties:

Crawford Co., Sect. "G" Bucyrus-Cresline Rd., 1.69 mi., rein.-con. $64,821, bituminous macadam, asphalt or tar $57,254, brick $78,635.

Hancock Co., Sect. "Arlington" Findlay-Kenton Rd., 0.362 mi. mituminous concrete (brick gutter) $32,768, bituminous concrete (concrete gutter) $30,228.

Hocking Co., Sect. "G-2" Logan-Lancaster Rd., 1.292 mi., brick $51,513, rein.-con. $39,626.

Hocking Co., Sect. "G-2" Logan-Lancas- Rd., 1.776 mi., rein.-con. $61,402 brick, $72,307.

Tuscarawas Co., Sect. "New Comerstown" Uhrichsville-New Comerstown Rd., 0.63 mi., semi-monolithic brick $35,735, bituminous concrete $30,855, Kentucky rock asphalt $30,014.

Muskingum Co., Sect. "R" Zanesville-McConnelsville Rd., 0.96 mi., grading and drainage structures $11,624. L. C. Herrick, dir. highways.

O., Akron—July 20, by S. Porter, clk. Summit Co. grading and paving Sect. B-1 Cuyahoga Falls-Hudson Rd., 15,000 cu.yd. earth excav., 12,300 sq.yd. 7 in. waterbound macadam on 3 in. bituminous macadam, $34,350; various streets in Fairlawn Heights, 1,650 lin. ft. stone curb, 10,470 cu.yd. earth and 110 cu.yd. rock excav., 35,511 sq.yd. bituminous macadam, 30,952 ft. 6 in. vitr. sewer, $109,251; Sects. A and B Krumroy-Myersville Rd. 130, 5,600 lin.ft. 6 ft. 8 in. concrete curb, 24,500 cu.yd. earth excav., 14,730 sq.yd. bituminous concrete on waterbound macadam or 13,000 sq.yd. concrete base, $78,248; Sect. D Brittain-Massillon Rd. 49, 17,700 lin.ft. wood curb, 15,500 cu.yd. earth excav., 15,725 sq.yd. 6 in. concrete case, 15,725 sq.yd. vitr. brick, 17,050 sq.yd. concrete or 15,725 sq.yd. bituminous concrete, $71,850, $65,322 or $63,770 respectively. J. Weaver, Court House, engr.

O., Athens—July 21, by Athens Co. grading and bituminous macadam paving 2 mi. Marshfield-Carbondale Rd., also widening 1 concrete bridge, $49,423.

O., Columbus—July 22, by R. W. Smith, clk. Franklin Co., surface treating 28 roads, 295,185 sq.yd. $33,473. C. C. Lattimer, Court House, engr.

O., Dayton—July 20, by Comrs. Montbomery Co., paving Janette St. from Salem to Fairview Sts., 4,200 cu.yd. earth excav., 5,200 sq.yd. concrete or Kentucky rock asphalt on concrete. $25,000. P. S. Bookwalter, co. surv.

Michigan—July 20, by State Hy. Dept., Lansing, grading and surfacing 1 mi. State Trunk Line Rd. 87-2, incl. 4,046 cu.yd. excav., 10,741 sq.yd. asphalt, concrete or bituminous concrete, also 1.75 mi. State Trunk Line Rd. 65-1, Sects. A and B, 10,400 cu.yd. excav., 20,824 sq.yd. asphalt, concrete or bituminous concrete, both Genesee Co. L. H. Belknap, ch. engr.

Michigan—July 20, by State Hy. Dept., Lansing, grading 4.731 mi. State Trunk Line Rd. 51-2, Sect. A, Ottawa Co., 30,000 cu.yd. excav., 600 lin.ft. tile culverts, etc. L. H, Belknap, ch. engr.

Michigan—July 21, by State Hy. Dept., Lansing, grading and surfacing 1.39 mi. State Trunk Line Rd. 36-3, Lapeer Co., 3,523 cu.yd. excav., 15,838 sq.yd. asphalt, concrete or bituminous concrete, also 5.383 mi. Federal Aid Project 84, Monroe Co., 22,587 cu.yd. excav., 56,094 sq.yd. asphalt, concrete or bituminous concrete. L. H. Belknap, ch. engr.

Michigan—July 26, by State Hy. Dept., Lansing, grading and surfacing 1.923 mi. State Trunk Line Rd. 18-19, Sect. B, Cheboygan Co., 9,632 cu.yd. earth excav., 18,047 sq.yd. gravel. L. H. Belknap, ch. engr.

Mich., St. Joseph—July 19, by H. Harper, clk., paving Pine St. also 1st St. from Viaduct to Pine St., about 4,700 sq.yd. vitr. brick on sand foundation, 3,200 lin.ft. concrete curbing. $25,000.

Illinois—July 17, by State Dept. of Pub. Wks. and Bldgs., Div. of Highways, Springfield, paving with portland cement concrete 0.33 mi. Route 3, Sect. 54, Greene Co., 18 ft., (to be let in conjunction with paving in Carrollton), Kelker, De Leuw & Co., Conway Bldg., Chicago, engrs.; 0.27 mi. Route 25, Sect. 38 C, Iroquois Co., 18 ft., (to be let in conjunction with certain city paving in Clifton), C. F. Helman, Paxton, city engr.; grading 0.23 mi. Project 9, Sect. 39, Madison Co., incl., 23,280 yd. excav.

Ill., Sterling—July 18, grading, curbing and constructing 7,000 sq.yd. rein.-con. pavement on various streets. A. G. Hubbard, city engr.

Streets and Roads (Continued)

Wisconsin—July 18, by State Hy. Comn., at div. office 6, 213 South Barstow St., Eau Claire, grading and surfacing Menomonie-Hudson Rd., Federal Aid Project 1023, Dunn Co., Sta. 260-336 plus 39. 6,267 cu.yd. unclassified excav., 3,780 cu yd. shale and 945 cu.yd. gravel surfacing, etc.; Menomonie-Hudson Rd., Federal Aid Project 1024. Sta. 0-89 plus 10, 9,592 cu.yd. unclassified excav., 4,485 cu.yd. shale and 890 cu.yd. gravel surfacing, etc. A. R. Hirst, highway engr.

Wisconsin—July 19, by State Hy. Comn., at div. office 1, 149 East Wilson St., Madison, grading and paving, 0.85 mi. Madison-Verona Rd., Federal Aid Project 312, Dane Co., 3,143 cu.yd. earth excav., 11,475 lb. reinforcing, 9,000 sq.yd. concrete pavement, etc.; 1.35 mi. Madison-Oregon Rd., Federal Aid Project 273, Dane Co., 4,203 cu.yd. earth excav., 15,837 sq.yd. concrete surfacing, etc.; Reedsburg-Spring Green Rd., Federal Aid Project 243, Sauk Co., alternate bids received on West Route and East Route, West Route incl. 39,866 cu.yd. earth excav., 5,522 cu.yd. borrow, 6,754 cu.yd. solid and 2,100 cu.yd. loose rock excav., etc., East Route, 43,728 cu.yd. earth, 2,605 cu.yd. solid and 2,100 cu.yd. loose rock excav., 4,636 cu.yd. borrow, etc. A. R. Hirst, Madison, highway engr.

Wis., Fond du Lac—July 17, by A. M. Hunter, clk., paving 1.1 mi. 12th, Howard, Oak, South, Grant, Merrill and Rose Sts., 20 ft., rein.-con., sheet asphalt on 5 in. concrete, 1 binder or asphaltic concrete. $25,000. R. Petters, City Hall, Madison, engr.

Wis., Shawano—July 19, by P. J. Winter, clk., paving Division, Main and Andrews Sts., 20 ft., rein.-con. or other type of permanent pavement. $25,000. Private plans.

Wis., Watertown — July 18, by F. S. Weber, clk., paving 1 mi. various streets, incl. 15,000 sq.yd. 1 course concrete with concrete curbs and gutters. $25,000. A. Kraeft, Watertown, engr.

Minnesota—Aug. 1, by State Hy. Dept., St. Paul, 11 mi. State Project 9-29, Federal Aid Project 289, Houston and Fillmore Counties, 270,000 cu.yd. excav., 1,720 sq.yd. concrete spillway, culverts, 8 bridges, $150,000; 10.8 mi. State Project 11-21, Roseau Co., 151,000 cu.yd. excav., culverts, 4 bridges, $107,100; 2 mi. State Project 7-28, Federal Aid Project 233, Brown and Nicollet Counties, 163,000 cu.yd. excav., culverts, $136,300; 17 mi. State Project 8-30, Federal Aid Project 280, Itasca Co., 218,000 cu.yd. excav., culverts, $176,200; 8 mi. State Project 12-21, Federal Aid Project 256, Carver Co., 133,000 cu.yd. excav., $67,100; 6 mi. State Project 42-21, Federal Aid Project 207, Olmsted Co., 90,000 cu.yd. excav., culverts, $75,900; State Project 53-23, Dakota Co., 12,940 sq.yd. one-course concrete paving, culverts, $26,000; 4.5 mi. State Project 7-30, Federal Aid Project 269, Waseca Co., 55,000 cu.yd. excav., culverts, 1 bridge, $32,000; 8.7 mi. State Project 15-29, Watonwan Co., 9,000 cu.yd. excav., gravel surfacing, 1 bridge, $25,000; 1.4 mi. State Project 4-25, Beltrami Co., 37,000 cu.yd. excav., gravel surfacing, 1 bridge, $25,000. State Hy. Dept., 1246 University Ave., St. Paul, engrs.

Minnesota—Aug. 2, by State Hy. Dept., St. Paul, gravel surfacing 21,000 cu.yd. State Project 44-21, Federal Aid Project 147-C, Houston Co., $78,600; 24,000 cu.yd. State Project 9-23, Jackson and Nobles Counties, $46,200; 15,600 cu.yd. State Project 3-32, Wilkin Co., $35,000; 10,426 cu.yd. State Project 9-30, Mower Co., $30,000; 4,000 cu.yd. State Project 8-37, Federal Aid Project 94, Polk Co., $12,000; 8,300 cu.yd. State Project 8-36, Polk Co., $16,000; 10,300 cu.yd. State Project 8-38, Federal Aid Project 204, Itasca Co., $17,000. State Hy. Dept., 1246 University Ave., St. Paul, engrs.

Minn., St. Paul—July 17, by H. W. Austin, city purch. agt., paving Grand Ave. from Oakland Ave. to Milton St. and from Milton St. to Cretin Ave., creosoted wood blocks, $108,000; Hudson Rd. from Point Douglas Rd. to east city limits, concrete, $30,000. O. Claussen, city engr.

Kan., Larned—July 28, by Comrs. Pawnee Co. grading, sand clay surfacing, etc., 10.283 mi. Santa Fe Trail, Sects. A, B and C, Federal Aid Project 123.

Mo., Columbia—July 24, by J. S. Bicknell, city clk., grading, curbing, guttering and paving, 5 streets, Kentucky rock asphalt; adv. this issue.

Mo., Columbia—July 24, by J. S. Bicknell, city clk., repairing, surfacing and resurfacing about 37,000 sq.yd. streets in Dists. 2, 4, 6 and 7, tarvia preparations; adv. this issue.

Mo., Kennett—July 18, at office of D. Stroud, city clk., curbing, grading, laying sewers and paving various streets. C. E. Smith & Co., Cape Girardeau, engrs.; adv. this issue.

Tex., Cameron—July 25, by J. T. Kemp, judge Milam Co., grading, surfacing, etc., 17.94 mi. State Highway 36, Federal Aid Project 222, incl. 91,035 cu.yd. borrow, 46,343 cu.yd. roadway excav., 1,114 cu.yd. concrete, 96,008 lb. reinforcing, 37,241 cu.yd. schist and 2,523 cu.yd. gravel. $113,547. A. F. Mitchell, co. engr.

Tex., Farmersville—July 18, by Mayor, paving and grading McKinney, Washington and Main Sts., 10,841.6 sq.yd. cement concrete or vitr. brick on concrete, 1,196 lin.ft. combined curb and gutter. $25,000. Montgomery & Ward Co., Wichita Falls, engrs.

Tex., Tyler—July 21, by D. R. Pendleton, judge Smith Co., grading, surfacing, etc., 14.73 mi. Highway 37, Federal Aid Project 284, 691.9 cu.yd. concrete, 58,149 sq.yd. bituminous macadam, 37,121 sq.yd. concrete pavement, 52,152 lb. reinforcing, 5,148 cu.yd. clay binder, 10,296 cu.yd. imported and 11,949 cu.yd. local gravel. $252,003. Materials for concrete structures, and gravel and clay, to be furnished by county. D. K. Caldwell, engr.

N. M., Roswell—Aug. 4, at office of J. A. Gilmore, city clk., grading, curbing, guttering and paving various streets. L. Rowland, city engr.; adv. this issue.

California—July 24, by State Hy. Comn., Sacramento, grading 9.9 mi. and graveling 2.5 mi. highway between Hopland and El Robles. A. B. Fletcher, state highway engr.

California—July 31, by State Hy. Comn., Sacramento, grading and concrete paving 10.9 mi. highway between Colusa and Long Bridge, Colusa and Sutter Counties; grading 11.7 mi. between Fish Springs School and Southeast corner Sect. 33, T. 8 S., R. 33, M. D. B. and M., Inyo Co., 6.8 mi. between Cottonwood Creek and First Corner Kern River, Kern Co.; asphaltic concrete surfacing 0.8 mi. between Arcola School and Borden Station. A. B. Fletcher, state highway engr.

Cal., Redwood City—July 17, surfacing Roosevelt Ave., 166,400 sq.ft. oil macadam. C. L. Dimmitt, Redwood City, engr.

Cal., San Rafael—July 17, by Supervs. Marin Co., improving Point San Pedro Rd., Sect. 1, 67,809 sq.ft. 4 in. bituminous concrete or 5 in. hydraulic concrete, 840 lin.ft. 8-15 in. corrugated iron pipe culverts, 500 cu.yd. grading, etc.; Point San Pedro Rd., Sect. 2, 40,190 sq.ft. 4 in. bituminous concrete or 5 in. hydraulic concrete, 1,200 cu. yd. grading, 850 cu.yd. fill, etc.; Bolinas Rd., Sect. 5, 9,459 cuyd. grading etc., Sect. 7, 4,354 cu.yd. grading, 500 cu.yd. surfacing, etc., Sect. 8, 9,414 cu.yd. grading, 1,000 cu. yd. surfacing, etc., Sect. 9, 2,528 cu.yd. grading, 400 cu.yd. surfacing etc. G. M. Dodge, co. surv.

Ont., Oakville—July 17, by P. A. Bath, council clk., 7,565 sq.yd. concrete pavement, 6,426 lin.ft. curbs and gutters, 7,340 sq.yd. tarvia pavement and 8,600 lin.ft. concrete sidewalks. $28,000. Prices wanted on cement. J. A. Bell, Court House, St. Thomas, engr.

BIDS RECEIVED

Maine—State Hy. Dept., Augusta, opened bids June 23, (1) 3.443 mi. State Highway "O," Project 35, in Canton, 112 cu. yd. concrete masonry, 10,856 cu. yd. earth and 385 cu. yd. rock excav., 7,897 cu. yd. gravel, (2) 0.32 mi. State Highway "K", Project 47, in Island Falls, 500 sq. yd. cobble gutter, 4,382 cu. yd. earth excav., 712 cu. yd. gravel, (3) 4.023 mi. State Highway "O", Project 32, in Canton, 129 cu. yd. concrete masonry, 7,200 cu. yd. earth excav., 1,537 cu. yd. borrow, 5,307 cu. yd. gravel base, 5,855 cu. yd. gravel, (4) 0.85 mi. State Highway "F", in Wilton Village. 330 cu. yd. masonry, 790 lin. ft. concrete curbing, 361 sq. yd. sidewalk, 3,100 cu. yd. earth excav., 430 cu. yd. borrow, 223 cu. yd. stone and gravel base, 1,834 cu. yd. gravel, (5) 3.14 mi. State Highway "K", Project 51, in Easton, 52 cu. yd. concrete masonry, 10,260 cu. yd. earth and 1,920 cu. yd. rock excav.. 500 cu. yd. borrow, 1,287 cu. yd. gravel and stone base. 7,833 cu. yd. gravel, (6) 2.188 mi. State Highway "K", Project 43, in Orono, 4,493 cu. yd. concrete, 3,500 cu. yd. earth excav., 1,800 cu. yd borrow, 4,200 cu. yd. gravel base, 225 cu. yd. gravel, 200,680 lb. reinforcing, (7) 1.76 mi. State Highway "K", Project 53, in Orono, 3,600 cu. yd. concrete, 3,800 cu. yd. earth excav., 1,600 cu. yd. borrow, 3,800 cu. yd. gravel base, 159,800 lb. reinforcing, (8) 4.66 mi. State Higfihway "E", Project 12, in New Gloucester, from W. H. Doran, Mercer, (1) $32,065 (4) $17,552; J. H. Ke [illegible], Rumford, (1) $40,369 (3) $46,101 (4) $17,539; R. and J. McGregor, Rumford, (1) $41,971 (3) $48,490; M. Hughes, 105 3rd St., Bangor, (2) $8,237 (5) $47,229; H. A. Day, 254 Parkview Ave., Bangor, (2) $9,951; G. W. York, Island Falls, (2) $15,242; Arborio Road Constr. Co., 721 Main St., Hartford, Conn., (3) $48,805; A. V. Leo Constr. Co., Thompson, Conn., (4) $17,979 (5) $53,466; McCabe & Giovanni, 24 East Concord St., Boston, Mass., (5) $54,400; Portland Constr Co., 21 Portland St., Portland, (6) $55,992 (7) $51,178; A. D. Bridges Sons, Inc., Hazardville, Conn., (6) $57,327 (7) $51,041; Hassam Paving C., 17 Federal St., Worcester, Mass., (6) $57,896 (7) $50,717; J. McCormick, 319 Taunton Ave., East Providence, R. I., (8) $191,120; Forgione & Romano, Fidelity Bldg., Portland, (8) $191,840: Bruno & Pettiti, 18 Tremont St., Boston, Mass., (8) $212,459. Noted June 8.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids July 5, repaving roadway of Bway. from Kent to Bedford Aves., new granite blocks, from J. Meehan & Son, 74 Cortlandt St., New York, $43,372; Greico Bros., 172 Russell St., $46,980; Brooklyn Manhattan Contg. Co., 26 Court St., $57,100. Noted June 29.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., opened bids July 5, recurbing, reflagging and paving (1) 5th Ave. from Grand to Jamaica Aves., paving (2) Liberty Ave. from 104th to 109th Sts., repaving (3) Cooper Ave. from Myrtle Ave. to Brooklyn Boro line, 2nd Ward, from Cleveland Trinidad Paving Co., Flushing, (1) $12,045, (2) $45,505, (3) $66,414; W. P. McDonald Constr. Co., 17 West 42nd St., New York, (1) $13,105, (2) $41,610, (3) $81,622; Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (2) $46,390. Noted June 29.

N. Y., New York—Dept. Parks, Municipal Bldg., opened bids July 6, paving centre roadway of Bronx and Pelham Parkway from point approximately 600 ft. west to Williamsbridge Rd. to Bronx Park East, in Boro of Bronx, from C. D. Beckwith, Inc., 2875 Bway., $27,515; Interboro Asphalt Co., 2306 Creston Ave., $29,789; Asphalt Constr. Co., 208 Bway., $30,177.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., opened bids July 6, paving Ft. Washington Pl., (Magaw Pl.) from Hastings Pavement Co., 25 Broad St., $12,443, Burnside Contg. Co., 270 Burnside Ave., $13,451, Regan Towers Co., 124 West 121st St., $14,044; widening and repaving Madison Ave. (curb to rail) from J. E. Gaffney, 143rd St. and Harlem River, $52,731, Asphalt Constr. Co., 208 Bway., $52,793, Uvalde Asphalt Paving Co., 1 Bway., $53,305; 34th St. (curb to rail), from W. J. Fitzgerald, 547 West 45th St., $19,509, Interboro Asphalt Co., 2306 Creston Ave., $21,383, C. D. Beckwith, Inc., 2875 Bway., $22,241. Noted June 29.

N. Y., White Plains—Bd. Supervs. Westchester Co., Court House, opened bids July 3 constructing North Bway., Co. Rd. 6, from Petrillo Bros., 434 North High St., Mt. Vernon, $42,778. Noted June 22.

North Carolina—State Hy. Dept., Raleigh, (a) clearing, grading and topsoiling, (b) rein.-con. bridges and culverts on (1) 9.76 mi. State Project 661, Richmond Co., (2) 6.92 mi. State Project 402, Chatham Co., (3) 12.82 mi. State Project 419, Franklin Co., (4) 20.5 mi. State Project 167, Northampton Co.; (a) grading and concrete or asphaltic paving, (b) rein.-con. bridges and culverts on (5) 7.83 mi. State Project 473, Vance Co., (6) 1.56 mi. State Projects 420 A and B, Franklin Co., (7) 10.62 mi. State Project 742, Forsyth Co., (8) 3.53 mi. State Project 713, Ashe Co.; grading and concrete or asphaltic paving (9) 19.2 mi. State Projects 386 and 387, Robeson Co., (10) 0.14 mi. State Project 264 Craven and Pamlico Counties, (11) 11.25 mi. State Project 463, Person Co.; clearing and grading (12) 12.88 mi. State Project 145, Hertford Co.; (a) clearing and grading, (b) rein.-con. bridges and culverts on (13) 5.18 mi. State Project 711, Ashe Co.; (a) clearing, grading and concrete or asphaltic paving, (b) rein.-con. bridges and culverts on (14) 5.77 mi. State Project 665, Richmond Co.; clearing, grading and concrete or asphaltic paving (15) 5.54 mi. State Project 800, Avery Co.; clearing and grading (16) 13.68 mi. State Project 200, Carteret Co., from McDonald & Brooks, Hamlet, (1a) $31,802, (1b) $5,346; W. H. Saunders Hamlet, (1a) $35,585, (1b) $5,185; J. F. Mulligan, North Wilkesboro, (1a) $35,355 (1b) $5,429, (2a) $25,617, (2b) $4,985, (8a) $131,176, (13a) $43,563; J. T. Plott, Greensboro, (2a) $25,420, (2b) $5,137; F. P. Holder Jefferson, Ga., (2b) $4,816; Jamison

Streets and Roads (Continued)

Bros., High Point, (2a) $25,811, (3a) $42,490, (4a) $71,218; Brooks-Calloway Co., Forsyth Bldg., Atlanta, Ga., (3a) $46,472, (3b) $13,523, (4b) $19,406; Olliver & Costello Bros., Knoxville, Tenn., (3b) $14,479, (15) $155,486; C. B. Hester, Greensboro, (3a) $49,486; J. A. Kreis, Holston Bank Bldg., Knoxville, Tenn., (3b) $14,851, (14b) $7,707; Bacon&Moore, Littleton, (4b) $16,597; Virginia Contg. Co., Petersburg, Va., (4a) $73,630; Atlantic Bridge Co., Roanoke, Va., (4b) $18,093; Porter & Peck, Greenville, (4a) $73,889; R. G. Lassiter, Citizens Bank Bldg., Raleigh, (5a) $236,071, (5b) $5,335, (6a) $47,060, (6b) $3,821; Porter & Boyd, Realty Bldg., Charlotte, (5a) $240,763, (5b) $6,033, (11) $297,408; Concrete Steel Bridge Co., Clarksburg, W. Va., (5b) $5,901, (7b) $14,064, (8b) $18,082, (13b) $13,914; Hardaway Constr. Co., Charlotte, (5a) $242,702, (7a) $381,888; Chandler & Ragland, Virgilina, Va., (6a) $46,349, (6b) $4,175; Luten Bridge Co., 405 East 4th Ave., Knoxville, Tenn., (6b) $4,360, (8b) $19,579, (13b) $14,701, (14b) $7,827; Harris Constr. Co., Newton, (7f) $363,911, (7b) $13,846; Hagedorn Constr. Co., Thomasville, (7a) $364,765, (7b) $13,866; J. O. Heyworth, Harvester Bldg., Chicago, (9) $552,024; General Constr. Co., Raleigh, (9) $574,285; S. J. Graves, Minneapolis, Minn., (9) $610,895; Rhyne & Kitchen, Blacksburg, S. C., (10) $25,000; Batson-Cook Co., West Point, Ga., (10) $27,196, (16) $45,463; Eagle Eng. Co., New Bern, (10) $28,188, (16) $45,385; A. S. Wardrep, Holston Bank Bldg., Knoxville, Tenn., (11) $298,868, (14a) $169,607, (14b) $7,312; W. W. Boxley, Roanoke, Va., (11) $299,325; O'Brien Constr. Co., Balsam, (12) $41,084, (15) $147,836; N. L. Teer, Durham, (12) $41,281; J. P. Dicus, Robersonville, (12) $44,283; Turner-Hartsoe Constr. Co., Warrensville, (13) $14,492; Lampton & Burks, Louisville, Ky., (14a) $171,331; C. D. Rigsbee, Durham, (14a) $176,514; Luck Co., Sylva, (15) $152,559, (16) $52,121. Noted June 8.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids June 30, grading, bridging and paving roads with (a) rein.-con., (b) brick, (c) asphaltic macadam, oil, (d) tar macadam, (e) bituminous concrete, (f) waterbound macadam, (g) asphaltic macadam, (h) concrete, in following counties: Auglaize Co., Sect. "H" Lima-Wapakoneta Rd., 6,558 mi., from Radebaugh-Graham Co., Columbus, (a) $177,325 (b) $239,823; Lewis & Copeland, Lima, (a) $178,193 (b) $233,257; J. Wroe, 54 Davies St., Dayton, (a) $191,394; V. Smith, Dayton, (b) $234,436. Auglaize Co., Sect. "G" Sidney-Wapakoneta Rd., 5.305 mi., from Lewis & Copeland, Lima, (a) $155,419 (b) $203,723; Radebaugh-Graham Co., Columbus, (a) $155,968 (b) $201,580; J. Wroe. 54 Davies St., Dayton, (a) $157,083 (b) $204,223. Clark Co., Sect. "L-1" Springfield-Washington C. H. Rd., 1.65 mi., from Central Paving Co., Hamilton, (c) $32,329 (d) $32,809; W. H. Ringwold & Sons Co., Chillicothe, (c) $33,106 (d) $33,106; N. B. Putnam, Van Wert, (c) $34,161 (d) $34,083. Clark Co., Sect. "O" Springfield-Washington C. H. Rd., 1.857 mi., from W. H. Ringwold & Sons Co., Chillicothe, (c) $40,411 (d) $40,411; Central Paving Co., Hamilton, (a) $52,714 (c) $42,044 (d) $42,574, (e) $52,097; N. B. Putnam, Van Wert, (c $43,817 (d) $43,729; C. Bird, Springfield, (a) $54,416; M. J. Cooney, Springfield, (a) $54,933; A. G. Pugh, Columbus, (e) $53,786. Crawford Co., Sects. "M" and "N" Marion-Bucyrus Rd., 6.705 mi., from E. A. Freshwater & Son, Bucyrus, (b) $37,750. Fayette Co., Sect. "G" Washington C. H.-London Rd., 4.268 mi., from Craig & Jordan, Blanchester. (d) $86,927 (f) $74,732 (g) $88,949; W. H. Ringwold & Sons Co., Chillicothe, (d) $91,980 (f) $79,159 (g) $91,920; C. L. Straw, Paulding, (d) $91,000 (f) $80,776 (g) $91,000. Holmes Co., Sect. "B" Navarre-Berlin Rd., 3.987 mi., from Griggs-Anderson Constr. Co., Millersberg, (h) $78,426. Lawrence Co., Sect. "R" Ohio River Rd., 0.676 mi., from G. B. Mahl, Ironton, (e) $16,764; G. C. Harden, Ironton, (e) $15,883. Lawrence Co., Sect. "O" Ohio River Rd., 1.468 mi., from Jenkins Bros., Kittsville, (e) $35,505. Pike Co., Sect. "C-1" Columbus-Portsmouth Rd., 0.393 mi., from Anderson & Brown, Chillicothe, (a) $21,617; Waverly Lumber & Constr. Co., Waverly, (a) $21,986; Harper & Ruel, Portsmouth, (a) $23,673. Tuscarawas Co., Sect. "Mineral City" Canton-Canal Dover Rd., 1.03 mi., from Daley Bros., Bolivar, (b) $34,611; C. G. Fuller, Dover, (b) $35,041; Kane Bros., Youngstown, (b) $35,184. Athens Co., Sect. "L-1" New Lexington-Athens Rd., 2.659 mi., grading and building bridge, from Sterling Constr. Co.. Akron, $31,544; J. A. Petrie, Logan, $33,954; D. M. Sawyer, Glouster, $34,420. Hamilton Co., Sect. "Z" Glendale-Milford Rd., 1.798 mi., grading and paving from Cleary, Coley & Berry, Cincinnati, (h) $96,093. Hamilton Co., Sect. "Z" Glendale-Milford Rd., building drainage structures, from K. Vaughn, Hamilton, $51,950. Cleary, Coley & Berry, Cincinnati, $60,663. Lawrence Co., Sect. "M-2" Ohio River Rd., 0.14 mi., building rein.-con. bridge, from G. B. Mahl, Ironton, $14,798. Lawrence Co., Sect. "M" Ohio River Rd., constructing culvert, from G. C. Hardin, Ironton, $3,721. Noted June 22.

O., Akron—M. P. Tucker, dir. Pub. Serv., opened bids July 5, grading and paving, etc., (1) 1,565 ft. Bluff and Prospect Sts., (2) 750 ft. Weber and Charlotte Sts., (3) 6,140 ft. Tallmadge Ave., (4) 2,000 ft. Spicer St., (5) 2,450 ft. Cole Ave., (a) brick, (b) brick and stone, (c) asphalt and brick, (d) asphalt, from H. Gilbert, 19 South Martha Ave., (1a) $30,766, (1b) $32,296, (2a) $15,927, (5a) $61,940; McAlonan Bros., 506 Woodland Ave., (1a) $30,938, (1b) $32,488, (1c) $32,928, (2a) $15,953, (3a) $128,911, (3d) $127,971, (4a) $34,045, (4d) $34,276, (5a) $60,865, (5d) $61,225; Hollinger & Davidson, 315 South Bway., (1a) $31,089, (1b) $32,838, (2a) $17,047; V. Olson Contg. Co., Herberich Bldg., (3a) $127,839, (5a) $61,257; T. E. McShaffrey Constr. Co., 171 South Forge St., (3a) $133,790, (d) $128,004, (4a) $36,128, (4d) $34,273; S. F. Baker, Box 174, R. F. D. 24, South Akron, (4a) $34,020. Noted June 29.

O., Cleveland—Repaving Euclid Ave. from East 115th St. to city limits, 200 cu. yd. earth excav., 10,370 sq. yd. asphalt and 52,000 sq. ft. stone relaid and filled with asphalt, from Cleveland Trinidad Paving Co., The Arcade, $39,765; River Constr. Co., Schofield Bldg., $41,679.

O., Cleveland—Cuyahoga Co. opened bids July 1 paving Pleasant Valley Rd. 1, 13,000 cu.yd. earth excav., 22,300 sq.yd. 8 in. concrete, 25,000 lin.ft. 4 in. sewers, from M. A. Ryan, c/o Pavers Exch. Society for Savings Bldg., $78,616; King Bridge Co., foot of East 69th St., $80,013; Ohio Contg. Co., Elyria, $81,414. Engrs. est. $87,527.

O., Euclid—Opened bids July 3, asphalt paving (1) Beachview Ave., (2) Cambridge, Elsmer and Hawthorne Aves., from H. G. Herring, c/o Pavers Exch., Society for Savings Bldg., Cleveland, (1) $23,403 (2) $23,700; Cleveland Trinidad Paving Co., The Arcade, Cleveland, (1) $23,574 (2) $22,925. Noted June 22.

Michigan—State Hy. Dept., Lansing, received low bid, grading and surfacing 2.912 mi. Federal Aid Project 75, Sect. B, Jackcon Co., 14,148 cu.yd. excav., 34,324 sq.yd. bituminous concrete, from Brooks Constr. Co., 2104 Miner St., Ft. Wayne, Ind., $81,644. Noted June 22.

Michigan—State Hy. Dept., Lansing, opened bids June 27, grading and surfacing 4.56 mi. State Trunk Line Rd. 16-5, Ottawa Co., from H. A. Hoxie, Grand Rapids, $76,923; C. Marsman, Grand Rapids, $79,015; New Era Road Bldg. Co., New Era, $81,266. Noted June 22.

Michigan—State Hy. Dept., Lansing, grading and surfacing 1.134 mi. State Trunk Line Rd. 18-20, Sect. A, and 61-2, Sect. A, Gladwin Co., from H. Campbell & Son, Bay City, $18,674, Taylor Constr. Co., Birmingham, $20,257, McKimmey & Mills, Beaverton, $20,343; 3.429 mi. State Trunk Line Rd. 37-5, Sect. C, Barry Co., from P. W. O'Conner & Son, Grand Rapids, $26,989, H. A. Brog, Middleville, $28,365, Saginaw Constr. Co., Saginaw, $28,664; 3.136 mi. State Trunk Line Rd. 79-1, Barry Co., from P. W. O'Conner & Son, Grand Rapids, $28,524, J. Mishler, Freeport, $42,630, Byam & Whitmore, Eagle, $42,984; 2 mi. State Trunk Line Rd. 25-14, Alger Co., from Alger Co. Rd. Comn., Munising, $30,000, Hall & Labby, Negaumee, $38,435.

Mich., Detroit—Opened bids paving (1) Cherrylawn Ave., (2) Cloverlawn Ave., (3) Cortland Ave., (4) Hardyke Ave., (5) Lemay Ave., (6) Monterey Ave. from 12th to Linwood Aves., (7) Monterey Ave. from Linwood to Dexter Aves., (8) Northlawn Ave., (9) Oakland Ave., (10) Rogers Ave., (11) Taylor Ave., (12) Thompson Court, (13) Jos. Campau Ave., from Detroit Asphalt Paving Co., 20 McGraw Bldg., (1) $20,489 (2) $37,170 (3) $14,963 (4) $8,865 (5) $21,173 (6) $37,695 (7) $38,337 (8) $34,656 (9) $71,307 (10) $14,504 (11) $15,748 (12) $4,351 (13) $51,045; Cleveland Trinidad Paving Co., 402 Hammond Bldg., (1) $21,678 (2) $39,582 (3) $14,678 (4) $8,915 (5) $23,037 (6) $37,053 (7) $37,373 (8) $36,901 (9) $77,518 (10) $14,744 (11) $16,938 (12) $5,047 (13) $54,640; G. R. Cooke, 1260 Penobscot Bldg., (9) $73,361 (13) $51,938. Noted June 8.

Wis., West Allis—Paving with (a) rein.-con., (b) vibrolithic concrete, from R. L. Reisinger Co., 464 Oakland Ave., Milwaukee. 1,292 sq.yd. North Gordon Ave., (a) $2.22, (b) $2.37, 2,701 sq.yd. 45th Ave., (a) $2.16, (b) $2.31, 5,508 sq.yd. 48th Ave., (a) $2.16, (b) $2.31, 6,330 sq.yd. 50th Ave., (a) $2.16, (b) $2.31, 7,288 sq.yd. 51st Ave., (a) $2.15, (b) $2.31, 3,455 sq.yd. 52nd Ave., (a) $2.16, (b) $2.31, 4,073 sq.yd. 54th Ave., (a) $2.16, (b) $2.31, 4,617 sq.yd. 63rd Ave., (a) $2.16, (b) $2.31, 2,049 sq.yd. Scott St., (a) $2.26, (b) $2.33. Noted June 22.

Missouri—State Hy. Dept. at div. office Alexandria opened bids June 23, 1.754 mi. road from Wayland to Keokuk, Federal Aid Project 172, Clark Co., (1) 3,914 cu. yd. earth excav., (2) 1,444 cu. yd. borrow, (3) 16,576 sq. yd. 1 course concrete, etc., from Cameron-Joyce & Co., Keokuk, Ia., (1) $0.40 per cu. yd. (2) $0.35 (3) $2.88, total $50,792; Keokuk Quarry Constr. Co., Keokuk, Ia., (1) $0.50 (2) $0.50 (3) $2.92, $52,123; Lynch-McDonald Constr. Co., Moberly, (1) $0.50 (2) $0.40 (3) $2.96, $52,469. Noted June 22.

Missiouri—State Hy. Dept. at div. office Boonville, opened bids May 18, 5.57 mi. road from Boonville eastward, Federal Aid Project 24, Cooper Co., (1) 38,697 cu. yd. earth excav.. (2) 6,200 sq. yd. broken stone base course, (3) 36,200 sq. yd. specification A bituminous macadam surface course, fluxed native asphalt binder, (4) 36, 200 sq. yd. specification A bituminous macadam surface course, oil asphalt binder, (5) 36,200 sq. yd. specification A bituminous macadam surface course. cool tar cement binder, etc., from E. C. Johnson, Carrollton, (1) $0.37 per cu. yd. (2) $0.77 (3) $0.92 (4) $0.905 (5) $0.905, total $75,570; Land Constr. Co., Ballinger Bldg., St. Joseph, (1) $0.40 (2) $0.80 (3) $0.98 (4) $0.97 (5) $0.97, $85,258; E. J. Meeke & Co., Kansas City, (1) $0.45 (2) $1.08 (4) $0.99 (5) $0.91, $106,348.

Missouri—State Hy. Dept. at div. office Houston, opened bids June 22, 3.7 mi. road from Houston to Rolla. Federal Aid Project 109 B. Texas Co., (1) 16,100 cu. yd. earth excav., (2) 1,225 cu. yd. rock excav., (3) 26,304 sq. yd. gravel surfacing, etc., from Coopers Constr. Serv. Co., St. Louis. (1) $0.35 per cu. yd. (2) $1.75 (3) $0.46, total $35,170; M. E. Gillioz, Monett, (1) $0.40 (2) $2 (3) $0.40. $35,356. Noted June 22.

Missouri—State Hy. Dept. at div. office Ironton, opened bids May 26, 11.26 mi. road from Ironton to Potosi, Federal Aid Project 107A, Iron Co., (1) 30,717 cu. yd. earth excav., (2) 27,549 cu. yd. borrow, etc., from St. Louis Bridge & Supply Co., Frisco Bldg., St. Louis, (1) $0.36 per cu. yd. (2) $0.41, total $40,625; M. E. Gillioz, Monett, (1) $0.40 (2) $0.35, $42,299; C. Gove, St. Louis, (1) $0.50 (2) $0.495, $45,213. Noted May 18.

Missouri—State Hy. Dept. at div. office Liberty, opened bids June 6, surfacing 10.52 mi. road from North Kansas City to Nashau, Federal Aid Project 6A. Clay Co., (1) rock asphalt, (2) concrete, (3) penetration macadam, (4) inverted penetration macadam, (5) asphaltic concrete, from O. G. Chapin, San Antonio, Tex., (1) $237,140; J. O. Patterson & Co., 311 Ridge Bldg., Kansas City, (1) $297,343 (3) $267,775 (4) $207,933; Lewis-Rich Constr. Co., St. Louis, (1) $316,026 (2) $319,802; Koss Constr. Co., 2818 5th Ave., Des Moines, Ia., (2) $302,480; Dalton Constr. Co., Junction City, Kan., (2) $321,133; W. A. Ross, Kansas City, (3) $233,457; Unit Constr. Co., Title Guaranty Bldg., St. Louis, (4) $247,275.

Missouri—State Hy. Dept. at div. office Liberty, opened bids June 5, paving 13.07 mi. road from Liberty to Excelsior Springs. Federal Aid Project 25, Clay Co., (1) inverted penetration macadam, (2) penetration macadam, (3) asphaltic concrete, (4) rock asphalt, (5) concrete, from P. P. Young, Savannah Rd., St. Joseph, (1) $240,748 (2) $264,808 (5) $369,270; E. S. Meeke & Co., Kansas City, (1) $254,608 (2) $275,023 (3) $343,884; Unit Constr. Co., Title Guaranty Bldg., St. Louis, (3) $303,052; L. Rich Constr. Co., 429 Missouri Ave., East St. Louis, Ill., (4) $393,222 (5) $399,366; O. C. Chapin, San Antonio, Tex., (4) $396,771; Koss Constr. Co., 2818 5th St., Des Moines, Ia., (5) $388,506.

Tex., Dallas—Dallas Co. grading, etc., (1) 8.6 mi. Midway Church Rd., incl., 10,000 cu.yd. scarifying and reshaping, 23,000 cu.yd. earth excav., 20,000 cu.yd. native and 8,000 cu.yd. crushed stone, etc.; (2) grading surfacing with macadam and ⅝ in. bituminous topping 2.9 mi. Maple Ave. Rd., 2,000 sq.yd. reshaping and scarifying, 10,000

Streets and Roads (Continued)

cu.yd. earth excav., 5,270 cu.yd. native and 1,850 cu.yd. crushed stone to be furnished by county; from Hill, Wilson & Watson, Dallas, (1) $63,378, (2) $23,971; Wear & Thomas, Rogers, (1) $66,681, (2) $24,784.

Tex., Richmond—Ft. Bend Co. surfacing 13.01 mi. State Highway 36, (a) 9 in. gravel base, (b) 6 in. shell and 4 in. rock base with 1 in. bituminous topping, from Haden & Austin, Hill and Marsch Sts., Houston, (a) $121,603, (b) $129,413; Cooke & Arrington, Crockett, (a) $118,438, (b) $132,239; Wear & Thomas, Rogers, (a) $122,049, (b) $144,920. Noted June 15.

Tex., San Angelo—Tom Green Co. opened bids June 30, grading, surfacing and topping 15.43 mi. State Highway 4, from Harris & Powell, Tyler, $93,357; McCollum Constr. Co., 1507 F & M Bank Bldg., Ft. Worth, $99,841; M. M. Craven, Fredericksburg, $107,435. Noted June 22.

Wash., Seattle—Opened bids June 30, paving, etc., Wilson Ave. et al., (a) 34,000 sq.yd. 7 in. concrete, (b) 4,380 sq.yd. 6 in. concrete, (c) 7,125 lin.ft. concrete curbing, type A, (d) 12,000 cu.yd. subgrade, etc., from Independent Asphalt Paving Co., Seaboard Bldg., (a) $1.99, (b) $1.79, (c) $0.35, (d) $0.60, total $133,467; A. Tocco & Co., 1125 20th Ave. S., (a) $1.90, (b) $1.70, (c) $0.40, (d) $0.75; total $136,850; J. L. Smith, Pioneer Bldg., (a) $1.80, (b) $1.65, (c) $0.45, (d) $0.70, total $137,538. Engrs. est. $140,598.

CONTRACTS AWARDED

Vermont—State Hy. Dept., Montpelier, 5.71 mi. gravel road, Project 32, in Orange, to G. L. Gregoire & Co., Barre, $102,069; 2.15 mi. gravel road, Project 31, in Concord, to Dix & Stapes, Springfield, Mass., $39,298; 1.97 mi. Project 30, in Lunenberg, to Colburn Constr. Co., Concord, N. H., $41,901. Noted July 6.

Massachusetts—State Hy. Dept., Boston, constructing 6,950 ft. State Highway in Ayer and Shirley, 13,900 sq.yd. bituminous macadam, and 3,400 ft. in Acton, 6,800 sq. yd. bituminous macadam, to Canedy Constr. Co., New Bedford, $33,648 and $27,306 respectively; 600 ft. in Ashland, 1,200 sq.yd. bituminous macadam, to J. L. Schube, Ashland, $5,998.

Mass., West Springfield—Paving Riverdale Rd., 23,000 sq.yd. rein.-con. on 8 in. concrete, with 3 ft. tar macadam shoulders, to Hassam Paving Co., 17 Federal St.. Worcester, $82,830.

Conn.. New Haven—Paving Maple St. from Sherman to Pendleton Sts., 14,000 sq. yd. 1:2:4 concrete, 3,000 lin. ft. curving, to McGann Bros., New Haven. Engrs. est. $25,000. Noted June 22

N. Y., Buffalo—Paving Fisher St., specification B standard asphalt on concrete, to H. P. Burgard Co., 1968 Fillmore Ave., $27,067.

N. Y., Massena—President and Village Bd. Trustees rejected bids opened June 26, paving Bridges Ave., Andrews, Water and North Main Sts. Work will be done by day labor. Noted June 15.

N. Y., Spencer—Will macadamize 2 mi. Halsey Rd., by day labor under supervision of A. Peet, engr., Spencer, $25,000.

N. Y., Victor—Bd. Trustees improving Maple Ave., to M. C. Soper, 72 Cayuga St., Seneca Falls, $44,639. Noted June 15.

N. Y., White Plains—Bd. Supervs. Westchester Co., Court House, constructing Seven Bridge Rd. Co. Rd. 5, in towns of New Castle and Yorktown, to F. G. Fowler Constr. Co., 77 Carpenter Ave., Mt. Kisco, $38,408; Croton Point Ave., Co. Rd. 7, Harmon, to Christopher Bros., Peekskill, $8,362. Noted June 22.

N. J., Avon—Monmouth Co. (Freehold) constructing 8,845 sq.yd. State Highway Route 4, Sect. 11, here, rein.-con., to E. J. Bridge Co., 175 Smith St., Perth Amboy, $54,814. Noted May 25.

N. J., Belvidere—Warren Co. constructing 46,425 sq.yd. State Highway Route 5, Sect. 9, Barkers Corner-Hackettstown, concrete, to F. J. Gromans Sons, Bethlehem, $230,274. Noted May 11.

N. J., Boonton—Morris Co. (Morristown) repaving, 14,440 sq. yd. East Main St. concrete, to Huss & Young, Towaca, $57,350.

N. J., Long Branch—Bd. City Comrs. paving Liberty St. from Bway. to Atlantic Ave., to W. P. McDonald Constr. Co., Long Branch, $70,000. Noted June 15.

N. J., Red Bank—Monmouth Co. (Freehold) constructing 23,307 sq.yd. State Highway Route 4, Sect. 5-A, Maple Ave., here, cement, to T. J. Barrett, 147 Lafayette Ave., Trenton, $93,429. Noted June 1.

N. J., South Orange—Paving Ridgewood Rd. from West Orange line to South Orange Twp. line, 25,940 sq.yd., 5 x 12 x 2½ in. Hastings asphalt block, to J. Selitto, South Orange, $134,625.

Pa., Greensburg—Westmoreland Co., paving 3.3 mi. Youngwood and Hunker Rds., and grading and paving 3,600 ft. from Hunker to road in East Huntington Twp., to R. H. Cunningham & Sons, Turtle Creek (East Pittsburgh P. O.), $136,375 and $37,352 respectively.

Pa., Verona—S. P. Grundy, secy. Boro. Council, paving 2nd St. from South Ave. to Verona Rd., to Booth & Flinn Ltd., 1942 Forbes St., Pittsburgh; North Ave. from High to 2nd Sts., to McCrady Bros., 6th Ave., Braddock. Noted June 8.

D. C., Georgetown—Baltimore & Ohio R.R., 2 Wall St., New York, paving in railroad yards, here, to Empire Eng. Co., 216 East Lexington St., Baltimore, Md., $25,000.

Virginia—State Hy. Comn., Richmond, paving 7.99 mi. Hampton Roads, Richmond Highway, between Williamsburg and Toano, 18 ft. concrete, to J. U. Addenbrooks Sons, 125 East 24th St., Norfolk, $209,505. Noted June 29.

N. C., Reidsville—For 16,000 sq.yd. 2 course concrete sidewalks to Elliott & Sons, Spartanburg, S. C., $25,000; 50,000 sq.yd. asphaltic street paving to Atlantic Bitulithic Co., Virginia Ry. & Power Bldg., Richmond, Va., $175,000.

Fla., Mt. Dora—Improving various streets to F. G. Fowler, Mt. Dora, 2,900 sq. ft. resurfacing at $0.95 per sq. ft., 14,040 sq. ft. of 3 in. sheet asphalt $1.28, etc., total about $25,000.

Fla., Orlando—Comrs. Orange Co. clearing and grading 12.6 mi. road from Bithlo to Brevard Co. line, 200,000 cu. yd. excav. to E. W. Parker, Curry Bldg., Tampa, $63,400. Noted May 11.

Alabama—State Hy. Dept., Montgomery, grading and gravel surfacing 4.85 mi. Jackson Highway from Tuscumbia south, Colbert Co., to J. W. Gwin, Jefferson Co. Bank Bldg., Birmingham, $74,382; grading and surfacing with warrenite bitulithic on puzzolan cement concrete, 3.6 mi. Jackson Highway from Tennessee River to Sheffield and Tuscumbia, Colvert Co., to Southern Rds. Co., Amer. Trust Bldg., Birmingham, $88,789. Noted June 15.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 5,528 mi. Sect. "B" Columbus-Millersburg Rd., Franklin Co., asphaltic macadam sandstone base, to M. C. Miller, 314 East Northwood Ave., Columbus, $142,019; 5.221 mi. Sect. "B" Cincinnati-Zanesville Rd., Hamilton Co., plain concrete, to Englewood Constr. Co., Englewood, $244,801. Noted June 29.

O., Akron—See "Railways under Ohio".

O., Akron—Summit Co. grading and paving 3.91 mi. Kent Darrowville Rd. 119, to Kahl Bros. Constr. Co., 13,004 Woodland St., Cleveland, $102,784. Noted June 29.

O., Dayton—Paving Johnson St., 4,500 sq. yd. vitr. brick, to C. Hoolihan, 1406 Riverview St., $23,400.

O., Garfield Heights (Cleveland P. O.)—Paving East 106th St., Parkway Dr. Homeworth and Summerdale Aves., to Enterprise Paving & Constr. Co., 8436 Bway., Cleveland, $42,489. Noted July 6.

Michigan—State Hy. Dept., Lansing, grading and gravel surfacing 3 mi. Assessment Dist. Rd. 84, Saginaw Co., to J. W. Ederer & Co., Saginaw, $35,290.

Michigan—State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rd. 24-19, Isabella Co., 10,655 cu.yd. excav., 37,923 sq.yd. gravel, to Isabella Co. Rd. Comm., Mt. Pleasant, $37,050. Noted May 11.

Michigan—State Hy. Dept., Lansing, grading and gravel surfacing 6½ mi. Assessment Dist. Rd. 8, Bay Co., to G. C. Quackenbush, 203 Grand River Ave., Highland Park, $58,640.

Michigan—State Hy. Dept., Lansing, and gravel surfacing 6½ mi. Assessment Dist. Rd. 48, Saginaw Co., to L. I. Goldberg, East Tawas, $33,759.

Mich., Detroit—To Cleveland Trinidad Paving Co., 402 Hammond Bldg., paving Glynn Court, $36,183, Burlingame Ave. $34,924, Cortland Ave., $13,549, Tuxedo Ave., $35,385; to Detroit Asphalt Paving Co., 20 McGraw Bldg., St. Albertus Pl. $7,313, McGregor Pl. $5,803, Cicotte Ave. $47,229, Duncan Ave. $6,994, Farview Ave. $21,869, Horatio Ave. $18,920, Lakewood Ave. $22,372, Parkwood Ave. $32,525, Seebaldt Ave. $6,685, Mandalay St. $18,369, Otsego Ave. $11,978, Herbert St. $23,019; to G. R. Cooke, 1260 Penobscot Bldg., Arizona Ave. $13,087. Worchester Pl. $21,465. Wanda Ave. $32,367. Davison Ave. $34,170. Noted June 29.

Wisconsin—State Hy. Comn., Madison. Alma-Mondovi Rd., Project 270, Buffalo Co., to H. P. Nelson, Osseo, 4.23 acres clearing $30, 18,793 cu.yd. earth excav. $0.34, 400 cu.yd. loose rock $0.70, 2,014 cu.yd. solid rock $1.15, 1,200 cu.yd. sand surfacing $0.95, 5,348 cu.yd. shale surfacing $0.96, 1,520 cu.yd. channel change $0.45, 58,000 lb. structural steel $0.05, etc., total $43,919.

Wis., Milwaukee—Grade separation, to R. H. Gumz, 831 13th Ave., $122,479. Noted June 15.

Wis., Monroe—Paving various streets with one course rein.-con. and concrete curb and gutter. to J. F. C. Icke, Washington Bldg.. Madison, paving $2.39; curb and gutter, $0.77; sidewalks, $0.20. Noted June 29.

Wis., Racine—Racine Co. concrete surfacing, etc., Dales Crossing-Union Grove Rd., to J. Weiher & Son, 878 Franklin Pl., Milwaukee, $52,640. Noted June 22.

Ia., Cedar Rapids—Brick paving 6,270 sq. yd. Ave. A. W., and 5,000 sq.yd. Ave. G. W., to Ford Paving Co., 208 2nd Ave., $21,541 and $16,375 respectively. Noted May 11.

Ia., Hampton—Franklin Co., grading Federal Aid Project 171, 94,417 cu.yd. excav. to J. W. Peed & Son, Ft. Dodge, $0.225 per cu.yd.; 95,675 cu.yd. to J. E. Kughn & Sons, Dows, $0.218; 73,905 lin. ft. 6 in. tile, 16,765 lin. ft. 8-10 in., to Sheffield Brick and Tile Co., Sheffield, $0.044 for 6 in. $0.07 and $0.128 for 8 and 10 in.; tile labor, to Peterson & Madsen, Coulter, $0.058 per ft. for 6 in., to $0.091 for 10 in.

Ia., Waukon—Paving 50,000 sq.yd. various streets, asphalt on concrete, to Western Constr. Co., Sioux City, $2.78 per sq.yd. Noted May 4.

Minn., Brainerd—Crow Wing Co., grading 8 mi. Brainerd-Midland Highway from Deerwood to Bay Lake, to P. W. Roark, Thief River Falls, $42,579.

Minn., Cloquet—Concrete paving 1,825 ft. Main St. from Arch to 14th St., 65 ft., to Belanger & Lindberg Co., Hibbing, $78,912. Noted April 27.

Minn., Moorhead—Grading, paving and curbing various streets, 29,843 sq.yd. vitr. brick, rock, concrete and bitulithic. paving 14,605 lin.ft. concrete curb, inlets, castings and headers, to W. E. Kennedy Co., Fargo, N. D., $102,784. Noted June 1.

Minn., Nahnomen—Nahnomen Co., Job 2201, State Rd. 2, 28,944 cu.yd. excav., 29,000 cu.yd. overhaul, also Job 2101, State Rd. 2, 14,266 cu.yd. excav., 20,656 cu.yd. overhaul, to C. Colwell, Fosston, $12,560, culverts on above projects to P. H. Gramer, Crookston, $831; Job 2202, State Rd. 1, 32,177 cu.yd. excav., 45,184 cu.yd. overhaul, to Rhierson & Nohre, Thief River Falls, $10,349, culverts, to Lyle Culvert & Road Equipment Co., 171 27th Ave. S. E., Minneapolis, $614. Noted June 15.

Minn., St. Paul—Paving 2.52 mi. Edgerton St. from Crosley Rd. to Centerville Rd. station, one course rein.-con. (traprock), to W. Devine, New Brighton. $73,977. Noted June 29.

Nebraska—State Hy. Dept., Lincoln, to Peterson, Shirley & Gunther, W. O. W. Bldg., Omaha, grading Project 91 B, Florence-Blair Rd., Washington Co., $7,974, Project 102 B, Smiley Canyon Rd., Sioux Co., $9,083, Project 180, Columbus East, Platte Co., $28,734, Project 196, Minden-Newark Rd., Kearney Co., $24,691, Project 189, Florence Heights, Douglas Co., $7,875, Project 146 B, Ogallala-Belmar Rd. Keith Co., $24,286, Project 137 A, Springview-Bassett Rd., Rock Co., $9,496, Project 130 B, Sidney-Dalton Rd., Cheyenne Co., $27,761, Project 139 E. Norfolk-Ewing Rd., Holt Co., $13,694, Project 168 A, Stuart-Bassett Rd., Holt Co., $14,034, Project 191 A, Haigler-Sanborn Rd., Dundy Co., $15,030, Project 192, Lutherville-Oshkosh Rd., Garden Co., $8,589, Project 70 B, Stanton-Wisner Wayne Rd., Wayne Co., $29,585, Project 70 A, Stanton-Wisner-Wayne Rd., Stanton Co., $23,294, Project 108, Hay Springs-Merri-

Streets and Roads (Continued)

man Rd., Sheridan Co., $48,444, Project 88 C, Oakland-Crowell Rd., Cuming Co., $7,980, Project 133 A, Nebraska City-Lincoln Rd., Otoe Co., $33,126, Project 184, Elwood-Stockville Rd., Gosper Co., $27,657, Project 186, Kimball-Bushnell Rd., Kimball Co., $21,702, Project 172. West Point-Wisner Rd., Cuming Co., $8,722, Project 139 F, Norfolk-Ewing Rd., Antelope Co., $21,006, Project 168 B, Stuart-Bassett Rd., Rock Co., $55,506, grading and graveling Project 49 F, Oakland-South Sioux City, Dakota Co., $12,940, gravel surfacing Project 143 B, Fremont-Osceola Rd., York Co., $48,683; Lameraux Bros., 416 Arthur Bldg., Omaha, grading Project 195 A, Litchfield-Hazard Rd., Sherman Co., $15,985, Project 181, Ravenna-Sweetwater Rd., Buffalo Co., $13,763; Big Four Constr. Co., Loup City, graveling Project 37, Rockville-Loup City Rd., Sherman Co., $11,038; Phelan Shirley Co., W. O. W. Bldg., Omaha, grading Project 164 A, Hebron-Nelson Rd., Thayer Co., $12,958, Project 49 D, Oakland South Sioux City Rd., Burt Co., $13,247, Project 55 B, Dorchester-Fairmount Rd., Saline Co.. $7,141, Project 98 C, Crete-Wilber-Dorchester Rd., Saline Co., $6,091, Project 176, Curtis-Maywood Rd., Frontier Co., $22,122, Project 182, Harbard-Eldorado Rd., Clay Co., $28,297, Project 185, Geneva-Mulligan Rd., Fillmore and Saline Counties, $15,913, Allied Contractors, Inc., 403 Bee Bldg., Omaha, paving with bitulithic Project 20, in Lincoln, Douglas Co., $168,156, grading and graveling Project 170 A, North Platte East, Lincoln Co., $119,583; Western Bridge & Constr. Co., grading Project 139 B, Norfolk-Ewing Rd., Madison Co., $13,875; C. T. Whelan, North Platte, grading Project 188 A, Arnold-Merna Rd., Custer Co., $34,394; Beatty Constr. Co., Blair, concrete paving Project 49 A, Oakland-South Sioux City Rd., Dakota Co., $7,953; Morrill Co., Bd., Bridgeport, gravel surfacing Project 79 A, Bayard-Broadwater Rd., Morrill Co., $34,253; Pioneer Constr. Co., Railway Exch. Bldg., Kansas City, Mo., concrete paving Project 76 A, Alliance-Chadron Rd., Dawes Co., $1,065; Central Bridge & Constr. Co., Wahoo, concrete paving Project 107 C, Greenwood-Chalco Rd., Sarpy Co., $4,567. Noted June 29.

Neb., Lincoln—To Abel Constr. Co., Terminal Bldg., repaving Dist. 83, 18th St. from O to N Sts. $2,400, Dist. 85, Washington St. from 16th to 17th Sts. $835, Dist. 82, 17th St. from O to N Sts. $2,362, above work involves 5,830 sq.yd. asphaltic concrete at $0.96 per sq.yd., paving Dist. 482, Garden St. from 14th to 15th Sts., 1,100 sq.yd. asphaltic concrete $2.35 per sq.yd., 876 lin.ft. combined curb and gutter $0.82, total $3,312; to Cochrane Constr. Co., 1st Natl. Bank Bldg., repaving Dist. 76, L St. from 9th to 16th Sts., 10,374 sq.yd. asphaltic concrete $0.945 per sq.yd., total $9,803, paving Dist. 479, P St. from 24th to 27th Sts., 3,320 sq.yd. asphaltic concrete $2.37, 2,046 lin.ft. combined curb and gutter $0.82, total $9,498; to Roberts Constr. Co., 1st Natl. Bank Bldg., repaving Dist. 84, 9th St. from S to T Sts., 1,464 sq.yd. brick $3.47 per sq.yd., total $5,080.

N. D., Devils Lake—Ramsey Co., grading 13 mi. Federal Aid Project 153, Sect. A, to W. S. Noel, Jamestown, $8,725; Sect. B, to Dunbar & McCoy, Cando, $14,873; culverts to Klauer Mfg. Co., 9th and Washington Sts., Dubuque, Ia., $3,380.

Wyoming—State Highway Dept., Cheyenne, grading, surfacing and building structures on 20.145 mi. Lincoln Highway, Hanna to Walcott, Federal Aid Project 59 B, 24 ft., Carbon Co., to Ames & Braisted, Laramie, $65,029, engrs. est. $88,500; 12.243 mi. Lincoln Highway, Rock River to Albany Co. line, Federal Aid Project 122, 24 ft., Albany Co., to Mudd & Keahey, Torrington, $28,411, engrs. est. $50,000.

Tex., Dallas—Dallas Co. paving with asphalt on macadam 3.3 mi. Westmoreland Rd., 10,000 sq.yd. scarifying and reshaping, 15,000 cu.yd. earth excav., 40 sq.yd. concrete, 4,000 lb. reinforcing, 35,500 sq.yd. bituminous macadam, (7,700 cu.yd. native and 5,920 cu.yd. crushed stone furnished by county), to Wear & Thomas, Rogers, $34,952; grading and surfacing 8 mi. Sachse Rd., 15,000 sq.yd. scarifying and reshaping, 20,000 cu.yd. earth excav., 70,000 sq.yd. bituminous macadam, 40 cu.yd. concrete, 1,000 lb. reinforcing, (15,000 cu.yd. native and 10,500 cu.yd. crushed stone, 3,500 cu.yd. gravel furnished by county), to H. R. Raney Co., Wylie, $54,534.

Tex., Decatur—Wise Co. grading, clay surfacing, etc., 20.7 mi. State Highway 2 from here to Montague Co. line, to Mitchell Constr. Co., Cleburne, and Everheart Bros., Mathis, $58,882. Noted June 29.

—**Tex., Ft. Worth**—Tarrant Co. grading 15.56 mi. and gravel surfacing 14.87 mi. Arlington-Webb-Britton Rd., to Purvis & Lowrey, Ft. Worth, $73,028; grading and gravel surfacing 14 mi. Polytechnic-Webb Rd., to McCoy & Richards, Arlington, $40,457.

Tex., Marshall—Harrison Co. grading, gravel surfacing, etc., State Highway 8 from here to Panola Co. line, and 10.79 mi. State Highway 8 from here to Marion Co. line, to Cocke & Turner, Marshall, $86,765 and $54,012 respectively. Noted June 29.

Washington—State Hy. Dept., Olympia, grading and grubbing 4 mi. National Park Highway, east from Ethel, Lewis Co., to G. E. Banderet, Tacoma, $34,900. Engrs. est. $35,000.

Wash., Aberdeen—Paving Michigan St. from Heron to Simpson Sts., to Green Eng. Co., Aberdeen, $25,536. Engrs. est. $25,000.

Wash., Seattle—Grading and paving West Marginal Way, to J. Mattson, Thompson Bldg., $273,217. Engrs. est. $272,391. Noted July 6.

California—State Hy. Dept., Sacramento, surfacing 0.35 mi. highway in town of Williams, Colusa Co., to J. A. Costello, Jr., 1083 Shotwell St., San Francisco, 900 ton asphaltic concrete at $9.10 per ton, total $8,190; grading and graveling 3.5 mi. highway between Alto and Belvidere Crossing, Marin Co., to J. A. Modin and M. C. Preston, Byron, 45,000 cu.yd. excav. $0.41, 4,730 cu.yd. gravel surface $2, 262 cu.yd. portland cement concrete (culverts and monuments) $20, etc., total $33,812; grading 16.5 mi. highway between Trinidad and Freshwater Lagoon, Humboldt Co., to Pacific Constr. Co., San Francisco, $439,212; paving 2 mi. highway between El Centro and Imperial, Imperial Co., to J. F. Knapp, Turlock, 36,500 cu.yd. embankment $0.40, 3,920 cu.yd. portland cement concrete pavement $5.60, total $36,552. Noted June 8.

Cal., Bakersfield—Improving streets in Dist. 77, to Kneen & Austin, Santa Monica, $174,539. Noted June 8.

Cal., Modesto—Improving portions of I and 18th Sts., to Standard Paving Co., 1411 9th St., 20,176 sq.ft. grading at $0.05, 19,933 sq.ft. 1½ in. warrenite bitulithic on 2½ in. asphaltic concrete $0.17, 243 sq.ft. concrete gutters $0.20, 160 lin.ft. concrete curb $0.70, etc.

Cal., Oakdale—Improving various streets to A. Teichert & Son, Ochsner Bldg., Sacramento, 175,000 sq.ft. 1½ in. warrenite on 3½ in. bituminous $0.223 per sq. ft., 72,255 sq.ft. grading and rolling $0.02, 2,000 sq.ft. 5 ft. concrete gutter, $1.50, 1,790 sq.ft. 2 ft. concrete gutter $0.50, 840 ft. concrete curb $0.60, 5,020 sq.ft. concrete sidewalk, $0.18, etc. Noted June 8.

Cal., Sacramento—Sacramento Co. will pave 8,900 lin.ft. Sheldon-Slough House Rd., 1,646 cu.yd. concrete, by day labor. $26,368.

Cal., Sacramento—Sacramento Co. paving 7,400 lin.ft. road from Sacramento River to Vorden, to Byrne & Yost, 2512 N St., 2,192 cu.yd. 6 in. concrete at $14.80 per cu.yd., total $32,450.

Cal., San Diego—Paving Rosecrans, Dumas, Poe, Canon and Rogers Sts., to California Constr. Co., 526 Granger Bldg., $85,083. Noted June 8.

Cal., San Jose—Improving 17th St. between Empire and Rosa Sts., to I. Ryder, 5 South 14th St., 6,486 sq.ft. concrete gutter at $0.25 per sq.ft., 4,948 lin.ft. concrete curb $0.62, 3,814 sq.ft. artificial stone walks $0.19, 91,938 sq.ft. 2 in. bithulithic on 3½ in. asphaltic concrete $0.2475, 13,986 sq.ft. paving intersections $0.2485, etc.

Cal., San Rafael—Marin Co. will pave Culloden Ave. from city limits of San Rafael to Cemetery line, 600 cu.yd. excav., 27,146 sq.ft. macadam, by day labor under supervision G. M. Dodge, co. surv.

Cal., Santa Cruz—Santa Cruz Co. improving Moore Hill Rd., et al., 26,670 cu.yd. excav., 550 lin.ft. corrugated metal pipe, 25,700 lb. reinforcing, 265 cu.yd. concrete, etc., to Grant-Smith Co., Balboa Bldg., San Francisco, $28,043.

Cal., Tracy—Improving 11th St., to J. E. Johnston, Savings and Loan Bldg., Stockton, $84,701. Noted July 6.

Ont., Newmarket—P. J. Anderson, town clk., 13,000 sq.yd. bithulithic pavement on cencrete with concrete curbs and gutters, to Warren Bituminous Paving Co., 54 University Ave., Toronto, $60,000. Noted April 27.

Ont., Ottawa—For 2,300 sq.yd. pavement on Breeze Hill Ave. from Beach to Hickory Sts., and 2,400 sq.yd. Sherbrooke St. from Wellington St. to Bethany Rd., to O'Leary's Ltd., Bank Natl. Bldg., $12,000 and $12,240 respectively; 2,700 sq.yd. Renfrew Ave. by day labor, $12,588.

Ont., Pembroke—S. L. Briggs, town clk., 26,600 sq.yd. bithulithic pavement on concrete, with concrete curbs and gutter, also 3,000 sq.yd. bituminous penetration with curbs and gutters, to Warren Bituminous Paving Co., 54 University Ave., Toronto, $94,767. Noted June 15.

Ont., Stratford—For 12,000 sq.yd. asphalt pavement on concrete, to Curran & Briggs, 51 Rusholme Park Ave., Toronto, $50,000, concrete curbs, gutter and base, sublet to Malcolm Paving Co., Ontario St.

Ont., Walkerville—Concrete pavement on various streets, to Merlo, Merlo & Ray, Sandwich. Engrs. est. $60,000.

Industrial Works

PROPOSED WORK

Me., Portland—Oakhurst Dairy Co., Forest Ave., plans 2 story, brick and tile dairy, etc., also power plant unit, Forest Ave. $100,000. Architect not announced.

Mass., Lowell—Saco-Lowell Shops, 77 Franklin St., Boston, plan large brick, concrete and steel addition to plant, here. Architect not announced.

Conn., Devon (Milford P. O.)—Connecticut Light and Power Co., West Main St., Waterbury, plans large 1 story power plant on East side of Housatonic River, here. Private plans.

N. Y., Buffalo—Lautz Marble Corp., 861 Main St., plans new factory, Norfolk St. $85,000. Architect not announced.

N. Y, Buffalo—Pratt & Lambert, 79 Tonawanda St., plans addition to varnish factory. $40,000. Private plans.

N. Y., New York—New York Edison Co., 130 East 15th St., having plans prepared by W. Whitehill, archt. and engr., 709 6th Ave., 3 story, 46 x 125 ft., brick and concrete transformer station, plain foundation, 12 Stone St. $90,000.

N. Y., Rochester—Gallagher Motor Co., Inc., plans 72 x 159 ft., brick and steel garage and salesroom, 32 ft. high, Monroe Ave. $50,000. Architect not announced.

Pa., Charleroi—Fox Grocery Co., Charleroi, plans 1 story, 44 x 100 ft. brick garage and repair shop, McKean Ave. $40,000. Architect not selected.

Pa., Johnstown—Walling Co., 518 Washington St., plans 3 story, 75 x 130 ft. rein.-con and brick service and repair shop, Railroad St. $150,000. Private plans.

Pa., New Brighton—R. B. McDanel Co. plans 2 story, 42 x 68 ft. rein.-con. and brick packing house. Architect not announced.

Pa., Pottsville—D. Guinan, Mahoney City, plans 4 story, 60 x 120 ft. garage and repair shop, brick and steel, Harrison and Centre Sts. Engineer not announced.

Va., Newport—Page Power Co., soon takes bids 1,800 hp. light and power plant on Shenandoah River, here. $100,000. A. A. Roudabush, Shenandoah, secy.

Va., Scottsville—Big Bend Power Co. had plans prepared and soon receives bids for hydro-electric plant on James River to develop 100,000 hp. $2,000,000. Amber Eng. Co., Richmond, engrs.

W. Va., Huntington—Consolidated Light, Heat & Power Co., Miller-Ritter Bldg., plans 2 story power house. $90,000. Engineer not announced.

N. Y., Elmira—Elmira Water, Light & R.R. Co., plans artificial gas manufacturing plant, 1,500,000 cu.ft. daily capacity. F. H. Hill, vice pres.

N. C., Scotland Neck—North Carolina State Warehousing System and citizens of Scotland Neck plan large cotton warehouse. Architect not selected.

Fla., Orlando—W. F. Blackman and associates plan ice and cold storage plant. $50,000 to $100,000.

La., Swartz—Palmer Trust Co., Shreveport, plans gasoline plant with 25,000,000 cu.ft. daily capacity, in Quachita Parish. $75,000. Architect not announced.

Tenn., Chattanooga—Dixie Spinning Co. plans 10,000 spindle cotton and yarn mill. $500,000. J. L. Lupton, Pres. Architect not announced.

O., Columbus—W. L. Lillie Co., 233 Gear St., having revised plans prepared by C. Morgan, archt., 233 Gear St. and takes bids in about 6 weeks four 1 story, 100 x 250 ft. buildings for woodworking plant, East Gear St. $200,000.

Industrial Works (Continued)

O., Lima—Toloson Tent & Awning Co. plans factory. $75,000. Architect not announced.

O., Niles—Youngstown Steel Car Co., Niles, and 1609 Wilson Ave., Youngstown, plans addition to plant here. $60,000. Architect not announced.

O., Youngstown—Youngstown Mazda Lamp Co., 617 Williams St., plans 4 story, 97 x 120 ft. addition to factory. $125,000. Architect not announced.

Mich., Wyandotte—J. G. Kastler & Co., archt., Detroit Savings Bank Bldg., Detroit, preparing plans for 2 story, 50 x 150 ft. rein.-con. and brick garage, plain foundation. Owner's name withheld.

Ill., Chicago—E. E. Hall, archt., 123 West Madison St., preparing plans 2 story, 50 x 125 ft. garage, 5712-5714 Ridge Ave. $80,000. Owners name withheld.

Wis., Beloit—P. B. Yates Machine Co., 729 4th St., plans to remodel present powerhouse, and construct addition 1,000 kw. generating unit.

Wis., Hawkins—F. Prochaski, Milan, plans 1 story, 60 x 100 ft., electric light plant, brick, rein.-con. and steel, here. $60,000. Architect not selected.

Wis., Madison—Kennedy Dairy Co., 618 University Ave., plans 1 story, 50 x 75 ft., brick and steel plant, plain foundation, Washington St. $40,000. Architect not selected.

Wis., Milwaukee—Gurda & Gurda, archts. and engrs., 2nd Ave. and Mitchell St., takes bids about July 18, 1 story, 48 x 50 ft., central heating plants, brick and concrete, plain foundation, 10th Ave. and Hayes St., for S. S. Cyril & Methody Congregation, 110 Windlake Ave. $40,000.

Wis., Oshkosh—Winnebago Co. plans 1 and 2 story, 50 x 80 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000. Architect not selected.

Wis., Phillips—Kneeland-McClurg Lumber Co. plans 60 x 210 ft. saw mill, brick and steel, plain foundation, to replace one recently destroyed by fire. $200,000. Architect not selected.

Wis., Waunakee—Gripx Mfg. Co., plans 2 story, 75 x 90 ft., brick and steel factory, plain foundation. $50,000. A. Simpson, mgr. Architect not selected .

Minn., Minneapolis—Ives Ice Cream Co., 2nd and University Aves., S. E., plans 3 story, 117 x 117 ft. rein.-con., brick and tile factory addition; also adding third story, to present 41 x 117 ft. building. $75,000. A. H. Ives, pres. C. A. Berger, 401 Phoenix Bldg, archt.

Minn., Minneapolis—Royal Wet Wash Laundry Co., 1401 Plymouth Ave., had plans prepared by Liebenberg, Kapan & Martin, archts., 617 McKnight Bldg., 2 story, 88 x 140 ft. rein.-con. and brick, Plymouth Ave. $45,000. J. B. Greenberg, mgr.

Okla., Ardmore—R. H. Harris & Son, Ada, plans brick manufacturing plant, here, 20,000 brick daily capacity. Private plans.

Okla., Tulsa—Osage Battery Co. plans large factory. Architect not announced.

Okla., Tulsa—Oklahoma Pub. Service Co., Mayo Bldg., plans large addition to power plant. $1,000,000. Sargent & Lundy, West Adams St., Chicago, engrs.

Cal., San Francisco—F. Clark, c/o H. C. Baumann, archt., 251 Kearny St., had plans prepared 1 story, 100 x 100 ft., rein.-con. garage, Divisadero and Grove Sts.

Cal., San Francisco—Collins-Hencke Co., 25 Beale St., had plans prepared by N. W. Sexton, archt., Chronicle Bldg., and soon takes bids 3 story, rein.-con. and brick factory, Folsom St. between 2nd and 3rd Sts. $100,000. Noted March 9.

Cal., San Francisco—J. Pasqualetti, Humboldt Bank Bldg., having plans prepared by Meyer & Johnson, archts., 742 Market St., 2 story, rein.-con. garage, Bush and Franklin Sts. $40,000.

B. C., Ocean Falls—Pacific Mills Ltd., 510 Hastings St. W., Vancouver, plans hydro electric plant here. Cost between $450,000 and $500,000. Engineer not announced.

Ontario—Pure Gasoline Co., 13 King St. W., Toronto, having plans prepared for gasoline stations in Kitchener, Niagara Falls and other points in western part of province. $50,000. Private plans. Noted April 13.

Ont., Brampton—Sturgis Baby Carriage Co., 60 Sumach St., Toronto, having plans prepared by R. W. Hall, archt., 707 Yonge St., Toronto, 2 story, 50 x 100 ft. factory and 20 x 30 ft. boiler house, concrete, brick and steel. $100,000.

Ont., Hamilton—Kanadda Biscuit Co., 185 West Ave. N., had plans prepared by B. H. Prack, archt., 60 Bay St., Toronto, and soon takes bids 2 story, 80 x 400 ft. factory. $400,000. Noted April 20.

Ont., North Bay—Canadian Creostine Co. plans to build and equip plant. Total $1,500,000. A. Moore, ch. engr.

BIDS DESIRED

Conn., Bantam—Fletcher-Thompson, Inc., archts. and engrs., 542 Fairfield Ave., Bridgeport, taking bids 2 story, 50 x 104 ft. rein.-con., brick and steel factory addition, plain foundation, here, for Bantam Ball Bearing Co. $50,000.

Conn., Branford—July 17, by Military Emergency Bd., State Armory, Hartford, 1 story, 85 x 150 ft. rein.-con., brick and steel mechanical building, plain foundation, at State Armory, here. $40,000. Payne & Keefe, Manwaring Bldg., New London, archts. Noted June 22.

Pa., Meadville—Champion Tool Co., Pine St. taking bids 1 and 2 story, 100 x 200 ft. machine shop and 60 x 60 ft. forge shop, brick and steel, South Main St. Private plans.

Pa., Phila.—R. E. White, archt., Pennsylvania Bldg., taking bids 2 story, 62 x 138 ft. rein.-con. and brick factory, plain foundation, Richmond and Tioga Sts., for G. Spruance, 312 North 3rd St. $50,000.

Pa., Pittsburgh—July 15, by W. G. Wilkens Co., archts., Westinghouse Bldg., 3 story, 60 x 79 ft. rein.-con. and brick warehouse, West Carson St., for W. W. Lawrence Co., West Carson St. $150,000.

W. Va., Wheeling—E. B. Franzhiem, archt., 1425 Chapline St., receiving bids 3 story, 40 x 60 ft., brick, steel and terra cotta garage, 15th and Eoff Sts., for Hopkins Motor Co., 15th St. $45,000.

Fla., Miami Beach—July 26, 6,000 ft. 24 in. c.i. force main, 2,700 ft. 24 in., 900 ft. 18 in., 4,000 ft. 15 in., 710 ft. 12 in., 1,800 ft. 10 in., 4,200 ft. 8 in., 2,000 ft. 6 in. terra cotta pipe, $75,000; 50,000 gal. storage tank, 2 centrifugal pumps, each 2,000,000 gal. daily capacity. $30,000. R. M. Davidson, Miami Beach, engr.

O., Cleveland—July 15, by E. McGeorge, archt. and engr., 1900 Euclid Ave., 2 story, 96 x 180 ft., brick, steel and concrete factory and warehouse, East 61st St. north of Euclid Ave., for Cleveland Folding Machine Co., 5200 Euclid Ave. $100,000.

Ill., Chicago—R. Griesser, archt., 64 West Randolph St., receiving bids 2 story, 100 x 193 ft., bakery, rein.-con., brick and steel, 5029 North Western Ave., for Maier-Roedel Baking Co., Inc., 5029 North Western Ave., $160,000.

Ill., Chicago—D. J. Schaffer, archt., 139 North Clark St., receiving bids 1 story, 125 x 125 ft., garage, rein.-con., brick and steel, Division St. near Western Ave. $50,000. Owner's name withheld.

Ill., Forest Park—J. D. Broxham Dairy Co., 2814 West Polk St., Chicago, 2 story, 145 x 175 ft. dairy, rein.-con., brick and steel, Harrison St., here, to B. W. Constr. Co., 720 Cass St., Chicago, $150,000.

Wis., Milwaukee—Pittsburgh Plate Glass Co., 213 Lake St., taking bids 5 story, 86 x 140 ft., storage and laboratory, rein.-con. and brick, plain and wood pile foundation. $100,000. Kirchoff & Rose, 221 Grand Ave., archts.

Wis., Neenah—E. A. Wettengel, archt., 578 Pierce Ave., Appleton, taking bids 1 story, 60 x 120 ft. and 50 x 50 ft., brick and concrete garage, plain foundation, North Commercial St., for Jaeger-Wheeler Co., Neenah. $45,000.

Cal., Pittsburg—California Bean Growers Assn., 120 Battery St., San Francisco, receiving bids 1 story, 80 x 350 ft. frame and corrugated iron warehouse with 5 story, 20 x 40 ft. mill in center, here. $80,000. MacDonald Eng. Co., 149 California St., San Francisco, engrs. Noted June 15.

CONTRACTS AWARDED

Mass., Palmer—D. O. Pease Mfg. Co., 161 Summer St., Worcester, 1 story, 75 x 200 ft. concrete and steel mill, plain foundation, here, to Palmer Constr. Co., Main St. Archts. est. $45,000.

Mass., Pittsfield—Berkshire Woolen Co., Pecks Rd., 3 story, 60 x 104 ft. mill constructed plant, to J. R. Hampson & Co., Inc., Pittsfield, $60,000.

Mass., South Boston (Boston P. O.)—John West Thread Co., 297 Congress St., Boston, 2 story, 60 x 200 ft. brick and steel plant addition, Covington St., to F. G. Rowley Co., Inc., 266 Central Ave., Pawtucket, R. I. Archts. est. $100,000.

N. Y., Brooklyn—G. A. Whalen, comr. Plant & Structures, Municipal Bldg., New York, housing station, Atlantic Ave. between Utica and Schenectady Aves., here, for Dept. Street Cleaning, to J. Young, Jr., 103 Park Ave., New York, $61,578. Noted July 6.

N. Y., New York—S. M. De Padquale, c/o S. J. Kessler, archt. and engr., 529 Courtlandt St., brick, steel and concrete garage, plain foundation, Webster Ave., by day labor. $125,000.

N. Y., New York—Webster Building Co., c/o S. J. Kessler, archt. and engr., 529 Courtlandt St., 3-story, brick, steel and concrete garage, plain foundation, 172nd St. and Sheridan Ave., by day labor. $175,000.

N. Y., Retsof—Retsof Mining Co., rein.-con. machine shop, to J. W. Cowper Co., Inc., Fidelity Bldg., Buffalo, $225,000.

N. J., Belleville—Thompson Machine Co., 2 story, rein.-con., brick and steel factory, plain foundation, to J. W. Ferguson, Inc., United Bank Bldg., Paterson. Archts. est. $150,000. Noted June 1.

Pa., Charleroi—G. Woodward, general contract for 3 story, 88 x 100 ft. garage, brick and steel, to J. S. Rockwell, Charleroi, Engrs. est. $40,000. Noted June 22.

Pa., Hays—Harbison-Walker Refractories, Farmers Bank Bldg., Pittsburgh, 4 story, 40 x 130 ft. rein.-con., brick and steel storage building, to Pihl & Miller, Wabash Bldg., Pittsburgh. Engrs. est. $50,000.

Pa., New Brighton—Standard Sanitary Mfg. Co., Bessemer Bldg., Pittsburgh, general contract 1 story, 47 x 135 ft. foundry, to Austin Co., 16116 Euclid Ave., Cleveland, O. Engrs. est. $50,000.

Pa., New Kensington—Premier Baking Co., 3 story, 80 x 99 ft. brick and steel bakery, Stanton Ave., to B. H. Prack, Keystone Bldg., Pittsburgh, $100,000. Noted June 22.

Pa., Trafford—Westinghouse Electric & Mfg. Co., East Pittsburgh, 1 story, 50 x 135 ft. tin shop, to B. H. Prack, Keystone Bldg., Pittsburgh, $40,000. Noted June 22.

W. Va., Peach Creek—Chesapeake & Ohio Ry., 9th and Main Sts., Richmond, Va., 1-story, machine shop, round house and power house. here, to J. E. Nelson & Son, 3240 South Michigan Ave., Chicago, $250,000.

W. Va., Ronceverte—West Penn Power Co., West Penn Bldg., Pittsburgh, 2 story addition to power plant, to J. G. White Eng. Corp., 43 Exchange Pl., New York, $500,000.

W. Va., Wheeling—Warren Auto Trading Co. will build 3 story, 60 x 125 ft. garage and repair shop, brick and steel, by day labor. $50,000.

N. C., Charlotte—Textile Mill Supply Co., North College St., 3 story, 120 x 125 ft., brick and steel warehouse, to E. H. Clement Co., Commercial Bank Bldg., $60,000. Noted May 18.

O., Bellaire—C. L. Dorer Fdry. Co., 1 story, 36 x 60 ft. foundry addition, to Riverside Bridge Co., Martins Ferry.

O., Cleveland—Wilberite Roofing Co., 3700 Brook Park Rd., 1 story, 35 x 130 ft., heating house, steel and concrete, to Van Dorn Iron Wks., East 79th St. and Woodland Ave. Archts. est. $40,000.

O., Dayton—Lowe Bros. Co., 450 East 3rd St., 7 story, 30 x 270 ft. paint mill, rein.-con. and steel, plain foundation, Wayne Ave., to Frank Hill Smith, Inc., Winters Bldg., $175,000.

O., Dover—Reeves Mfg. Co., 1 story, 60 x 80 ft., brick and steel factory and warehouse, plain foundation, to Austin Co., 16112 Euclid Ave., Cleveland. Archts. est. $100,000.

Ind., Indianapolis—R. H. Hassler, Inc., 1335 Naomi St., 2 story, 37 x 120 ft. factory, Naomi St., to Builders Constr. Co., 340 North Meridian St. Archts. est. $40,000.

Ill., Chicago—Natures Rival Co., 306 South Franklin St., 3 story, 133 x 166 ft factory, ordinary fireproof construction, Irving Park Blvd. and Hermitage Ave., to Salomon-Waterton Co., 230 East Ohio St. Archts. est. $180,000. Noted June 29.

Wis., La Crosse—Trane Co., 2nd St. and Cameron Ave., 1 story, 60 x 90 ft. factory addition, brick and steel, plain foundation, 2nd St., to P. Nelson & Son, Newburg Bldg.; structural steel to J. Torrance & Son, La Crosse. Engrs. est. $40,000.

Wis., Manitowoc—Aluminum Goods Mfg. Co. 1 story, 150 x 360 ft., brick and steel

Industrial Works (Continued)

warehouse, plain foundation, to W. W. Oeflein, Inc., 86 Michigan St., Milwaukee. Engrs. est. $150,000.

Wis., Racine—Wisconsin Gas & Electric Co., 305 6th St., 2 story, 50 x 60 ft., brick, rein.-con. and steel utilities building, plain foundation, to Worden Allen Co., Port Washington Rd., Milwaukee. Engrs. est. $50,000.

Minn., St. Paul—Washington Fdry. Co., Eagle and Washington Sts., 2 story, 22 x 100 ft. and 1 story, 71 x 166 ft. steel and concrete foundry, Eagle St. near Washington St., to F. J. Romer Constr. Co., 190 Ramsey St.

Cal., Oakland—Central Shuey Creamery Co., 599 12th St., 3 story, brick and concrete cannery, West Telegraph Ave. and South 55th St., to B. H. Schmidt, 2237 East 19th St., $62,000.

Cal., Selma—Fresno Tire & Rubber Co., Mattei Bldg., Fresno, brick and timber factory, Block E, here, to W. L. Miller, 149 Abby St., Fresno, $126,000.

Ont., Montrose—Canadian Axolite Co., 2 story, 50 x 100 ft., concrete, brick and steel addition to machine shop, to Robertson Constr. Co., Erie Ave., Niagara Falls. Engrs. est. $50,000.

Ont., Toronto—July 10, by H. H. Couzens, genl. mgr. Toronto Transportation Com., three 1 and 2 story, rein.-con. car barns and brick office building. $300,000. J. B. Carswell, Yonge and Front Sts., engrs.

Buildings

PROPOSED WORK

Conn., Bridgeport—Business—Schnee & Schnee, 1115 Main St., having plans prepared by F. A. Cooper, archt., 1024 Main St., converting present mill into 4 story store and office building. $150,000.

Conn., Bridgeport—School Addition—Bd. Educ. having plans prepared by F. A. Cooper, archt., 1024 Main St., 2 story, brick and steel addition to Sheriden School, Tesiny Ave. $150,000.

Conn., New Haven—High School—Bd. Educ. plans 3 story, brick, steel and concrete, Edgewood Ave. $300,000. C. S. Palmer, 114 Whitney Ave., archt.

N. Y., Buffalo — Church — St. Vincent's Roman Catholic Congregation, c/o A. Hummel, pastor, having plans prepared by Comes, Perry & McMullen, archts., Renshaw Bldg., Pittsburgh, Pa., 1 story, 100 x 160 ft., Eastwood Pl. and Main St. $250,000.

N. Y., Buffalo—Office—N. P. Clement and S. Weed, 39 Linwood Ave., soon take bids 14 story, brick and steel, Main and Genesee Sts. $1,000,00. Architect not announced. Noted June 8.

N. Y., Buffalo—Store and Office—W. K. Jackson, 218-228 Delaware Ave., plans 8 story modern construction, Delaware Ave. $500,000. Private plans.

N. Y. New York—Bath—Bd. Estimate, Municipal Bldg., plans brick, steel and stone, plain foundation, 134th St. between 5th and Lenox Aves. $200,000. Private plans.

N. Y., New York—School—Bd. Educ., 500 Park Ave., having plans prepared by C. B. J. Snyder, archt. and engr., Concord St., Brooklyn, P. S. 63, 5 story, brick, steel and stone, plain foundation, Franklin Ave. and 168th St., here. $500,000.

N. Y., Solvay (Syracuse P. O.)—Schools—Bd. Educ. takes bids in August new High School $400,000 and Boyd School, $80,000. Former bids rejected. M. L. King, Snow Bldg., Syracuse, archt. Noted June 15.

N. J., Atlantic City—Hotel—Hotel Chelsea, Morris Ave. and Beach, plans 125 x 150 ft., brick, steel and stone addition, plain foundation, South Morris Ave. $3,000,000. Carrere & Hastings, 52 Vanderbilt Ave., New York, archts.

Pa., Greensburg—Home—Comrs. Westmoreland Co., Court House, rejected bids June 12, altering and building addition to county home. $190,000. Burrell & Snyder, Coulter Bldg., archts. Noted June 8.

Pa., Greensburg—Store and Office—Inland Realty Co. having plans prepared by Bartholomew, McCullough & Smith, archts., Coulter Bldg., 5 story 30 x 95 ft. brick addition, Main St. $150,000.

Pa., Pittsburgh—Bank—City Deposit Bank, Fern and Center Aves., rejected bids for addition on Penn and Center Aves. $150,000. Mowbray & Uffinger, 56 Liberty St., New York, archts. Noted April 20.

Pa., Pittsburgh — Store — Kaufmanns Dept. Store, 5th and Smithfield Sts., soon lets contract 1 story, 93 x 118 ft. addition, rein.-con., brick and terra cotta, Smithfield and Diamond Sts. $150,000. B. Janssen, Century Bldg., archt.

Pa., Titusville—Theatre and Store—J. C. McKinney, Titusville, having plans prepared by E. DeRosa, archt., 110 West 40th St., New York City, 1 and 2 story, 40 x 100 ft. and 80 x 100 ft. brick and terra cotta, West Spring St. $150,000.

W. Va., Wheeling—Store and Office—Finance Co. having sketches made by J. R. Anderson, Jr., archt., Wheeling, 4 story, 66 x 128 ft., brick, stone and steel, 14th and Market Sts. $200,000.

N. C., Durham—Hospital—Lincoln Hospital having plans prepared and takes bids in about 50 days, for hospital. $150,000. Milburn-Heister & Co., Union Savings Bank Bldg., Wash., D. C., archts.

N. C., Fayetteville — Bank — National Bank of Fayetteville having plans prepared and takes bids about Sept. 1, 10 or 12 story, steel and concrete. W. G. Rogers, Trust Bldg., Charlotte, archt.

Fla., Lakeland—Hotel—B. M. Pulliam, pres. of new corporation, having plans prepared by F. J. Kennard, archt., 109 Amer. Bank Bldg., Tampa, 8 story, 122 x 122 ft., rein.-con. $415,000.

La., New Orleans—Hotel—L. Jacobs, 802 Perdido St., and D. Dreyfous, having plans prepared by Weiss & Dreyfous, archts., 613 Mason Blanche Bldg., and takes bids between Aug. 15 and Sept. 1, 4 story, 121 x 128 ft. Canal St. between North Rampart and Basin Sts. $150,000.

O., Cleveland—Apartments—Euclid-77th Co., c/o T. C. Minor, archt., 9501 Wade Park Ave., having plans prepared, two 4 story, 44 x 200 ft., brick and steel, 7711 Euclid Ave. $400,000.

O., Cleveland—Commercial and Office—M. B. Scharfeld, Society for Savings Bldg., had plans prepared by Knox & Elliot, archts. and engrs., Engineers Bldg., 12 story, 60 x 75 ft., brick, steel and concrete, East 6th St. and St. Clair Ave. $500,000. Noted April 6.

O., Cleveland—Parcel Post Station—La Roth-Keller Co., c/o G. Keller, 2230 Superior Ave., N. E., having plans prepared by Lehman & Schmitt, archts., Electric Bldg., 3 story, brick, steel and concrete, 131 West St. Clair Ave. $200,000.

O., Martins Ferry—High School—Plans $250,000 bond issue for new high school annex.

O., St. Marys—High School—Plans $160,000 bond issue for new high school, in Memorial Park. Architect not announced.

Mich., Detroit—Apartment—G. Klein, c/o A. Kahn, archt., 1000 Marquette Bldg., had plans prepared for 8 story, 107 x 111 ft. rein.-con., brick and steel, plain foundaiton, Pingree and 2nd Aves.

Mich., Detroit—Apartment—J. I. Weinberg, archt., 401 Congress Bldg., preparing plans 4 story, 80 x 140 ft. Owners name withheld.

Mich., Detroit—Cathedral—Catholic Diocese of Detroit, c/o M. J. Gallagher, 1219 Washington Blvd., having preliminary plans prepared by Maginnis & Walsh, archts., 100 Boylston St., Boston, 2 story, rein.-con., brick and steel, plain foundation, Lasalle Blvd., Webb and Lawrence Aves. $5,000,000.

Ill., Chicago—Office—G. Nimmons & Co., archts., 122 South Michigan St., prepared plans 12 story, 50 x 140 ft., 1416-1418 South Wabash St. $500,000. Owner's name withheld.

Ill., Waukegan — Theatre — Orpheum Theatre Co., 112 South State St., Chicago, having plans prepared by Rapp & Rapp, archts., 190 North State St., Chicago, 3 story, 75 x 200 ft., Water and Genesee Sts., here. $500,000.

Wis., De Forest—High School—Voted $150,000 bonds for 2 story, 60 x 180 ft., brick and rein.-con., plain foundation. Architect not selected.

Wis., Kenosha—Hotel—M. Tullgren & Sons, archts., 425 East Water St., Milwaukee, opens bids about July 17, (Maywood Hotel), 5 story, 66 x 126 ft., brick, concrete and steel, plain foundation, Main St., here, for S. Schwartz, 888 Sheridan Rd., Waukegan, Ill. $150,000. Noted Noted June 29.

Wis., Lancaster—High School—School Bd. soon takes bids 2 story, brick, tile and concrete, plain foundation. $175,000. Parkinson & Dockendorff, Linker Bldg., La Crosse, archts.

Wis., Madison—Apartment Hotel—Piper Bros. Co., 31 North Pinckney St., plans 7 story, 60 x 200 ft., brick and rein.-con., plain foundation, State St. $200,000. Architect not selected.

Wis., Madison—Depot—Chicago, Milwaukee & St. Paul Ry., c/o E. F. Immley, Agt., West Madison St., plans 75 x 300 ft., brick, steel and rein.-con., plain foundation. $750,000. Architect not selected.

Wis., Madison — Hospital — St. Marys Catholic Hospital, c/o F. W. Huels, chn., 722 South Brooks St., plans 2 and 3 story, 75 x 160 ft., brick, rein.-con. and steel, plain foundation, Brooks St. $150,000. Architect not selected.

Wis., Milwaukee—Apartment—Voelz & Siebert, archts., 373 Bway., takes bids about July 17, 4 story, 132 x 136 ft., brick and concrete, plain foundation, Grand Ave., for Vendome Realty Co., c/o Architects. Noted May 11.

Wis., Milwaukee—Store and Office—M. Tullgren & Sons, archts., 425 East Water St., preparing plans 2 story, brick, tile and concrete, plain foundation, North Ave. $150,000. Owner's name withheld.

Wis., Milwaukee—Business and Office—O. Brachman, 425 East Water St., and T. Saxe, 156 5th St., having revised plans prepared by M. Tullgren & Sons, archts., 425 East Water St., 5 story, 150 x 200 ft., brick, steel and concrete, plain foundation, $400,000.

Wis., Milwaukee—Convent Addition—See "Miscellaneous."

Wis., Oconomowoc—Dormitory, etc.—Redemptorist Fathers having preliminary plans prepared by A. C. Eschweiler, archt., 141 Wisconsin St., Milwaukee, 2 and 3 story dormitory, chapel, class rooms and library, brick, concrete and stone, plain foundation.

Ia., Cedar Falls—School—Bd. Educ. having plans prepared by H. S. Ralston Co., archts., Waterloo, 2 story, rein.-con., brick, tile and stone. $150,000. E. V. W. Johnson, secy.

Minn., Virginia—Hotel—Community Hotel Financing and Building Co., 743 Plymouth Bldg., Minneapolis, having plans prepared by C. W. Farnham, archt., 1040 Lumber Exch. Bldg., Minneapolis, 3 story, rein.-con., brick and tile, here. $300,000.

Cal., Berkeley—Gymnasium—University of California having plans prepared by B. Maybeck, archt., Lick Bldg., San Francisco, for gymnasium to replace structure recently destroyed by fire. $150,000.

Cal., . Monterey — Schools — Monterey Union High School Dist., voted $250,000 bonds for schools. N. R. Coulter, 46 Kearny St., San Francisco, and M. A. Dean, Monterey, archts.

Cal., Oakland—High School—Bd. Educ soon takes bids 2 and 3 story, rein.-con and tile, 19th Ave. and East 18th St. $700,000. C. W. Dickey, 2149 Bway., archt.

Cal., Oakland — Hospital — Providence Hospital Assn., 26th and Bway., having plans prepared hospital, Webster and Summit Sts. $700,000. Architects name withheld.

Cal., Richmond—Memorial, Hospital and Library—Plan election to vote on $100,000 bonds for memorial building, $50,000 bonds for hospital and grounds, and $25,000 bonds for library addition. H. D. Chapman, city engr.

Cal., San Anselmo—Clubhouse—American Legion, Golden Gate Post 40, San Francisco, having plans prepared by Morrow & Garren, archts., Chronicle Bldg., San Francisco, 2 story, concrete and steel, Turk and Polk Sts., here. $150,000.

Cal., San Francisco—Apartment and Store—S. & G. Gump Realty Co., having plans prepared by M. Latham, archt., 452 Montgomery St., 6 story, rein.-con. and steel, Geary and Jones Sts. $150,000.

Ont., Owen Sound—School—Bd. Educ. having plans prepared by Watt & Blackwell, archts., St. James Chambers, Toronto, 3 story, 16 room, concrete, brick and steel 5th Ave. E. $250,000.

Ont., St. Thomas—Hospital—Hospital Bd. having plans prepared by N. R. Darragh, archt., 430 Talbot St., 3 story, 112 x 129 ft. concrete, brick and steel. $175,000.

Buildings (Continued)

Ont., Toronto—Forestry—University of Toronto, Queens Park, plans brick or stone and steel forestry and botany building, Queens Park. $200,000. Architect not selected.

Ont., Toronto—School and Dormitory—St. Josephs Convent, St. Albans St., having plans prepared by J. P. Hynes, archt., 73 King St. W., 3 story, 106x110 ft. rein.-con., brick, steel and tile. $200,000.

Ont., Weston—School—School Bd. having plans prepared by S. B. Coon & Sons, archts., 4 St. Thomas St., Toronto, 2 story, 10 room, concrete, brick, steel and stone. $160,000.

BIDS DESIRED

Me., Belfast—School—Aug. 5, by City Treasurer, 3 story, brick. $160,000. Kilham, Hopkins & Greely, 9 Park St., Boston, archts. Noted March 16.

Me., Waterville—Hospital—Sisters Hospital, College Ave., taking bids 4 story, granite, brick, steel and concrete, plain foundation, College Ave. $400,000. H. L. Rourke, 525 Hildreth Bldg., Lowell, Mass., archt.

Conn., New Britain—Normal School—July 18, by A. B. Meredith, secy. State Bd. Educ., Hartford, 1 and 2 story rein.-con., brick and steel main structure and 1 story boiler house, Camp St. $700,000. A. S. Kellogg, 89 Franklin St., Boston, engr. Guilbert & Betelle, 546 Broad St., Newark, N. J., archts. This corrects report in May 18 issue.

N. Y., Brooklyn—Schools—July 18, by Bd. Educ., 500 Park Ave., New York, P. S. 161, Crown St. near New York Ave., also P. S. 189, East New York Ave. and Rockaway Parkway, both brick, steel and stone, plain foundation, here. Noted May 18.

N. Y., Corning—Hospital—Corning Hospital Assn., 4 story, brick addition. $175,000. Work will be done by separate contracts. F. H. Dewey & Co., 175 5th Ave., New York, archts. and engrs.

N. Y., New York — Apartment — A. Bricken, c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., 12 story, brick, steel and stone, plain foundation. Lexington Ave. and 74th St. $750,000. Work will be done by separate contracts under supervision of architects.

N. Y., New York—Office—July 17, by H. D. Sayer, industrial comr., 124 East 28th St., altering and repairing office buildings. L. F. Pilcher, Albany, state archt.; adv. this issue.

Pa., Erie—High School—Aug. 20, by Bd. Educ., 2 story, 200 x 300 ft. rein.-con. and brick, West Side. $425,000. W. W. Myers, Library Bldg., archt.

Pa., Johnstown — Theatre — Shubert Theatre Co., taking bids, 2 story and balcony, 82 x 135 ft., theatre, Franklin and Vine Sts. $500,000. H. J. Krapp, 114 East 16th St., New York, archt.

Pa., Overbrook—Academy—P. Monaghan, archt., 1218 Chestnut St., taking bids 3 story, 42 x 174 ft. with four 59 x 92 ft. wings, rein.-con., brick and steel, plain foundation, for Academy of Sacred Heart, 1835 Arch St. $500,000.

Pa., Pittsburgh—Synagogue—July 15, by R. J. Friedberg, archt., 1117 Farmers Bank Bldg., 2 story, 80 x 120 ft., St. Clair and Margaretta Sts., for Adath Jashurum Congregation, c/o architect. $150,000. Noted May 4.

Pa., Vandergrift—High School—July 15, by Bd. Educ., 2 story, brick and stone addition to school. $155,000. W. G. Eckles, New Castle, archt. Noted June 22.

Ga., Atlanta—Physic—July 21, by Robert & Co., archts. and engrs., Tuft Bldg., 3 story, 100 x 110 ft., brick, concrete and tile, rock foundation, for Georgia School of Technology. $200,000.

Ga., Brunswick—School—Aug. 2, by C. F. Dryden, secy. Glynn Co. Bd. Educ., 3 story, brick, tile and concrete. $200,000. H. Wallins, 23 Abercorn St., Savannah, archt.

Ga., Dalton—High School—July 18, by F. Manley, chn. Bd. School Comrs., 2 story, 76 x 125 ft. rein.-con., steel and brick, rock foundation. J. J. Baldwin, Anderson, S. C., archt.

O., Cleveland—Church—July 18, by A. E. Skeel, archt., 4500 Euclid Ave., 1 story, 50 x 110 ft., brick, steel and stone, Scranton Rd., for Trinity Evangelical Church, Scranton Rd. and Aiken Ave. $150,000.

WATERWORKS—CHILDRESS, TEX.

Following are lowest bids opened by city for waterworks improvements, item 1, including dam, spillway, etc., (A) F. P. McElwrath, Corsicana, (awarded contract); (B) McCall-Moore Eng. Co., Waco; (C) Brooks & Winans, Eastland; item 2, including 9 mi. pump line, pump house, etc., (A) Hamilton Bros., Taylor; (B) Jones Contg. Co., Dallas; (C) Winslett-Eldridge Co., Dallas. The unit bids were as follows:

	A	B	C
240,994.18 cu.yd. earth embankment-Dam	$0.28	$0.29	$0.328
16,766.00 cu.yd. earth excavation—Spillway	.25	.29	.20
7,965.00 cu.yd. earth excavation—Core trench	.35	.34	.40
88.50 cu.yd. 1:2:4 reinforced concrete	30.00	24.50	30.00
2,165.00 cu.yd. 1:2½:5 reinforced concrete	12.75	16.25	14.30
26,893.93 sq.yd. pavement—water slope dam and spillway	1.25	1.45	1.34
53 cast iron manhole steps—intake	.30	.65	1.00
1 24-in. cast iron manhole cover	25.00	40.00	40.00
246.00 lin.ft. 36-in. cast iron pipe, class "B"	16.00	16.40	18.00
1 36-in. sluice gate	615.00	696.00	750.00
4 12-in. sluice gates	100.00	105.00	125.00
1 36-in. x 36 in. x 36 in. T.S.	350.00	400.00	450.00
1 36-in. gate valve	520.00	575.00	600.00
1 36-in. x 12-in. reducer	200.00	265.00	300.00
5 floor stands for sluice gate control	30.00	32.50	40.00
Extended totals	$144,546	$160,432	$162,559

	A	B	C
3,578.6 cu.yd. earth excavation	$0.40	$0.40	$0.40
2,040.0 sq.yd. pavement	1.28	1.50	1.80
30.0 cu.yd. 1:2:4 reinforced concrete	16.00	25.00	25.00
72.0 lin.ft. 12-in. vitrified sewer pipe	2.00	1.25	2.50
4 12-in. ⅛ curves vitrified pipe	3.00	3.50	2.50
200.0 lin.ft. 4-in. tile drain	1.50	.90	.75
24,200.0 lin.ft. 14-in. cast iron pipe, Class "L"	3.07	3.04	3.19
7,300.0 lin.ft. 14-in. cast iron pipe, Class "C"	3.47	3.41	3.53
2 14-in. gate valves	111.00	119.00	112.50
1 14-in. x 14-in. x 12-in. T	41.00	44.50	46.80
6 14-in., ⅛ curves	27.00	30.00	33.00
2 14-in. Ells	30.00	33.00	37.00
17,440.00 lin.ft. 12-in. cast iron pipe, Class "B"	2.55	2.47	2.54
2 12-in. gate valves incl., 1 box	75.00	83.65	80.00
6 12-in., ⅛ curves	20.00	24.00	22.00
1 12-in. Y	49.00	53.00	52.00
1 12-in. 1/16 curve	20.00	23.00	22.00
1 12-in. x 12-in. x 12-in. T	36.00	42.00	37.00
3 12-in. x 12-in. x 6-in. Ts	31.00	36.00	34.00
1 12-in. cast iron plug	5.00	6.00	7.00
20,500.0 lin.ft. 6-in. cast iron pipe, Class "B"	1.03	1.16	1.17
24 fire hydrants	53.00	56.00	55.00
11 6-in. gate valves, incl. boxes	32.00	34.00	31.00
1 6-in. x 6-in. x 6-in. x 12-in. cross	36.00	39.00	50.00
5 6-in. x 6-in. x 6-in. x 12-in. cross	20.00	21.00	21.00
2 6-in., 1/16 curves	8.00	9.00	10.00
24 6-in. x 6-in. x 6-in. Ts	15.00	17.00	17.50
2 8-in. x 8-in. x 6-in. Ts	20.00	22.00	22.00
9 6-in., cast iron pipe plugs	3.00	2.50	1.50
8,900.0 lin.ft. 2-in. wrought iron pipe	.26	.38	.35
6 2-in. ground unions	1.00	2.00	2.50
6 2-in. nipples	.30	.15	2.00
18 2-in. ells	.50	.30	1.00
6 2-in. Ts	.70	.40	1.00
10 2-in. valves	7.50	4.00	5.00
1 10-ft. x 10-ft. brick pump house	135.00	250.00	500.00
1 internal comb. engine and pump comb.	330.00	405.00	550.00
3 10-ft. x 7-ft. circular galvanized storage tanks	135.00	165.00	300.00
41.0 cu.yds. 1:2½:5 concrete	12.00	20.00	25.00
Fence around reservoir (lump sum)		Cost + 15 per cent	Cost + 20 per cent
Extended totals	$177,124	$179,682	$187,003

O., Cleveland—Commercial and Apartment—J. A. Saunders, 11838 Detroit Ave., Lakewood, taking bids 4 story, 67 x 91 ft., brick and timber, plain foundation, Detroit Ave., here. $150,000. A. F. Janowitz, Permanent Bldg., archt.

O., Mentor—High School—July 16, by Bd. Educ., Rural School Dist., 2 story, brick, steel and concrete, plain foundation. $150,000. Miller & Son, Dollar Bank Bldg., Youngstown, archts.

Ind., Ft. Wayne—Hotel—T. Keenan, c/o Anthony Hotel, 128-30 West Berry St., taking bids and opens same about July 15, 15 story, 150 x 200 ft. brick, steel and concrete, plain foundation. $2,000,000. W. B. Vetterhogg, Ft. Wayne, archt. C. C. French, Plymouth Bldg., Cleveland, engr. Noted Feb. 16.

Mich., Hamtramck—School—July 20, by G. J. Haas, archt., 1514 Kresge Bldg., Detroit, 2 story, 80 x 300 ft. rein.-con., brick and steel, plain foundation, for Bd. Educ. $300,000.

Ill., Chicago — Church and office — H. Shaw, archt., 39 South State St., receiving bids 60 x 100 ft. church and 50 x 100 ft. study and office, both 2 story, rein.-con., brick and steel, University Ave. and 57th St., for Hyde Park Christian Disciples of Christ, c/o architect.

Wis., Clinton—High School—July 21, by Bd. Educ. 2 story, 78 x 90 ft., brick, rein.-con. and stone, plain foundation. $150,000. E. Tough, Conklin Bldg., Madison, engr.

Minn., Duluth—Hospital—Sept. 30, by F. A. Cokefair, chn. com., 516 Providence Bldg., 4 story, 140 x 250 ft. rein.-con., brick and steel, 1st St. and 9th Ave. E. $750,000. R. E. Schmidt, Chicago, and German & Jenssen, 411 Exchange Bldg., Duluth, associated archts. and engrs.

N. D., Dickinson—School—July 28, by State Bd. of Administration, Fargo, 3 story, rein.-con., brick, tile and stone, State Normal School Campus, here. $200,000. Keith & Kurke, Fargo, archts.

Cal., Berkeley—Hall—Aug. 2, by Regents of University of California, 2 story, 70 x 186 ft., rein.-con. J. G. Howard, 1st Natl. Bank Bldg., San Francisco, archt.

Cal., Berkeley—Mechanics—July 21, by Regents of University of California, 1 story, 40 x 80 ft., rein.-con. J. G. Howard, 1st Natl. Bank Bldg., San Francisco, archt.

Cal., San Francisco—Apartment—C. A. Meussdorffer, archt., Humboldt Bank Bldg., receiving bids 11 story, rein.-con., southwest Hyde and Greenwich Sts., for O. B. Martin, c/o architect. Noted May 11.

Cal., San Francisco—Store and Apartment—MacDonald & Couchot, archts., 110 Sutter St., receiving bids 10 story, rein.-con., Sutter St. near Taylor St., for G. D. Smith, 735 Taylor St. $375,000.

Cal., Stockton—School—Bd. Educ. receiving bids 13 room school, Burkett Acres. $150,000. F. E. Warner, Belding Bldg., Stockton, archt. Noted June 22.

BIDS RECEIVED

N. Y., Elmira—High School—Bd. Educ., Junior-Senior High School, 3 story, brick, on south side, general contract from Felton Constr. Co., Buffalo, $377,645 plus $7,539 for water-proofing boiler room, Drummond-Miller Co., 4500 Euclid Ave., Cleveland, O., $418,960 plus $8,420, Tifft Constr. Co., Iroquois Bldg., Buffalo, $654,472, plus $4,950; ventilating and heating work from

Buildings (Continued)

Globe Automatic Sprinkler Co., 2035 Washington St., Phila., $53,700; gas fixtures and vacuum cleaning apparatus, from Ellett Stempfle Co., 112 Lake St. ,$29,744. Noted March 22.

N. Y., Elmira—Hospital—St. Josephs Hospital, 555 East Market St., opened bids July 1, 5 story, 80 x 140 ft., brick annex, (general contract), from G. A. Zimmerman Corp., 18 East 41st St., New York, $211,713; Pulford Dempsey Constr. Co., 317 Penn Ave., $223,224; E. C. Brown Co., New York, $242,690. Noted March 23.

N. Y., New York—School—Bd. Educ., 500 Park Ave., opened bids July 5, P. S. 130, 2nd portion, brick, steel and stone, plain foundation, Hester and Baxter Sts., from Concord Constr. Co., 476 Seneca St., Brooklyn, $218,800; P. J. Brennan & Son, 624 Madison Ave., $236,600; T. A. Clarke Co., 122 Livingston St., Brooklyn, $237,300. Noted June 29.

N. Y., New York—School—Bd. Educ., 500 Park Ave., opened bids July 6, additions to and alterations in P. S. 57, brick, steel and stone, plain foundation, East 114th St. near 3rd Ave., from Frymier & Hanna, 25 West 45th St., $264,539; E. Diebitsch, 383 Madison Ave., $274,940; G. F. Driscoll Co., 115 Schermerhorn St., Brooklyn, $276,000. Noted June 29.

Pa., Phila.—Home—F. H. Caven, dir. pub. wks., opened bids June 29, 2 story, 38 x 93 ft. with two 37 x 88 ft. wings, brick and steel, plain foundation, 34th and Pine Sts., from J. B. Kelly Co., 2313 Walnut St., $172,976; G. H. Evans, 109 North 13th St., $183,538, Wark Co., Broad and Walnut Sts., $197,650. Noted June 22.

O., Cleveland—High School—Bd. Educ., East 6th St. and Rockwell Ave., opened bids July 3, 3 story, 40 room, rein.-con., brick and steel addition, West 93rd St. and Williard Ave., general contract, from Drummond-Miller Co., 4500 Euclid Ave., $652,000, W. Moore Co., 1276 West 4th St., $695,990; heating from Warden & Leese, Prospect Ave., Cleveland, $130,697. Noted June 15.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., opened bids 2 story, 151 x 205 ft., rein.-con., brick and steel, plain foundation, Brooklyn Ave., from F. H. Goddard, 2130 Franklin St., $295,500; G. Worswick, 410 Hodges Bldg., $298,400; Corrick Bros., 507 Owens Bldg., $299,878. Noted July 6.

Minn., International Falls—High School—F. E. Patterson, clk. Bd. Educ., opened bids July 6, 2 story, 100 x 250 ft. rein.-con., brick, tile and stone, (general contract) from Evenson & Utterberg, 550 Builders Exch. Bldg., Minneapolis, $177,950; J. and W. A. Elliott, 906 Lumber Exch. Bldg., Minneapolis, $188,600; J. C. Nelson & Son, 915 Bway., N. E., Minneapolis, $191,800. Noted June 22.

Cal., Berkeley — Bank — Federal Lang Bank, 2 story, rein.-con., Fulton St. opposite Kittredge St., from Lawton & Vezey, 357 12th St., Oakland, $134,900. Noted May 4.

N. B., St. John—School—A. G. Leavitt, secy. School Trustees, opened bids June 30, 2 story, 130 x 142 ft., brick, West St. John, from H. O. Clark, St. John, $151,585; Parsons-Ed Co., Moncton, $158,559; B. Mooney & Sons, St. John, $159,535. Noted June 22.

CONTRACTS AWARDED

Mass., Belchertown—Dormitories and Service—Dept. Mental Diseases, State House, Boston, two 2 story, brick and steel dormitories, and brick and steel service building, State Colony Group, here, to M I. O'Connor, 84 Main St., Northampton. Archts. est. $250,000.

Mass., Fitchburg—School—School Dept., 3 story, brick and steel, plain foundation, Academy and Elm Sts., to C. H. Cunningham & Sons Co., 23 Central Ave., Lynn. Archts. est. $400,000. Noted Oct. 27.

Mass., Springfield—Store, Office and Apartment—I. Richmond, 4 story, brick and concrete, plain foundation, Main and Ferry Sts., to Meyer Constr. Co., 318 Main St. Archts. est. $250,000.

Conn., Danbury—Theatre, etc.—Taylor Opera House, 190 Main St., 2 story, 78 x 105 ft. with 20 x 60 ft. ell, brick and steel, to L. S. Sweeney, 26 Montgomery St., and R. C. Read & Son, 12 Harmony St. Archts. est. $175,000.

Conn., New Haven—Forestry School—Yale University, 3 story, 100 x 150 ft. stone, brick and steel, Prospect St., to Casper Ranger Constr. Co., 20 Bond St., Holyoke, Mass. Archts. est. $300,000. Noted May 25.

Conn., New Haven—Hall of Medicine—Yale University, 3 story, brick, concrete, stone and steel, plain foundation, Cedar and Broad Sts., to Thompson-Starrett Co., 51 Wall St., New York. Archts. est. $1,320,000. Noted Jan. 12.

Conn., Newington—Home—Connecticut Childrens Aid Society, 904 Main St., Hartford, 1 and 2 story, brick and steel, group for new Newington Home for Crippled Children, to Bartlett-Brainerd Co., 252 Asylum St., Hartford. Archts. est. $300,000. Noted May 11.

Pa., McKeesport — Synagogue — Benai Israel Congregation, general contract 2 story, 65 x 124 ft., to A. Wishart & Sons Co., McKeesport. Archts. est. $150,000.

Pa., Sewickley—Library—H. D. Gilchrist, archt., Conestoga Bldg., Pittsburgh, "Clause Library," 1 story, 82 x 87 ft., Thorn and Broad Sts., to J. H. Fetterman, Park Bldg., Pitttsburgh, for Boro. Archts. est. $150,000. Noted April 27.

Md., Baltimore—Bank and Office—Natl. Bank of Baltimore, 3 story, brick, steel and stone addition, St. Paul St., to F. T. Ley, 19 West 44th St., New York. Archts. est. $200,000.

Md., Cumberland—School—Bd. Educ., 1 story, 200 x 200 ft., Cumberland Heights, to J. A. Powell, Cumberland. Archts. est. $150,000.

D. C., Wash.—Hotel—A. E. Walker, Southern Bldg., 8 and 11 story, 140 x 153 x 455 ft. hotel, Connecticut Ave. and De Sales St., to Longacre Eng. and Constr. Co., 46th St. and 4th Ave., New York, about $5,000,000; excavation to W. F. Brenizer Co., 101 New York Ave., N. E., $300,000. Noted April 27.

W. Va., Bluefield—Hotel—Cole Realty Co., 12 story, 50 x 175 ft., Scott and Federal Sts., to C. W. Hancock & Sons, Lynchburg, Va., $625,000. This corrects report June 15 issue.

O., Alliance — Church — First Christian Church, 1 story, 60 x 93 ft., brick, steel and stone, plain foundation, to V. B. Silver, Alliance. Archts. est. $150,000.

O., Cleveland—Bank and Office—Seventy-Eight-Twenty-Nine-Euclid Co., c/o Dennison & Hirons, archts., 806 Sincere Bldg., 8 story, 75 x 190 ft., brick, steel and concrete, East 79th St. and Euclid Ave., to W. Dunbar Co., 8201 Cedar Ave. Archts. est. $300,000.

O., Grandview Heights (Columbus P. O.) High School—Bd. Educ. 2 story, 150 x 175 ft., brick and concrete, to E. H. Latham & Co., 60 East Broad St., Columbus, $164,095. Noted June 1.

O., Granville—Hotel—J. S. Jones, 2 story, brick, concrete and stone, Main St., to be known as Granville Inn, to Taylor & Linn, 5th and Main Sts., Zanesville, $98,000. Noted May 25.

O., Ironton—Bank and Office—First Natl. Bank, 6 story, 100 x 120 ft., brick, concrete and terra cotta, Main St., to Taylor & Linn., 5th and Main Sts., Zanesville, $252,000. Noted May 25.

O., Westerville—High School—Bd. Educ., 2 story, 140 x 140 ft., brick and concrete, to D. W. McGrath & Sons, 255 East Broad St., Columbus, $114,800. Noted June 8.

Ill., Chicago—Sales—Buick Motor Co., 2031 Calumet Ave., 2 story, 101 x 208 ft., rein.-con., brick and steel, 2021-29 Calumet Ave., to Wells Bros. Constr. Co., 53 West Jackson Blvd. Archts. est. $150,000.

Ill., Chicago Heights—Hotel and Store—C. H. Thomas, c/o Cannedy-Otto Mfg. Co., East End Ave., 6 story, 70 x 122 ft. ordinary fireproof construction, 1651 Halsted St., to Chicago Heights Constr. Co., 1533 West End Ave. Archts. est. $250,000. Noted April 20.

Wis., Delavan—High School—Bd. Educ., general contract, 2 story, 60 x 110 ft., brick, rein.-con. and stone, plain foundation, to Hayes & Langdon, 325 Hayes Blk., Janesville. Engrs. est. $150,000.

Wis., Rhinelander—Hospital—St. Marys Hospital, 3 story, 48 x 86 ft., brick and concrete addition, plain foundation, to Hutter Constr. Co., 128 Western Ave., Fond du Lac. Engrs. est. $150,000. Noted June 15.

Wis., Stevens Point—High School—School Bd., 2 story, (1st unit), brick, plain foundation, to Immel Constr. Co., 200 North Main St., Fond du Lac, $124,483. Noted June 29.

Wyo., Worland—Reformatory—State Bd. Charities, Cheyenne, 3 story, 200 x 300 ft., brick and steel, on State Industrial Farm, here, to Larsen & Jorgenson, Casper, $173,729. Noted June 8.

Tex., Dallas—Film Exchange—Finn & Dunn, archts,. Houston, 4 story, rein.-con., here, to G. W. Hewitt, Slaughter Bldg. Engrs. est. $250,000.

Tex., Dallas—Hospital—Hella Temple, 400 South Harwood St., rein.-con. hospital, to Munn Constr. Co., Southwestern Life Bldg. Engrs. est. $250,000.

Cal., Oakland—Hospital—Fabiola Hospital Assn., Moss St. and Bway., 4 story, rein.-con. annex, Moss St. and Bway., to P. J. Walker Co., Monadnock Bldg., San Francisco, $200,000.

Cal., Sacramento—Office and Store—California State Life Insurance Co., Forum Bldg., 10 story, 100 x 100 ft., granite and terra cotta, 10th and J. Sts., to Lindgren Co., Monadnock Bldg., San Francisco, $1,000,000, percentage basis. Noted July 6.

Ont., Brantford—School—Bd. Educ., general contract 2 story, 76 x 140 ft. concrete, brick and steel, Grand and St. George Sts., to P. H. Secord & Sons Constr. Co., 133 Nelson St., $105,376.

Ont., Toronto—Office—Professional Offices, Ltd., 86 Bloor St. W., general contract 6 story, 51 x 112 ft. concrete, brick, steel, tile and stone, Bloor St. W., to H. A. Johnston, 412 Lake Front Ave. Archts. est. $200,000.

Bahamas-Nassau—Hotel—Munson Steamship Line, Munson Bldg., 67 Wall St., New York, brick, steel and stone plain foundation, here, to Purdy & Henderson, 45 East 17th St., New York. Archts. est. $1,000,000.

Federal Government Work

PROPOSED WORK

Cal., Mare Island—Wharf—Spec. 4688—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans oil wharf, here.

H. T., Pearl Harbor—Pier—Spec. 4687—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans submarine base pier, here.

BIDS DESIRED

N. J., Camden—Dredging—Aug. 7 at Office U. S. Engineer, 815 Witherspoon Bldg., Phila., Pa., dredging in Delaware River, here; adv. this issue.

Va., Hampton Roads—Equipment—Spec. 4667—Bureau Yards & Docks, Navy Dept., Wash., D. C., receiving bids for coal and ash handling equipment, here.

Va., Hampton Roads—Heating Plant—Spec. 4629—Bureau Yards & Docks, Navy Dept., Wash., D. C., receiving bids for heating plant building, here. Noted May 4.

Va., Norfolk—Hospital—July 31 by Treas. Dept., Wash., D. C., additional wing to main hospital building of U. S. Pub. Health Service Hospital, Tanner's Creek, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Fla., Key West—Distilling Plant—Spec. 4546—Aug. 2 by Bureau Yards & Docks, Navy Dept., Wash., D. C., distilling plant, here. L. E. Gregory, ch. of Bureau; adv. this issue.

Tenn., Memphis—Levee Work—July 20 at Office Mississippi River Comn., 1st and 2nd Dists., Customhouse, for 690,000 cu.yd. earthwork in White River Levee Dist.; adv. this issue.

Tenn., Memphis—Wire Mesh, etc.—July 25 at Office Mississippi River Comn., 1st and 2nd Dists., Customhouse, furnishing wire mesh and machine bolts;—adv. this issue.

Wyo., Riverton—Radial Gates, etc.—Aug. 18 at Office U. S. Recl. Service, Denver, Col., furnishing radial gates, radial gate hoists, geared hoists, etc., for Riverton Project. A. P. Davis, dir.; adv. this issue.

Cal., Mare Island—Circulating Loop—Spec. 4684—Bureau Yards & Docks, Navy Dept., Wash., D. C., receiving bids for circulating loop in central power plant, here. Noted July 6.

Cal., Petaluma—Dredging—July 22 at Office U. S. Engineer, Custom House, San Francico, dredging in Petaluma Creek, 445,000 cu.yd., place measurement.

Federal Government Work (Continued)

BIDS RECEIVED

Ky., Vanceburg—Dam—U. S. Engineer, 2nd Dist., Cincinnati, O., opened bids June 19, Dam 32, Ohio River near here, from Natl. Contr. Co., Citizens Bank Bldg., Evansville, Ind., $1,218,040; Dravo Constr. Co., Diamond Bldg., Pittsburgh, Pa., $1,224,867. Noted May 25.

O., Chilo—Dam—U. S. Engineer, 405 Custom House, Cincinnati, opened bids June 19, Dam 34, Ohio River, near here, from Natl. Contr. Co., Citizens Bank Bldg., Evansville, Ind., $1,385,147; Dravo Constr. Co., Diamond Bldg., Pittsburgh, Pa., $1,627,464. Noted May 25.

Mont., Malta—Drainage—U. S. Recl. Serv., Malta, opened bids June 28, structures on Nelson Reservoir Canal and Vandalia Canal lateral and wastewater ditches, from Ditty, Schultz & Sigvardt, Lewiston, $27,796. Noted May 18.

CONTRACTS AWARDED

Pa., Hoboken—Hangars—Director of Air Service, Munitions Bldg., Wash., D. C., 2 portable aeroplane hangars, each to accommodate 20 airplanes, here, to W. S. Rae, Oliver Bldg., Pittsburgh, $23,000.

Pa., Phila.—Drydock Approach—Spec. 4681—Bureau Yards & Docks, Navy Dept., Wash., D. C., drydock approach, here, to McLean Contg. Co., Fidelity Bldg., Baltimore, Md., $16,500 (150 days).

D. C., Wash. — School — Constructing Quartermaster, 2306 Munitions Bldg., 19th and B Sts., Army Medical School at Walter Reed Hospital, here, to Boyle-Robertson, Evans Bldg., $431,557 (300 days). Noted July 6.

D. C., Wash.—Trestle and Bins—Dist. Comrs., 509 Dist. Bldg., trestle and bins, to A. H. Rogers, Colorado Bldg., $10,715.

O., Cincinnati—Bear Trap Leaves—U. S. Engineer, Cincinnati, bear trap leaves for Dams 36 and 38 in Ohio River, to Independent Bridge Co., May Bldg., Pittsburgh, Pa., $89,708.

Mo., Jefferson Barracks — Hospital — Treas. Dept., Wash., D. C., construction U. S. Veterans Hospital, here, to J. Stewart & Co., Inc., 30 Church St., New York, $779,350. Noted July 6.

H. T., Hilo—Radio Towers—Spec. 4666—Bureau Yards & Docks, Navy Dept., Wash., D. C., radio towers, here, to C. W. Will, Hilo, $30,986.

Miscellaneous

PROPOSED WORK

Baseball Park and Grandstand—Buffalo, N. Y.—Buffalo Baseball Club, 101 East Ferry St., having preliminary plans prepared by Osborn Eng. Co., archts. and engrs., 2848 Prospect Ave., Cleveland, O., ball park and 2 story, brick, concrete and steel grandstand. $500,000.

Park—Geneva, N. Y.—Plans $25,000 bond issue for 2 mi. park along Seneca Lake front. Engineer not announced.

Jetties—New Jersey—Asbury Park, Belmar, Long Branch and Longport plan jetties. $300,000. Address State Commerce & Navigation Dept., Trenton. B. F. Cresson, State House, Trenton, engr.

Retaining Wall—Trenton, N. J.—Plans rein.-con. retaining wall with appurtenances along John Fitch Way from municipal dock to Delaware River bridge. $25,000. A. C. Gregory, City Hall, engr.

City Annexation—Norfolk, Va.—City plans annexation of various Norfolk Co. sections incl. towns of Ocean View, Willoughby Beach, Tanners Creek, Chesterfield Heights and Fairmount Park. Plans incl. construction of three joint fire and police stations, several schools and miscellaneous improvements. $200,000. C. E. Ashburner, city mgr.

Park Improvements—Norfolk, Va.—Having plans prepared improving Lee Park on Smiths Creek, incl. walks, bulkhead and concrete landing wharf. $49,770. C. E. Ashburner, city mgr.

Summer Resort—Franklin, N. C.—E. S. Hunnicutt, Franklin, Va., having plans prepared and soon takes bids developing summer resort, including artificial lake, lighting installation, roads and sidewalks. W. N. Wills, Spartanburg, S. C., engr.

Gas Line—Sterlington, La.—Ouachita Natural Gas Co., of Sterlington and Monroe, plans 10 mi. of 6 in. pipe line from Swartz Field to gasoline absorption plant here. Cost to exceed $25,000.

Tipple—Typo, Ky.—Mains-Haskins Coal Co., Blue Diamond, plans reconstructing coal tipple, here. $45,000 to $50,000. A. Haskins, genl. mgr. Architect not announced.

Foundation—Milwaukee, Wis.—Brust & Phillip, archts., 405 Bway., takes bids about July 17, plain foundation for 4 story, 150 x 150 ft., L. shaped, addition to convent, brick and concrete, Greenfield Ave., for St. Josephs Convent, 575 Layton Blvd., $175,000.

Swimming Pool—Sheboygan, Wis.—Making plans tile and steel swimming pool in high school. $40,000. J. G. Waloord, supt. schools. Childs-Smith, Chicago, engrs.

Amusement Park—Wauwatosa, Wis.—Castalia Gardens, Inc., c/o P. J. Schultheis, 323 M. & M. Bank Bdg., Milwaukee, making preliminary plans amusement park in Castalia Park, incl. buildings, chutes, swimming pool, Ferris wheel, water supply, etc.

Drilling Wells—Archer City, Tex.—C. A. Everts, Kemp Hotel, Wichita Falls, plans drilling test wells for oil and gas, near east central line of Archer Co., where 2,000 acres are under lease for this purpose. $25,000.

Tanks—Galveston, Tex.—Galveston Gas Co. plans to expend $125,000 on plant improvements, incl. 750,000 cu.ft. gas storage tank and 2,100,000 gal. water storage tank. P. E. Nicholls, Genl. Mgr.

Transmission Line—Red Rock, Okla.—Had plans prepared transmission line. $25,000. J. D. Bonford & Co., Enid, engrs.

Transmission Line—Keyes, Cal.—Turlock and Modesto Irrigation Dists., plan transmission line from Don Pedro Project to Keyes. Modesto Dist. has $298,000 in unsold bonds to build the line, purchase transformers, etc. P. Jones, ch. engr. for Modesto Dist. R. V. Meikle, ch. engr. for Turlock Dist.

Playgrounds and Swimming Tank—Richmond, Cal.—Plan election to vote on $50,000 bonds for playgrounds and $40,000 bonds for swimming tank. H. D. Chapman, city engr.

Transmission Line—Cornwall, Ont.—W. W. Beach, Iroquois, granted franchise by united counties of Stormont, Dundas and Glengarry, to use highways in 3 counties for transmission line, incl. poles, towers, etc.

Stadium—Ottawa, Ont.—Stadium of Ottawa, Ltd., having plans prepared by Millson & Burgess, archts., 209 Sparks St., 2 story, 320 x 410 ft. concrete, brick and steel, King and York Sts. $500,000.

Race Track, etc.—Port Credit, Ont.—Belleville Driving & Athletic Assn., 301 Bank of Hamilton Bldg., Toronto, having plans prepared by J. M. Jeffrey, archt., Confederation Life Bldg., Toronto, race track, steel grand stand, concrete and timber stables, etc., Hamilton Highway. $250,000.

BIDS DESIRED

Asphaltic Paving Cement — New York, N. Y.—July 20, by J. Miller, pres. Manhattan Boro, Municipal Bldg., furnishing and delivering 500 ton asphaltic paving cement.

Frogs, Switches, etc.—New York, N. Y.—July 25, by Transit Comn., 49 Lafayette St., installing frogs, switches, tracks and bumping posts in yard near Jerome Ave and Mosholu Parkway, Bronx Boro, Jerome Ave. Line, Route 16; constructing additional approach track to Lenox Ave and 148th St. Yard; making changes in steel work at easterly approach to Queensboro Plaza station, Routes 36 and 37, Sect. 1, Boro of Queens, Agreement "BZ."

Lumber, etc.—New York, N. Y.—July 21, by Bd. Purch., Municipal Bldg., furnishing and delivering creosoted and plain yellow pine lumber also granite and wood paving blocks, to Dept. Plant & Structures. G. A. Whalen, comr.

Engines and D. C. Generators—Rome, N. Y.—Aug. 7, by C. J. Severance, pres. Bd. Mgrs., State School for Mental Defectives, Rome, for engines and d.c. generators in state school here. L. F. Pilcher, Albany, state archt.; adv. this issue.

Fabricated Steel Work—Pittsburgh, Pa.—July 17, by C. M. Yohe, purch. agt. Pittsburgh & Lake Erie R.R., Smithfield St., for 1,625 ton fabricated steel work.

Paving Brick—Washington, Pa.—July 31, by Town Council, 700,000 paving brick. J. F. Curran, pres.; adv. this issue.

Fabricated Steel—Baltimore, Md.—Baltimore & Ohio R.R. in market for about 400 ton fabricated steel work, to be used in bridges. W. S. Galloway, purch. agt.

Pier—Sarasota, Fla.—July 24, 850 ft. recreation pier, 100,000 cu.yd. excav. and 1,700 lin.ft. rein.-con. seawalls. $75,000. L. Pickett, comr. pub. wks.

Fill—Tampa, Fla.—July 26, 40,000 cu.yd. earth fill on estuary project. $25,000. R. D. Martin, Tampa, engr.

Grand Stand—Detroit, Mich.—July 20, by Osborn Eng. Co., engrs., 2848 Prospect Ave., Cleveland, 1 story, concrete and steel top addition, Navin Field, for Detroit Base Ball Club. $200,000. F. Navin, pres.

Asphalt Filer—Tomah, Wis.—C. F. Larson taking bids 1 carload, more or less, asphalt filler for brick binder.

Foundation—Minneapolis, Minn.—Aug. 15, by MacPhail School of Music and Dramatic Art, 804 Nicollet Ave., foundation for 4 story, 50 x 165 ft. rein.-con., brick and tile, LaSalle Ave. and 12th St. $225,000. W. MacPhail, pres. Magney & Tusler, 126 South 9th St., archts. Noted Aug. 4 under "Buildings."

Paving Materials — St. Paul, Minn. — July 17, by H. W. Austin, city purch. agt., materials for paving Hague Ave. from Lexington to Syndicate Aves., 1,235 bbl. portland cement, 960 cu.yd. crushed rock, 1,149 cu.yd. screened sand, 104 ton asphalt, 104 ton limestone dust, 276 cu.yd. binder stone, etc. O. Claussen, city engr.

BIDS RECEIVED

Bituminous Road Surfacing Material—New York, N. Y.—W. J. Flynn, acting pres. Bronx Boro, opened bids July 6, furnishing and delivering 35,000 gal. bituminous road surfacing material, from F. J. Lewis Mfg. Co., 177th St. and Ferris Ave., $0.1575 per gal.; Barrett Co., 40 Rector St., $0.168. Noted June 29.

CONTRACTS AWARDED

Underground Fire Alarm System—Brooklyn, N. Y.—T. J. Drennan, Fire Comr., Municipal Bldg., New York, constructing portion of underground fire alarm system, here, to Crocker Natl. Fire Prevention Eng. Co., 22 West 30th St., New York, $52,967. Noted July 6.

Heating Plant—Niagara Falls, N. Y.—Bd. Educ. installing and furnishing new heating plant for high school, will also be used for heating junior high school, to Matthews Plumbing & Heating Co., 2107 Main St., $73,225.

Gas Mains—Rochester, N. Y.—Rochester Gas & Electric Co., Clinton Ave., N., will extend gas mains into Sea Breeze Sect. near here, involving 43,000 ft. c. i. pipe, by day labor. $75,000. Noted May 18.

Dock, etc.—Troy, N. Y.—Harbor & Dock Comn., City Hall, constructing dock wall also improving and regulating river and dock front, to Great Lakes Dredge & Dock Co., 104 South Michigan Ave., Chicago, $582,795. Noted June 1.

Pier—Norfolk, Va.—Chesapeake & Ohio R.R., Brooke Ave., 52 x 450 ft., rein.-con. and steel pier, foot Brooke Ave., to T. Nuckols Co., 7th and Duval Sts., Richmond. Engrs. est. $125,000.

Jaw Crusher and Road Roller—Florida—State Hy. Dept., Tallahassee, climas jaw crusher and 10 ton Monarch road roller, to Good Roads Mchy. Co., 567 Whitehall St., Atlanta, Ga., $3,350 and $4,400 respectively. Noted May 25.

Terminal Improvements — Vicksburg, Miss.—Mississippi Warrior Waterways, St. Louis, Mo., grading and laying 6,000 ft. track, driving, capping and decking 1,400 ft. incline trestle, driving 6 sets cluster mooring piles, building cradle and repairing terminal barge, to Reid & Lowe, Brown-Marx Bldg., Birmingham, Ala., $170,000; driving piling $0.86 per ft. out of water, $1.25 per ft. under water.

Road Oil—Lake Mills, Wis.—Soon takes bids 15,000 gal., more or less road oil for streets, probably asphaltic. Private plans. N. U. Falk, clk.

Steel Tram—Racine, Wis.—Wisconsin Gas & Electric Co., 305 6th St., steel tram for mono rail hoist, will require 150 ton steel, to Worden-Allen Co., Port Washington Rd., Milwaukee. Noted June 15.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: July 18.

Water Supply for Fire Protection

Raybrook, N. Y.

Under the provisions of Chapter 106 of the Laws of 1922 sealed proposals for the construction and instalation of additions and alterations to the water supply of the New York State Hospital for Incipient Tuberculosis at Raybrook, N. Y., including intake pipes, pumps, force mains, hydrants, hydrant houses, fire hose and appurtenances, will be received by the Board of Trustees of said State Hospital at the office of the State Engineer and Surveyor, Telephone Building, Albany, N. Y., until 12 o'clock noon (Eastern standard time) on Tuesday, July 18, 1922, when they will be publicly opened and read.

Each proposal must be addressed to the Board of Trustees of the New York State Hospital for Incipient Tuberculosis, care of the State Engineer and Surveyor, Telephone Building, Albany, N. Y., and on the outside of the envelope must be clearly and conspicuously written "Sealed proposal for water supply construction at Raybrook."

Proposals shall be made on blank forms furnished for the purpose and shall be accompanied by a draft or certified check in the sum of five per cent (5%) of the amount of the proposal. The person or persons whose proposal shall be accepted will be required to execute the contract and furnish a "faithful performance bond" in an amount of not less than thirty per cent (30%) and a "labor bond" in an amount of not less than ten per cent (10%) of the amount of the contract within ten (10) days of the notice of award of the contract in accordance with the terms of the specifications.

The right is reserved to reject any and all bids.

Plans, specifications and forms of proposal and contract may be examined in the offices of the Board of Trustees of the New York State Hospital for Incipient Tuberculosis at Raybrook, N. Y., of the State Engineer and Surveyor, Telephone Building, Albany, N. Y., and of the State Engineer and Surveyor, Pier 6, East River, New York City, and specifications and forms of proposal and contract may be obtained from the State Engineer and Surveyor, Telephone Building, Albany, N. Y.

Blueprint copies of plans, consisting of sheets 1 to 8 inclusive, may be obtained from the State Engineer and Surveyor, Telephone Building, Albany, N. Y., upon payment of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints that may be returned.

The deposits of bidders, other than the one to whom the award of contract shall be made, will be returned immediately after the award has been made.

The award, if made, will be to the lowest responsible bidder and the successful bidder will be required to satisfy the Board of Trustees of his ability to provide suitable equipment and materials for the proper performance of the work.

Board of Trustees, New York State
Hospital for Incipient Tuberculosis,
By JOHN HURLEY, President.
Dated, July 1, 1922.

OFFICIAL PROPOSALS

Bids: July 17.

Alterations and Repairs to Office Buildings

New York City.

Sealed proposals for Alterations and Repairs, etc. (Painting Work) to Office Buildings, Department of Labor, New York City, will be received by Hon. Henry D. Sayer, Industrial Commissioner, 124 East 28th St., New York City, until 1 o'clock p.m. (Standard Time), on Monday, July 17, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3921. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Office of the New York State Industrial Commissioner, 124 East 28th St., New York City, at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: June 30, 1922.

Bids: July 18.

Street Paving

Kennett, Mo.

Sealed bids will be received by the Mayor and Council of the City of Kennett, Missouri, at the Office of the City Clerk, up to 7 o'clock p.m. on the 18th day of July, 1922, and will then be publicly opened and read.

The approximate quantities on this work are as follows: 6,520 cu.yds. earth excavation, 30,225 sq.yds. reinforced concrete pavement, 15,545 linear feet of concrete integral curbing 390 cu.yds. concrete for manholes and sewers, 36,430 lbs. of reinforcing steel, 3,910 lbs. of iron castings, 780 feet 12" vitrified pipe.

Plans and Specifications are on file at the office of the City Clerk or at the office of the Engineers, and copies of same can be obtained from the Engineers on receipt of $3.00.

A certified check or bidder's bond in the sum of One Thousand Dollars must accompany all proposals, check or bond to be made payable to the order of the Mayor.

All bids must be made on forms furnished by the Engineer; informal bids will not be considered.

The right is reserved to reject any or all bids:

J. W. KARSTEN, Mayor.
DAVE STROUD, Clerk.
C. E. SMITH & CO., Engineers,
Cape Girardeau, Mo.

OFFICIAL PROPOSALS

Bids: July 31.

Sewage Disposal Plant

Indianapolis, Ind.

Sealed proposals will be received by the Board of Sanitary Commissioners, Sanitary District of Indianapolis, at its office in the City Hall, Indianapolis, Indiana, until 10 a.m. July 31st, 1922, at which time bids will be publicly opened and scheduled, and awards made as soon thereafter as practicable, for construction of Section 2, Division III, and furnishing and erecting mechanical equipment for the Sewage Disposal Plant of the Sanitary District of Indianapolis, in accordance with plans and specifications on file at the office of the Board. This construction and equipment to consist of the following general items:

(1) One (1) Power Plant Building of Brick, Concrete and Steel, approximately 130 ft. x 82 ft. in plan and 65 ft. from bottom of foundation to top of coping wall.
(2) Two (2) Reinforced Concrete Pump Pits including Brick Pump Houses, as specified.
(3) One (1) Radial Brick Chimney, 200 ft. high, 9 ft. internal diameter.
(4) Railway grading, approximately 2,800 ft. in length.
(5) Water, Steam and Air Piping and Erection of Sludge Equipment and other machinery.
(6) One (1) Electric Power Plant Crane.
(7) Five (5) Electric Centrifugal Pumping Units.

Each bidder shall be required to deposit with his bid a certified check in the amount as provided in said specifications and information to bidders, to insure the execution of the contract for which bid is made.

Copies of plans and specifications and general information may be obtained at the office of Charles H. Hurd, Consulting Engineer, 1405 Merchants Bank Building, Indianapolis, Indiana.

The board reserves the right to reject any and all bids.

BOARD OF SANITARY
COMMISSIONERS
Jay A. Craven, President.
John L. Elliott, Vice-Pres.
Lucius B. Swift.

Bids: July 18.

Levee and Excavation

Beardstown, Illinois.

Sealed bids will be received by the Commissioners of the Coal Creek Drainage and Levee District of Schuyler County, Illinois, until 2:00 o'clock p.m. on July 18, 1922, at the office of Glass and Bottenberg, Rushville, Illinois, at which time and place they will be opened.

The proposed work will require the handling of approximately 200,000 cu.yds. of earth for levee reinforcement to be done with a floating dredge, and 120,000 cu.yds. of earth for levee reinforcement and ditch excavation to be done with a drag line or other device. Information, plans and specifications for said work may be obtained at the office of the undersigned upon deposit of $10.00 refundable upon return of same.

Bids will be received separately for the levee work to be done by dredge, and that to be done by drag line. Each bidder must accompany his bid by a certified check for $5,000.00 on work to be done by dredge, and a certified check for $3,000.00 in the case of work to be done with drag line.

GEORGE C. LOWE.
Engineer

Bids: Aug. 15.

Hydro-Electric Project

Dotham, Ala.

Sealed proposals will be received by the Mayor and City Council of the City of Dothan, Alabama, until 2 o'clock p.m., Tuesday, August 15th, 1922, for constructing a Hydro-Electric Project with appurtenances, and furnishing materials and equipment, at High Bluff on the Choctawhatchee River about eight (8) miles from Hartford, Ala., in sections 9 and 4 of township 2N, Range 23E, Geneva County, Alabama. The work consists of the construction of an earth dam, a concrete spillway, abutments and power house, and the furnishing and placing of machinery.

The principal approximate quantities involved are the following:

51,000 cu.yds. of excavation.
380,000 cu.yds. of embankment.
18,500 cu.yds. of concrete of different classes.
1,900,000 pounds of reinforcing steel.
354,000 pounds of structural steel work.

Turbines, generators, transformers and auxiliary power house equipment for a present installation of approximately 3,000 bhp. capacity in two units.

A transmission line twenty-one and one-half (21½) miles long at 44,000 volts pressure.

Plans and specifications are on file at the office of the City Clerk at Dothan, Alabama, and at the office of The Ludlow Engineers at Winston-Salem, N. C., where they may be examined by prospective bidders.

Copies of the plans covering the construction details of this project and two copies of the specifications attached to the form of proposal and contract will be furnished by The Ludlow Engineers, Winston-Salem, N. C., upon application by prospective bidders accompanied by a check for twenty-five ($25.00) dollars to cover the cost, or, separate prints, and extra copies of specifications and form of proposal, etc., at one ($1.00) dollar each.

Each bid must be accompanied by a certified check for approximately five (5%) per cent of the bid.

Proposals will be received at the City Hall, Dothan, Alabama, and opened publicly wih the right reserved to accept any bid or to reject any or all bids as the best interests of the City may appear.

Plans and supervision by THE LUDLOW ENGINEERS, INC. Winston-Salem, N. C.

E. O. JONES, Mayor.
R. W. LISENBY, City Clerk.

Bids: Aug. 10.

Drainage and Ditch Improvement

Wooster, Ohio.

Notice is hereby given that sealed proposals for the construction of the JOINT WAYNE-HOLMES COUNTY DITCH IMPROVEMENT will be received up until twelve o'clock noon Eastern Standard Time on Thursday, August 10, 1922, at the office of the Secretary of the Joint Board of County Commissioners of Wayne and Holmes Counties at the Court House at Wooster, Ohio.

The work to be done consists of the draining and dredging of Killbuck Creek in Wayne and Holmes Counties, in all, the distance of One Hundred and Fifty-Six (156) feet.

The yardage of earth to be moved is estimated at about 1,780,000 cubic yards, consisting principally of Hydraulic dredge work. The date of completion will be eighteen months from the date of awarding of contract.

A certified check in the amount of $10,000.00, payable to the Joint Board of County Commissioners of Wayne and Holmes Counties, Ohio, must accompany each proposal. Checks of unsuccessful bidders will be returned within ten days of the awarding of the contract.

The said board reserves the right to reject any or all bids. Plans, specifications and proposals are on file at the Secretary's office at the Court House, Wooster, Ohio, or same will be mailed upon application when same is accompanied by a deposit of $20, which will be refunded if plans are returned in good condition.

By order of the Joint Board of County Commissioners of Wayne and Holmes Counties.
CHAS. F. SCHOPF,
Secretary.

Bids: July 21.

Steel and Concrete Bridge

Cobleskill, N. Y.

Sealed bids and proposals will be received by the undersigned, at the office of the Town Clerk, in the village and town of Cobleskill, N. Y., until one o'clock in the afternoon of July 21, 1922, at which time they will be publicly opened and read, for the building of a new steel and concrete bridge over the Cobleskill Creek, on the Barnerville-Howe Cave road in said town.

Plans and specifications of said bridge may be seen and examined at the office of the town clerk in said village and town, and also at the office of Lawyer Wright, Superintendent of Highways of Schoharie County, at Schoharie, N. Y.

The right to reject any and all bids is hereby reserved.

Dated June 27th, 1922.

HERBERT L. SWEET,
Superintendent of Highways.
LEWIS UTTER,
Supervisor.
WILLIAM H. WHITE,
Justice of the Peace.
WILLIAM H. GOLDING,
Justice of the Peace.
GEORGE CHICKERING,
Justice of the Peace.
LELAND C. JONES,
Justice of the Peace.
AURA J. BROWN,
Town Clerk of the Town of Cobleskill, N. Y.

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Bids: July 25.

Barge Canal Terminals

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, July 25, 1922, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and amendatory laws, and Chapter 402 of the Laws of 1920, as follows:

—1—
TERMINAL CONTRACT NO. 89

For paving a portion of the terminal site, constructing railroad and crane tracks, electrical work and details incidental thereto, at Syracuse.

Contract plans, sheets 1 to 4 inclusive.

—2—
TERMINAL CONTRACT NO. 90

For dredging a portion of the Henry Street slip at Gowanus Bay, Borough of Brooklyn, New York City.

Contract plans, sheet No. 1.

Plans may be seen and detailed specifications, engineer's estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate at fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE,
Superintendent of Public Works.
June 22, 1922.

Bids: July 18.

Sidewalk Construction

Miami, Fla.

Sealed proposals will be received by "The Commission of the City of Miami, Florida," at the City Hall in Miami, Florida, until 11 a.m. at the regular meeting of the Commission, Tuesday, July 18th, 1922, for the construction of Concrete Sidewalks.

The work will consist of: Approximately 24,683 square yards of concrete sidewalk, and will be divided into 2 contracts. The bidder can bid on any or all of these contracts.

The improvements are to be constructed and payment therefor is to be made under Section 56 of the City Charter.

All bids must be upon blank forms provided in the proposal, specifications and contract.

Each bid must be accompanied by a certified check for 2½ per cent of the amount of the bid to insure the execution of the contract as provided by Section 56 of the City Charter.

The City reserves the right to reject any or all bids.

Plans and specifications will be on file at the City Hall in the office of the City Manager.

Copies of proposals, specifications and contract can be obtained from the office of Chas. W. Murray, Director of Public Service, on deposit of $10.00, which will be refunded to those who submit bona fide bids.

F. H. WHARTON,
City Manager.

Bids: July 25.

Sewer

Oklahoma City, Okla.

Sealed bids will be received by C. F. Semmelbeck, City Clerk of the city of Oklahoma City, Oklahoma, up to 12:00 o'clock m., Tuesday, July 25th, 1922, and a duplicate of each bid must be filed with the City Auditor of said city, and will be opened and considered by the Board of Commissioners in the Commissioners' Chamber in the City Hall Building at 2:00 o'clock p.m., Thursday, July 25th, 1922, for the furnishing of all materials and labor for the construction of the following work for the Lee Avenue Sewer District.

SECTION 2 (b)—The Lee Avenue Storm Main Sewer from the North Canadian River to the north line of Pottawatomie Avenue.

SECTION 2 (c)—The Lee Avenue Storm Main Sewer from the north line of Pottawatomie Avenue to the north line of California Avenue.

SECTION 2 (d)—The Lee Avenue Storm Main Sewer from the north line of California Avenue to the center of Second Street.

SECTION 2 (b)—Bids will be received for reinforced monolithic concrete sewer on this section.

This section consists of the construction of approximately 2,825 lineal feet of 13 ft. 9 in. x 13 ft. 9 in. sewer, together with the outfall, manholes, improved catch basins, catch basin leads, etc., necessary for the construction of the above.

SECTION 2 (c)—Bids will be received for reinforced monolithic concrete sewer on this section.

This section consists of the construction of approximately 1,960 lineal feet of 13 ft. x 13 ft. sewer together with manholes, improved catch basins, catch basin leads, etc., necessary for the completion of the above.

SECTION 2 (d)—Bids will be received for reinforced monolithic concrete sewer on this section.

This section consists of the construction of approximately 900 lineal feet of 12 ft. x 12 ft. sewer, and approximately 775 lineal feet of 11 ft. x 11 ft. sewer, together with the junction chamber, manholes, improved catch basins, catch basin leads, etc., necessary for the completion of the above.

Bids will be considered on each section separately and on the three sections as a whole.

All of the necessary work and materials used shall be in accordance with the plans and specifications therefor, now on file in the office of the City Clerk.

Each bidder shall accompany his bid with a sworn statement in writing that the bidder has not directly nor indirectly made any agreement, expressed or implied, with any other bidder or bidders having for its object the controlling of the price or amount of such bid or bids, the limiting of the bidder or bidders, the parcelling or farming out to any bidder or bidders, or other persons of any part of the contract or any part of the subject matter of the bid or of the profits thereof; and has no knowledge of the amount, kind or character of any kind to be made by any other person, firm or corporation, except those submitted and filed by him.

The bid or bids filed with the City Clerk must be accompanied by a certified check on any national bank or any Oklahoma City bank in the sum of three (3) per cent of the amount of the bid or bids.

It being further understood that the amount of damages which the city would suffer would be impracticable to determine and extremely difficult to fix in case the successful bidder should fail to enter into a contract and give the required bonds within the required time, it is therefore understood that by the filing of a bid or bids it will be considered as agreed that the amount of damages which the city would suffer by reason of such failure on the part of said successful bidder, is the amount represented by check or checks so filed by the successful bidder and that the city shall have the authority to appropriate such checks for its own use and benefit in payment for such damages.

Each bidder shall agree to enter into contract and give the required bonds within ten (10) days after the acceptance of his bid, also to commence work within twenty (20) days after signing the contract and to complete Section 2 (b) with one hundred eighty (180) days; Section 2 (c) within one hundred twenty (120) days; Section 2 (d) within ninety (90) days; and the three sections within two hundred forty (240) days after commencing the work.

The contractor will be required to give bond in the sum of twenty (20) per cent of the contract price for faithful performance of said work, and all other bonds that are required by the laws of the State of Oklahoma or the ordinances of the said city, and to give bond to hold the city harmless from any and all damages for which the city might be liable under the law, and which might occur by reason of any act upon the part of the said contractor or of any of his employees.

A deposit of Twenty-five ($25.00) dollars will be required for each set of plans and specifications.

The Board of Commissioners reserves the right to reject any or all bids.

C. F. SEMMELBECK,
(Seal) City Clerk.

Bids: July 19.

Turbine and Accessories

New Orleans, La.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans, up to 12 o'clock noon, Wednesday, July 19, 1922, for furnishing one 6,000 kw. turbine and accessories.

Specifications and blank forms of proposals may be obtained at Room 303, No. 526 Carondelet Street, New Orleans.

The right is reserved to reject any or all bids. A. G. MOFFAT, Secretary

GEO. G. EARL, General Superintendent,
May 11, 1922.

Engineering News-Record Reaches Your Local Contractors

Its distribution among the contractors of any one state is in proportion to the number of contractors situated in that state. The Official Proposal Colums of *Engineering News-Record* offer precisely the same efficient service to municipalities, counties, and state and government departments in every section of the United States.

Bids: July 26.

Cast-Iron Main Sewer

Rye, N. Y.

Sealed proposals will be publicly opened by the Trustees of the Village of Rye, N. Y., at the Village Municipal Hall, at 8.15 P.M., July 26, 1922.

Said proposals to cover the construction (both materials and labor) of a cast-iron main sewer according to plans and specifications filed with the Village Clerk.

Copies of the plans and specifications may be obtained from him, or from the engineer, G. Everett Hill, 45 Seventh Avenue, New York City, upon payment of $15, of which amount $10 will be refunded upon return of all papers, in good condition, on or before July 31st, 1922.

Approximately the work consists of:

About 2,000 feet of 16-inch and about 1,540 feet of 18-inch cast-iron pipe (with manholes and fittings) laid partly on piles and partly on concrete piers.

Each bid must be accompanied by a certified check for $5,000, as a guarantee that the bidder, if his bid be accepted, will enter into contract and execute the required bond.

Each bid must be made on blank forms to be obtained from the Village Clerk or the Engineer.

The Village reserves the right to reject any or all bids.

The Board of Village Trustees,
WILLIAM H. SELZER,
Village Clerk.

G. EVERETT HILL, Engineer,
45 Seventh Ave., New York.

Bids: Aug. 7.

Lighting Facilities

Rome, N. Y.

Sealed proposals for Engines and D. C. Generators (Lighting Facilities) at the State School for Mental Defectives, Rome, N. Y., will be received by Mr. Cyrus J. Severance, President of Board of Managers, State School for Mental Defectives, Rome, N. Y., until 11 o'clock A.M. (Standard Time) on Monday, August 7, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3918. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the State School for Mental Defectives, Rome, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: July 5, 1922.

CHAS. BERNSTEIN,
Superintendent.

Bids: July 18.

Road Work

Westwood, N. J.

Sealed proposals will be received by the Mayor and Council of the Borough of Westwood, at the Borough Hall on Centre Street, on Tuesday, July 18th, 1922, at 8:30 o'clock p.m. (Daylight Saving Time), for the Grading, Paving, Draining and Curbing of Center Avenue from Jefferson Avenue to Westwood Avenue.

Specifications may be seen and forms of proposals obtained at the office of Watson G. Clark, Consulting Engineer, Hillside Avenue, Tenafly, N. J., upon a deposit of Ten Dollars ($10.00) which amount will be refunded upon return of them in good condition.

All proposals shall be addressed to D. Van Emburgh, Borough Clerk, and placed in a sealed envelope and endorsed "Proposal for the Improvement of Center Avenue."

All proposals must be accompanied by a certified check in the amount of One Thousand Dollars ($1,000.00) payable to the order of the Borough of Westwood, or cash, which sum shall be forfeited if the Contractor shall fail to execute a contract with the Borough within ten (10) days after the same shall be awarded to him.

The right to reject any or all bids for any cause whatsoever is hereby reserved.

D. VAN EMBURGH,
Borough Clerk.

Bids: July 31.

Concrete Paving

Greenville, N. C.

Sealed bids will be received by the Pitt County Highway Commission, at their office in Greenville, N. C., on Monday, July 31st, 1922, at noon, for the paving with concrete five miles of Highway 16 ft. width, between Greenville and Falkland, and also for paving 7 miles of highway 16 ft. in width, with concrete between Greenville and Cox Mill. Bids will be received for both projects as a whole, and also each project separately. Grading completed.

The Highway Commission offers its Industrial Railway and paving equipment for these projects, and also Convict labor.

Plans and profiles may be seen at the Highway Office in Greenville, N. C.

Certified check for two thousand dollars to accompany bid. The right to reject any or all bids is reserved by the Commission.

By Order of The Pitt County Highway Commission, Greenville, N. C.

J. B. HARDING,
Engineer.

OFFICIAL PROPOSALS

Bids: July 21.

Highway Route No. 5—Section No. 8

Belvidere, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the County of Warren for the following: Construction of State Highway Route No. 5, Section No. 8, Great Meadows—Barkers Corner. Estimated amount of reinforced Portland Cement Concrete Pavement is 34,522 square yards.

Work is to be performed under County Reimbursement Act, Chapter 183, laws of 1918, and amended by Chapter 317, laws of 1920.

Bids will be received at the Court House at Belvidere, N. J., on
FRIDAY, JULY 21, 1922 AT 1 O'CLOCK P.M., STANDARD TIME.

Drawings, specifications and form of contract and bond for the proposed work are on file in the office of Harry W. Vetter, County Engineer, at Belvidere, N. J., and in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of ten dollars ($10.00) upon application to Harry W. Vetter, County Engineer. Bids must be made on the standard Proposal forms in the manner designated therein and as required by the specifications, enclosed in sealed envelopes addressed to the Board of Chosen Freeholders of the County of Warren and bearing the name and address of the bidder and the name and section of the route on the outside. Bids must be accompanied by a certified check drawn to the order of H. O. Carhart, County Treasurer, for not less than ten percent (10%) of amount of the bid, provided that said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form will be furnished on application to Harry W. Vetter, County Engineer.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a statement of equipment properly filled out.

By order of a resolution of the Board of Chosen Freeholders of the County of Warren passed at a meeting held on June 28, 1922.

MORRIS S. FAUST, Clerk.

Bids: July 18.

Grading, Paving, Draining, etc.

Westwood, N. J.

Sealed proposals will be received by the Mayor and Council of the Borough of Westwood, at the Borough Hall on Centre Street, on Tuesday, July 18th, 1922, at 8:30 o'clock p.m. (Daylight Saving Time), for the Grading, Paving Draining and Curbing of Third Avenue, from Mill Street to Washington Avenue.

Specifications may be seen and forms of proposals obtained at the office of Watson G. Clark, Consulting Engineer, Hillside Avenue, Tenafly, N. J., upon a deposit of Ten Dollars ($10.00) which amount will be refunded upon return of them in good condition.

All proposals shall be addressed to D. Van Emburgh, Borough Clerk, and placed in a sealed envelope and endorsed "Proposal for the Improvement of Third Avenue."

All proposals must be accompanied by a certified check in the amount of Two Thousand Dollars ($2,000.00) payable to the order of the Borough of Westwood, or cash, which sum shall be forfeited if the Contractor shall fail to execute a contract with the Borough within ten (10) days after the same shall be awarded to him.

The right to reject any or all bids for any cause whatsoever is hereby reserved.

D. VAN EMBURGH,
Borough Clerk.

OFFICIAL PROPOSALS

Bids: July 14.

Curb, Gutters and Sewers

Ann Arbor, Mich.

Sealed proposals will be received by the Board of Public Works, Ann Arbor, Michigan, through the City Clerk, on or before 7:30 p.m., Eastern Standard Time, July 14, 1922, for the construction of çoncrete curb and gutter in curb and gutter Districts Nos. 24 to 49 inclusive, also for the construction of lateral sewer in Lateral Sewer District No. 112 and for a storm sewer on Brooks St., from Pearl St. to Miller Ave. Approximate quantities are as follows:

53,200 lin.ft. combined curb and gutter.
680 lin.ft. 10 in. vitrified pipe.
1,200 lin.ft. 12 in. vitrified pipe.
1,240 lin.ft. 15 in. vitrified pipe.
250 lin.ft. 18 in. vitrified pipe.
480 lin.ft. 22 in. vitrified pipe.
2,000 cu.yds. excavation and backfilling.

Plans and specifications are on file in the City Engineer's Office. A certified check for 5% of the bid must accompany each bid as guarantee of good faith of bidder and the Board of Public Works reserves the right to reject any and all bids.

ISAAC G. REYNOLDS.
City Cerk.

Largest Circulation of Any Technical Paper

Engineering News-Record's circulation—over 30,000 weekly—is the largest of any technical paper printed. It includes among its readers practically every contractor, dealer, and manufacturer in the country who is interested in bidding on public works contracts—either local or outside of his immediate vicinity.

Bids: July 19.

State Highway Work

Providence, R. I.

Sealed proposals for the reconstruction of a section of State Highway 2,450 feet in length, located upon the Riverside Drive, so-called, in the Town of Tiverton, will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 m. (Daylight Saving), 11 a.m. (Eastern Standard), on Wednesday, July 19, 1922, at which time they will be opened and read in public.

The principal quantities involved are as follows:

Earth Excavation, 250 cu.yds.
Clearing, scarifying, harrowing and reshaping, 3,700 sq.yds.
Laying culvert pipe (12 to 24 inch), 444 lin.ft.
Catch basins, 4 each.
Crushed stone, 1,100 tons.
Applying asphalt, 13,000 gals.

Bids must be made upon blank forms to be furnished by the Board.

No bids will be accepted unless accompanied by a certified check for the sum of $200.00 payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids, and to give preference to towns or cities, in accordance with Section V of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Wednesday, July 5th, 1922, every week day (except holidays and Saturdays), between the hours of 9 a.m. and 5 p.m., Saturdays 9 a.m. to 12 m.

State Board of Public Roads.
ABRAM L. ATWOOD,
BENJAMIN F. ROBINSON,
FRANK COLE,
J. HENRY WOODARD,
ALTON HEAD.

OFFICIAL PROPOSALS

Bids: July 18

Concrete Flood Gate and Appurtenances

Little Rock, Ark.

Sealed proposals will be received by the Secretary of the Farelly Lake Levee District at the Marion Hotel, Little Rock, Ark., until 2 p.m., Tuesday, July 18, 1922, for the construction of a Concrete Flood Gate and Appurtenances at Big Bayou Meto, Gillett, Arkansas County, Ark. Following are the approximate quantities:

Excavation	50,000 cu.yd
Round foundation piles	24,000 lin.ft.
Steel sheet pile cut off walls	20,000 sq.ft.
Concrete	6,500 cu.yd
Reinforcing steel	200 tons
Gates and accessories	150 tons
Hand rail, 2-in. GI pipe and fittings	1,500 lin.ft.
Hand rail, 1½-in. GI pipe and fittings	1,000 lin.ft
Hoisting apparatus	30 tons

Detail plans, specifications and blank forms of proposal are on file at the office of A. W. Dobyns, Attorney, Little Rock, Ark., and at the office of Ayres & Miller, McCall Building, Memphis, Tenn.

Detail plans, specifications and proposal forms will be furnished upon application accompanied by a certified check for twenty ($20) dollars.

Each proposal shall be accompanied by a certified check for fifteen thousand ($15,000) dollars made payable to the Secretary of the Board.

This check is to be conditioned that, if the bid is accepted, a contract will be entered into and the performance of same secured within ten (10) days after notification of acceptance of bid. Successful bidder will be required to furnish a surety bond in an acceptable surety company in the sum of fifty (50%) per cent of the contract price.

The right is reserved to reject any or all bids and to waive any technical defects, as the interests of the district may require.

The Engineers, or their assistants, will be at Gillett, Ark., from July 10 to July 15 to show prospective bidders over the work.

JOHN M. GRACIE, Chairman
Board of Commissioners.
J. B. QUINN, Secretary,
Gillett, Arkansas.
AYRES & MILLER, Engineers,
McCall Building, Memphis, Tennessee.

Bids: Aug. 1.

Sanitary Sewer and Septic Tanks

Lake Worth, Fla.

Sealed proposals for the following contracts will be received by the Town Commissioners of Lake Worth, Florida, at the office of the Town Clerk until 10 o'clock a.m., August 1, 1922, for furnishing all materials, equipment and labor for the construction of a sanitary sewer system and septic tank, complete as per plans and specifications adopted by them.

The contracts will be divided as follows:

DISTRICT No. 1. Approximately 22,613 feet of 8-in. vitrified tile sewer, 1,620 feet of 10-in. vitrified tile sewer, 1,656 feet of 15-in. vitrified tile sewer, 370 feet of 14-in. cast-iron outfall and a reinforced concrete septic tank, all of the above to be complete with manholes and appurtenances.

DISTRICT No. 2. Approximately 19,297 feet of 8-in. vitrified tile sewer, 3,482 feet of 12-in. vitrified tile sewer, 250 feet of 14-in. cast-iron outfall and a reinforced concrete septic tank, all of the above to be complete with manholes and appurtenances.

Bids must be made out on blanks furnished by the City Engineer and must be accompanied by a certified check for $1,000 for each contract.

Plans, specifications and other necessary data may be obtained from the Town Clerk upon deposit of $10.00, of which the sum of $5.00 will be refunded upon return of the plans and specifications in good condition.

The bidder to whom the contracts are awarded must furnish surety bond in the sum of 25 per cent of the amount of the bid.

The Commissioners reserve the right to reject any and all bids.

J. L. BOSLEY.
City Clerk.

WARD RANDOLPH,
City Engineer.

OFFICIAL PROPOSALS

Bids: Aug. 2.

Water Filtration Plant

Oklahoma City, Okla.

Sealed bids will be received by C. F. Semmelbeck, City Clerk of the city of Oklahoma City, Okla., up to 12 o'clock m., Wednesday, August 2, 1922, and a duplicate of each bid must be filed with the City Auditor of said city, and will be opened and considered by the Board of Commissioners in the Commissioners' Chamber in the City Hall Building at 2 o'clock p.m., Wednesday, August 2, 1922, for the furnishing of all materials and labor for the construction of Aerator, Mixing Chamber, two (2) Clear Water Reservoirs, Head House, and eight (8) Two Million Gallon Filter Units complete with all equipment and appurtenances necessary to complete the water purification plant.

All the necessary work and materials used shall be in accordance with the plans and specifications now on file in the office of the City Clerk.

Each bidder shall accompany his bid by a sworn statement in writing that the bidder has not directly or indirectly made any agreement, expressed or implied, with any other bidder or bidders having for its object the controlling of the price or amount of such bid or bids, the limiting of the bidder or bidders, the parceling or farming out to any bidder or bidders, or other persons of any part of the contract or any part of the subject matter of the bid or of the profits thereof; and has no knowledge of the amount, kind or character of any bid to be made by any other person, firm or corporation, except those submitted and filed by him.

The bid or bids filed with the City Clerk must be accompanied by a certified check on any national bank, or any Oklahoma City bank in the sum of three (3%) per cent of the amount of the bid.

It being further understood that the amount of damages which the city would suffer would be impracticable to determine and extremely difficult to fix, in case the successful bidder should fail to enter into a contract and give the required bonds within the required time. It is therefore understood that by the filing of a bid or bids it will be considered as agreed that the amount of damages which the city would suffer by reason of such failure on the part of such successful bidder is the amount represented by the checks so filed by the successful bidder and that the city shall have authority to appropriate such checks for its own use in payment for such damages.

Each bidder shall agree to enter into contract within ten (10) days after the acceptance of his bid, also to commence work within twenty (20) days after signing the contract.

The contractor will be required to give bond in the sum of twenty (20%) per cent of the contract price for faithful performance of said work, and all other bonds that are required by the laws of the State of Oklahoma or the ordinances of the said city, and to give a bond to hold the city harmless from any and all damages for which the city might be liable under the law, and which might occur by reason of any act upon the part of said contractor or any of his employees.

A deposit of twenty-five ($25.00) dollars will be required for each set of plans and specifications.

The Board of Commissioners reserves the right to reject any or all bids.

C. F. SEMMELBECK,
City Clerk.
A. S. HOLWAY,
Engineer Water Department.

Bids: July 24.

Road Work

Columbia, Mo.

SEALED PROPOSALS will be received by the undersigned City Clerk of Columbia, Boone County, Missouri, until four o'clock P.M., the twenty-fourth day of July, 1922, for repairing, surfacing and resurfacing with Tarvia preparations, about 37,000 square yards of streets in Districts two, four, six and seven, in accordance with the plans and specifications on file with the city clerk, the work to be paid for in special tax bills.

JOHN S. BICKNELL,
City Clerk.

OFFICIAL PROPOSALS

Bids: Aug. 4.

Concrete Highway and Appurtenances

Hallstead, Pa.

Sealed proposals will be received by the Council of the Borough of Hallstead, County of Susquehanna, State of Pennsylvania, on August 4th, 1922, until 8 o'clock p.m., at their office at Municipal Building, at which time and place proposals will be opened and read for the construction of concrete highway and appurtenances on Franklin Street, Pine Street, Susquehanna Avenue, and Main Street.

Proposals must be on forms provided and must be accompanied by a certified check for 5 per cent of the total amount bid.

Proposal forms, specifications, maps and other information may be obtained at the office of the Secretary of the Borough of Hallstead, Pa., or at the office of Hoadley & Giles, Civil Engineers, 415 Phelps Bldg., Binghamton, N. Y.

A deposit of ten dollars will be required for each set of plans and specifications, which will be refunded upon return of plans and specifications.

The Borough Council reserves the right to reject any or all bids.

F. C. BROWN,
President, Hallstead
Borough Council.
W. J. KIRBY,
Secretary.

National Publicity Offers a Two-Fold Advantage

Giving calls for bids National publicity opens the way for additional and possibly lower offers from outside bidders to whom work can be let, if desired.

Then too, local contractors, seeing your contracts advertised Nationally will figure closer, realizing that the field of competitors for the work is greatly enlarged.

An advertisement printed in the Official Proposal Columns of *Engineering News-Record* brings the contract to the attention of not only local bidders but, in addition, any others who might be interested.

Bids: July 18.

Paving

Miami, Fla.

Sealed proposals will be received by "The Commission of the City of Miami, Florida," at the City Hall in Miami, Florida, until 11 a.m., at the regular meeting of the Commission, Tuesday, July 18th, 1922, for the construction of Bituminous Macadam Pavement.

The work will consist of: 170,819 square yards of bituminous macadam paving, and will be divided into 8 contracts. The bidder can bid on any or all of these contracts.

The improvements are to be constructed and payment therefor is to be made under Section 56 of the City Charter.

All bids must be upon blank forms provided in the proposal, specifications and contract.

Each bid must be accompanied by a certified check for 2½ per cent of the amount of the bid to insure the execution of the contract as provided by Section 56 of the City Charter.

The City reserves the right to reject any or all bids.

Plans and specifications will be on file at the City Hall in the office of the City Manager.

Copies of proposals, specifications and contract can be obtained from the office of Chas. W. Murray, Director of Public Service, on deposit of $10.00, which will be refunded to those who submit bona fide bids.

F. H. WHARTON,
City Manager.

OFFICIAL PROPOSALS

Bids: July 26.

Sewer Construction

Letting No. 3.

Louisville, Ky.

Sealed proposals will be received by the Commissioners of Sewerage of Louisville until 12 o'clock noon, July 26, 1922, for the construction of the Bardstown Road District Trunk sewer and drain, Section A, according to drawings and specifications now on file in the office of the Commission.

Approximate quantities are as follows:

One inverted siphon under Beargrass Creek 210 ft. in length including 8-in., 12-in., and 16-in. cast iron pipe and three concrete chambers.

The Sewer—342 lin.ft. 24-in., 485 lin.ft. 21-in., 1,650 lin.ft. 18-in., 174 lin.ft. 8-in.

The Drain—174 lin.ft. 24-in., 300 lin.ft.—5 ft. 1 in. by 9 ft. 1 in. semi-circular.

877 lin.ft. 75-in. semi-elliptical concrete or 78-in. circular segment block.

1,012 lin.ft. 87-in. semi-elliptical concrete or 90-in. circular segment block.

Proposals are invited for alternate types for the last two items included under the quantities for the drain.

Drawings, form of proposal, contract and specifications may be obtained from the office of the Commission upon the deposit of Ten Dollars ($10.00) to secure the return of same in good condition before August 10, 1922.

Each proposal must be inclosed in a sealed envelope addressed to the Commissioners of Sewerage, 417 West Main Street, Louisville, Ky., and accompanied by a certified check drawn upon a State or National Bank or a trust company established in the city of Louisville (or the city of New York, for an amount not less than seven (7) per cent of the total amount of the accompanying proposal payable to the Commissioners of Sewerage of Louisville or the bond executed as set forth in the information for bidders.

The Commission reserves the right to reject any or all proposals.

COMMISSIONERS OF SEWERAGE
OF LOUISVILLE.
By GEORGE T. WOOD,
Chairman.
P. H. HOGE, JR.,
Sect. & Treas.
J. B. F. BREED,
Chief Engineer.

Bids: July 21.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m., advanced standard time which is twelve o'clock noon eastern standard time, on Friday, the 21st day of July, 1922, for the improvement of the following in Cattaraugus County.

Highway No. 8018-A. Bradford-Carrollton, Part 2 (Carrollton Bridge). The work to be done under this contract includes seven spans of steel trusses weighing approximately 1,150,000 lbs. with six concrete piers and two abutments. The approximate length of steel structure is 895 feet and the roadway is 20 feet in width, surfaced with wood block on a reinforced concrete floor. Also for the improvement of the following highways:

Allegany......	(two highways: 2.77 & 8.35)
Fulton...............	(one highway: 4.23)
Oneida................	(one highway: 2.75)
St. Lawrence..........	(one highway: 7.73)
Steuben..............	(one highway: 1.01)
Wayne...............	(one highway: 1.65)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.
J. C. FINCH,
Secretary.

OFFICIAL PROPOSALS

Bids: Aug. 7.

Watermain Extension

Mitchell, S. D.

Sealed bids will be received at the Office of the City Auditor, Mitchell, South Dakota, up to eight (8:00)o'clock p.m. of Monday, the 7th day of August, 1922, for furnishing material and labor and constructing complete the watermain extensions proposed, in accordance with the plans and specifications on file at the Office of the City Auditor. Separate bids will be entertained as follows:

SECTION NO. 1. For furnishing all material, labor, equipment, etc., and constructing complete the proposed watermain extensions together with all accessories.

SECTION NO. 2. For furnishing the cast iron pipe and special castings listed on proposal blank No. 2. All prices to be f.o.b. Mitchell, South Dakota, freight and any tax included.

SECTION NO. 3. For furnishing all labor and materials, (except cast iron pipe and special castings) tools, equipment, etc. necessary for the construction complete of all watermain extensions and accessories.

"SECTIONS 2" and "3" are optional with "SECTION 1."

All the above material and work must be in accordance with the plans and specification on file at the Office of the City Auditor, Mitchell, South Dakota.

The above material and work is to be paid for in cash.

Any prospective bidder desiring a copy of the specifications may obtain the same from the City Auditor by making a deposit of $5.00, which amount will be refunded on the return of said specifications within five days following the date of receiving bids.

Each bid must be accompanied by a certified check (or draft) in the sum of not less than five per cent (5%) of the total amount of the bids. This check (or draft) must be drawn upon an incorporated Trust Company or Bank and made payable to the City Treasurer, Mitchell, South Dakota, and shall be forfeited and become the property of the City in cae the bidder neglects or refuses to enter into a contract and to furnish bond (of full amount of contract) within ten (10) days after the date when his proposal shall have been accepted by the City. All other checks will be returned upon demand after the contract has been awarded.

The City reserves the right to reject any and all bids.

E. V. BOBB, Mayor.
FRANK McGOVERN,
City Auditor.
FRED J. HENSON,
City Engineer.

Bids: July 18.

Sewer

Miami, Fla.

Sealed proposals will be received by "The Commission of the City of Miami, Florida," at the City Hall in Miami, Florida, until 11 a.m. at the regular meeting of the Commission, Tuesday, July 18th, 1922, for the construction of Sanitary Sewers.

The work will consist of: Furnishing and laying approximately

65,000 feet 8" pipe.
4,000 feet 10" pipe.
3,000 feet 12" pipe.
1,500 feet 15" pipe.
with necessary manholes and flush tanks.

and will be divided into 3 contracts. The bidder can bid on any or all of these contracts.

The improvements are to be constructed and payment therefor is to be made under Section 56 of the City Charter.

All bids must be upon blank forms provided in the proposal, specifications and contract.

Each bid must be accompanied by a certified check for 2½% of the amount of the bid to insure the execution of the contract as provided by Section 56 of the City Charter.

The City reserves the right to reject any or all bids.

Plans and specifications will be on file at the City Hall in the office of the City Manager.

Copies of proposals, specifications and contract can be obtained from the office of Chas. W. Murray, Director of Public Service, on deposit of $10.00, which will be refunded to those who submit bona fide bids.

F. H. WHARTON,
City Manager.

OFFICIAL PROPOSALS

Bids: July 17.

Curbing and Paving

Leechburg, Pa.

The Council of Leechburg Borough will receive bids for grading, curbing and paving Linden Avenue and portions of First Street, Center Avenue and Floral Avenue in the Borough of Leechburg, Pa.

Approximate amount of work to be done:

8000 lin.ft. of Curbing
3000 cu.yd. of Grading
200 cu.yd. of Filling
11000 sq.yd. of Paving

Bids will be taken for reinforced concrete curbing; also for Cleveland sand stone curbing, for reinforced concrete paving; also for Trinidad asphalt paving; also for a couple of short sections of Hillside brick.

Specifications can be secured from Borough Engineer C. A. Ehrenfeld, or from John A. Hill, Borough Secretary, Leechburg, Pa.

A certified check in amount of $500.00 must accompany each bid as a guarantee, that if awarded contract, bidder will file bond, to properly execute the work. The right to reject any or all bids is reserved.

Bids must be in hands of Borough Secretary on or before 8.00 p.m., Monday, July 17, 1922, at which time bids will be opened.

THIS ADVERTISING COSTS LITTLE

The cost of giving contracts NATIONAL publicity through the Official Proposal Columns of *Engineering News-Record* is only 40 cents a line an insertion. Figured on a circulation basis, the cost per line per thousand readers (1 1/3 cents) is extremely small, compared with the cost of other forms of publicity and the possibility of large waste distribution through publications of limited or general circulations. A single lower bid may save the cost of the advertising many times over.

Bids: Aug. 15.

Inlet Construction

Ft. Lauderdale, Fla.

Notice is hereby given that the Board of County Commissioners, Broward County, Florida, will receive bids until 11.00 A.M., on Tuesday, August 15, 1922, for the construction of an inlet from New River Sound to the Atlantic Ocean, near Ft. Lauderdale, as per plans and specifications on file in the Clerk's Office, Courthouse Bldg., Ft. Lauderdale, Fla.

Such work shall be let in two contracts, being as follows:

(a) The dredging of 81,000 cubic yards more or less of earth; and the dredging of 5,000 cubic yards more or less of rock;

(b) The furnishing and placing of 6,200 cubic yards more or less of riprap and jetty hearting and of 2,500 tons more or less of jetty capping, all in riprap and jetty construction.

Separate bids will be received and separate contracts let for each of the two classes of work mentioned. Copy of plans and specifications may be secured from the Clerk upon payment of $1.00 to cover cost of printing the same.

Each bid shall be accompanied by a certified check in the amount of 3% of the bid, guaranteeing that the bidder will make contract and bond within ten days of notice of award.

Bond on each contract will be required in the sum of 50% of the amount bid.

Address all bids to the Board of County Commissioners, in care of Frank A. Bryan, Clerk, Ft. Lauderdale, Fla.

The Board reserves the right to reject any and all bids.

By order of the Board.

H. G. WHEELER,
Chairman.

Attest:—
Frank A. Bryan, Clerk.
Geo. B. Hills Company, Engineers,
Jacksonville, Florida.
Dated July 10, 1922.

OFFICIAL PROPOSALS

Bids: Aug. 4.

Road Work

Roswell, New Mexico.

Sealed proposals will be received at the office of the City Clerk of the City of Roswell, New Mexico, until 4.00 o'clock p.m., on Friday, August 4th, 1922, for paving, curbs, gutters, grading and all necessary incidental appurtenances thereto on the following named streets, street intersections and alley in accordance with the Provisional Order of the City Council of the City of Roswell, dated May 9th, 1922:

1. Main Street, from the north line of Walnut Street to the north line of Tilden Street, and from the north line of Fifth Street to the north line of Seventh Street.
2. Virginia Avenue, from the north line of First Street to the south line of Second Street; from the north line of Second Street to the south line of Third Street; from the north line of Third Street to the south line of Fourth Street; from the north line of Fourth Street to the south line of Fifth Street, and from the north line of Fifth Street to the south line of Sixth Street.
3. Richardson Avenue, from the north line of First Street to the north line of Albuquerque Street, and from the north line of Seventh Street to the south line of Ninth Street.
4. Pennsylvania Avenue, from the north line of Walnut Street to the south line of Seventh Street, and from the north line of Seventh Street to the south line of Eighth Street.
5. Lea Avenue, from the north line of Second Street to the south line of Seventh Street.
6. First Street, from the west line of Main Street to the east line of Richardson Avenue.
7. Second Street, from the west line of Pennsylvania Avenue to the east line of Kentucky Avenue, and from the west line of Kentucky Avenue to the east line of Michigan Avenue.
8. Fourth Street, from the west line of Pennsylvania Avenue to the east line of Kentucky Avenue, and from the west line of Kentucky Avenue to the east line of Lea Avenue.
9. The Alley between Main Street and Virginia Avenue; from the south line of Fourth Street to the north line of Third Street; from the south line of Third Street to the north line of Second Street; from the south line of Second Street to the north line of First Street.

Bids will be received on Warrens Bitulithic pavement with concrete base, asphaltic concrete base, and plain concrete and asphaltic concrete (Topeka Mix) pavements.

The following is an estimate of the work to be done as compiled by the City Engineer:

56,000.00 sq.yd. street paving.
20,000.00 lin.ft. 6-in. curb combined with 24-in. gutter.
8,000.00 lin.ft. 10-in. curb combined with 24-in. gutter.
500.00 lin.ft. double gutter 48 in. wide.
3,900.00 lin.ft. straight curb.
12,758.00 sq.ft. new cement walk.
2,867.05 sq.yds. plain concrete 6 in. for alley.
24 street monuments.
10 manhole covers, adjusted.
60 cu.yds. extra concrete for headers.
15,000.00 cu.yds. earthwork included in the cost per sq.yd. pavement .

Two hundred weather working days will be allowed to complete the whole of this work; the city reserves the right to accept or reject any and all bids; plans and specifications may be seen at the office of the City Engineer, at the City Hall.

Each bidder will be required to deposit with the City Clerk to the credit of the City of Roswell, without indorsement, a certified check of deposit in the sum of Five Thousand Dollars ($5,000.00) as a guarantee that he will file all bonds required and enter into contract, if awarded to him, according to the terms of his bid, within ten days after the certification of the award. Should the contractor fail to file bonds in an approved surety company or enter into a contract with the City of Roswell, then the certified check shall become forfeited as liquidated damages and the money realized therefrom shall be turned into the treasury of the City of Roswell.

WILLIS FORD, Mayor.
J. A. GILMORE, City Clerk.
LEA ROWLAND, City Engineer.

OFFICIAL PROPOSALS

Bids: July 25.

Eight Sections of Road Work

Baltimore, Md.

SEALED PROPOSALS for building eight sections of State Highway, as follows:

ANNE ARUNDEL CO., Contract AA-24—One section of State Highway along the New Cut Road from end of Contract 293 to Pumphrey, a distance of 1.3 miles (concrete).

ALLEGANY CO., Contract A-23—One section of State Highway along the Old National Pike from Cumberland toward Allegany Grove for a distance of 1.2 miles (macadam resurfacing).

ALLEGANY CO., Contract A-24—One section of State Highway from Frostburg to the Swimming Pool, a distance of 9.26 mile (concrete).

HOWARD CO., Contract HO-16—One section of State Highway from Clarksville toward Dayton, a distance of 1.5 miles (concrete).

MONTGOMERY CO., Contract M-33—One section of State Highway from Lelands Corner to Campbells Corner, a distance of 1.5 miles (concrete).

BALTIMORE CITY, Contract BC-40—One section of State Highway along 25th Street, between the York Road and the Harford Road, a distance of 0.75 mile (sheet asphalt).

BALTIMORE CO., Contract B-46—One section of State Highway along the Philadelphia Road from Golden Ring, toward the Harford Co. Line for a distance of 3.7 miles (alternate bids—sheet asphalt and concrete).

QUEEN ANNES CO., Contract Q-24—One section of State Highway from and of Contract Q-16 at Winchester to Kings' Store, a distance of 1.8 miles (concrete).

Will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 m. on the 25th day of July, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five hundred ($500.00) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 6th day of July, 1922.

JOHN N. MACKALL,
Chairman.
L. H. STEUART,
Secretary.

Bids: July 25.

Sanitary Sewers

Gloversville, N. Y.

Sealed Proposals will be received by the Common Council of the City of Gloversville, N. Y., until 5 o'clock P.M., July 25, 1922, for furnishing all material and labor required for the construction of sanitary sewers of the following approximate quantities:

Inside Diameter	Lineal Feet
15 in.	890
12 in.	1640
10 in.	1330
8 in.	420
4 in.	1300

17 Manholes.

Each proposal will be accompanied by a deposit, of cash or certified check, in the amount of $1,100.00. Bond $11,000.00. The Common Council reserves the right to reject any and all bids.

H. J. HANMER,
City Engineer.

OFFICIAL PROPOSALS

Bids: July 31.

Paving

Washington, Pa.

Sealed proposals will be received by the Town Council of the Borough of Washington, Penna., at the Council Chamber until 7:30 p.m., July 31st, 1922, for the construction of about eighteen thousand (18,000 square yards of brick pavement (brick furnished by the borough) and for the resurfacing of about five thousand (5,000) square yards with bituminous pavement.

Each bid must be accompanied by a certified check in the amount of five per cent (5 per cent) of the contract price.

Plans and specifications may be obtained at the office of the Borough Engineer, and the right is reserved to reject any or all bids.

J. F. CURRAN,
President of Council.
JOHN GRIFFITHS,
Secretary of Council.

Make Plans Accessible to Distant Bidders

Plans and specifications for inspection by distant bidders may be filed at any of *Engineering News-Record* offices (without charge). Or a sufficient supply may be deposited at such of our offices as seem desirable, subject to your usual requirements in the matter of deposits, etc. (We assume full responsibility for return of plans or deposits). Therefore, Contractors in all parts of the country can bid with equal convenience on contracts advertised in *Engineering News-Record.*

Bids: July 31.

Paving Brick

Washington, Pa.

Sealed proposals will be received by the Town Council of the Borough of Washington, Penna., at the Council Chamber until 7:30 p.m., July 31st, 1922, for the furnishing of about seven hundred thousand (700,000) paving brick f.o.b. Washington, Pa.

Each bid must be accompanied by a certified check in the amount of five per cent (5 per cent) of the contract price.

Plans and specifications may be obtained at the office of the Borough Engineer, and the right is reserved to reject any or all bids.

J. F. CURRAN,
President of Council.
JOHN GRIFFITHS,
Secretary of Council.

OFFICIAL PROPOSALS

Bids: July 26.

Bridges and Road Work

Dover, Del.

Sealed proposals will be received by the State Highway Department, at its office, Dover, Delaware, until 2 o'clock p.m., July 26, 1922, and at that place and time publicly opened, for the construction of State Highway, involving the following approximate quantities:

CONTRACT 25-A

Smyrna Bridges

250	cu.yd. Excavation
2000	cu.yd. Borrow
570	cu.yd. Class A Concrete
150	cu.yd. Class B Concrete
49600	lb. Steel Reinforcement
2300	lin.ft. Concrete Piles
3500	ft. B. M. Sheeting
120	lin.ft. Test Piles

CONTRACT CN-5—1.45 Miles

Limestone Road

10800	cu.yd. Excavation
6000	cu.yd. Borrow
800	cu.yd. Rock Excavation
160	tons Broken Stone Base Course
2800	cu.yd. Cement Concrete Pavement
320	cu.yd. Class A Concrete
120	cu.yd. Class B Concrete
80	cu.yd. Cement Rubble Masonry
20300	lb. Reinforcement
220	lin.ft. 15-in. R. C. Pipe
100	lin.ft. 18-in. R. C. Pipe
28	lin.ft. 24-in. R. C. Pipe
54	lin.ft. 42-in. R. C. Pipe
180	lin.ft. Relaid Pipe, 18-in. and under
800	lin.ft. 4-in. Pipe Underdrain
1700	sq.yd. Class A Concrete Gutter
1000	lin.ft. Wire Cable Guard Rail

Performance of contract shall commence within ten (10) days after execution of the contract and be completed on or before December 15, 1922.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked "Proposal for the Construction of State Highway under Contract No. 25-A."

The Contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen and index plans and specifications may be obtained upon deposit of ten dollars ($10.00) which amount will be refunded upon return of plans and specifications in good condition at the Office of

STATE HIGHWAY DEPARTMENT.
Dover, Delaware.

Plant Equipment Not Your Whole Problem

¶You are quick to recognize the value of the most improved and efficient apparatus in your plant equipment. ¶You cretainly would not consider replacing your motor truck equipment with horses nor your steam shovel or cable-way with less efficient methods. ¶And yet, important as these things are, they are not your whole problem. ¶There have been important developments in the methods of handling Contract Bonds and Compensation insurance that are equally vital to you. ¶Swart has scientifically developed this service to the point where, judging it with the ordinary sort the result is a Contrast rather than a Comparison. ¶It will cost you nothing to find out more about it whereas the cost of not knowing may be greater than you would care to reckon.

HARMON V. SWART
Contract Bonds *Compensation Insurance*
92 William Street, New York

THE CITY OF HAPPINESS IS IN THE STATE OF MIND

CONTRACT BONDS FOR RESPONSIBLE CONTRACTORS

Ætna bond agents develop a superiority in service to clients as a logical result of their connection with one of the leading companies in the field.

ÆTNA CASUALTY AND SURETY COMPANY

HARTFORD, CONN. AGENTS EVERYWHERE

OFFICIAL PROPOSALS

Bids: July 26.

Concrete Paving

Westfield, Mass.

Sealed proposals for paving Franklin Street, Westfield, Mass., with reinforced concrete, will be received by the Board of Public Works at their office, City Hall, Westfield, Mass., until 2 P.M., July 26th, 1922, and at that place and time will be publicly opened and read.

Length of pavement about 4,400 ft., width 20 ft., thickness 7 in. Bituminous macadam shoulders.

Plans may be seen and forms of specification and contract may be obtained at the office of the Superintendent of the Board of Public Works, City Hall, Westfield, Mass.

The right is reserved to reject any and all proposals, or to accept the proposal deemed best for the City of Westfield.

CHESTER H. ABBE,
JOHN O. McKEAN,
PETER JENSEN,
Board of Public Works.
OREN E. PARKS,
Superintendent.

Bids: July 24.

Concrete Box Sewer

Annville, Penna.

Sealed bids will be received by the Board of Commissioners of Annville Township, Lebanon County, Penna., until 8:00 o'clock p.m., July 24th, 1922, at which time they will be publicly opened at the Town Hall, for the construction of a reinforced concrete Box Sewer, approximately six hundred and seventy-five feet in length, and three and one-half feet, by three and three-fourths feet, inside dimensions.

Plans and specifications may be obtained from the Township Clerk.

Each proposal must be accompanied by a certified check, in the amount of Two Hundred Dollars ($200.00) made payable to the Township Treasurer.

All bids must be made upon blanks furnished by the undersigned.

The right is reserved to reject any or all bids.

By order of the Board of Commissioners.

D. M. RANK,
President.
JOHN G. NYE,
Township Clerk.

Bids: July 20.

Street Improvement

North Adams, Mass.

Sealed bids will be received by the Commissioner of Public Works, City Hall, North Adams, Mass., until 4 o'clock P.M., July 20, 1922, for the following improvements on State Street, consisting of about:

3,000 cubic yards of excavation.
7,000 square yards concrete roadway.
2,200 square yards concrete combination curb and sidewalk.
950 linear feet of granite curbing reset.

Each bid must be marked "Proposals for Street Improvement" and to be accompanied by a certified check for not less than 5 per cent of the price bid, payable to the Treasurer of the City of North Adams, Mass., as a guarantee that if the contract is awarded, it will be executed within ten days of notice of award.

Specifications may be had at the office of the Commissioner.

The right is reserved to reject any or all bids.

JACKSON L. TEMPLE.
Commissioner of Public Works.

Bids: Aug. 1.

Street Paving

Oil City, Pa.

Sealed proposals will be received at the office of the City Controller of Oil City, Penna., up to 4:00 P.M., Tuesday, August 1, 1922, for resurfacing various streets, amounting to about 41,000 square yards of asphaltic resurfacing; also for grading and paving two alleys, amounting to 3,700 square yards of reinforced concrete, brick or asphalt. Each bid for the resurfacing contract must be accompanied by a certified check for $5,000.00, the required check for the two alley contracts being $300.00 each.

Specifications and proposal blanks may be obtained from the undersigned.

The City reserves the right to reject any or all bids.

B. B. WEBER,
City Engineer.

OFFICIAL PROPOSALS

Bids: July 25.

Highway Work

Raleigh, N. C.

Sealed bids for the construction of the following projects will be received by the North Carolina State Highway Commission at Raleigh, N. C., until 10 A.M., on the 25th day of July, 1922, when they will be opened and read:

Hard surface (Concrete or Asphaltic Paving projects), including grading, reinforced concrete or cast iron pipe, structures, etc.

Project No.	County.	Length (miles)
173	Pasquotank	7.22
183-A	Pitt	13.54
236	Johnston	14.83
342	Cumberland	5.91
484	Wake	8.79
494	Warren	6.21
535	Guilford	7.78
713	Ashe	3.53
764	Surry	1.63

Topsoil, Sand Clay, or Gravel projects, including grading, drainage pipe, structures, etc.

131	Gates	13.50
132	Gates	9.73
569	Moore	18.97
814	Burke	8.69
952	Jackson	
963	Macon	8.68

MACADAM PROJECTS

Penetration or waterbound Macadam Projects, including drainage pipe, structures, etc.

602	Alexander	9.28
640	Iredell	8.17
702-A	Alleghany	7.75
888	Yancey	15.22

BRIDGE PROJECT

694	Union	5.40 ft.

rein.-con. through girders.

Specifications, proposals, forms, etc., may be obtained from the State Highway Commission at Raleigh, N. C.

Plans may be seen in the Raleigh office, or in the offices of the District Engineer.

Bridge plans may be obtained from the State Highway Commission at Raleigh, N. C., upon payment of five ($5.00) dollars per set.

The right is reserved to reject any or all bids.

By order of the North Carolina State Highway Commission.

Bids: July 31.

Tenders for Incinerator

Chatham, Canada.

Sealed Bids will be received by the undersigned up to 4 p.m., Monday, July 31st, for the construction of a mixed garbage and refuse incinerator for the City of Chatham, Ontario.

Each bid must be accompanied by a satisfactory bidder's bond for 5% of the bid price.

A deposit of Five dollars is required to obtain plans and specifications. Further information will be supplied at the office of the City Engineer and Manager, Chatham, Ont.

The City reserves the right to reject any or all bids.

C. H. R. FULLER,
City Engineer and Manager.

Bids: July 24.

Grading, Curbing, etc.

Columbia, Mo.

SEALED PROPOSALS will be received by the undersigned City Clerk of the City of Columbia, Boone County, Missouri, until four o'clock p.m., the 24th day of July, 1922, for the grading, curbing and guttering and paving with Kentucky Rock Asphalt of five streets in said city, according to the plans and specifications on file with the undersigned. Approximately 5,700 lin.ft. curb and gutter, 10,500 sq.yd. of paving. For further information address

JOHN S. BICKNELL, City Clerk.

WANTED—TO SUBLET

40,000 square yards of Waterbound Macadam. State Highway work—Western North Carolina. Equipment installed and operating. May be bought or sold to responsible parties only.

**W-653 Engineering News-Record
509 Real Estate Trust Bldg., Phila.**

OFFICIAL PROPOSALS

Bids: July 26.

Concrete Wharf and Transit Shed Foundation

Tampa, Fla.

Sealed bids will be received by the City Commission of the City of Tampa until twelve o'clock noon on the 26th day of July, 1922, for furnishing all materials, labor and equipment necessary to construct a reinforced concrete wharf and transit shed foundation at the municipal slip on the Estuary in the City of Tampa, according to the plans and specifications on file in the office of the City Manager, copies of which may be obtained upon application, for the sum of Ten Dollars ($10.00), payable in advance.

Each bid must be accompanied with a certified check for five percent (5%) of the amount of the bid, payable to the City Clerk of the City of Tampa, to be retained by the City Commission until the contract is awarded and acceptable bonds filed, at which time checks will be returned to the unsuccessful bidders.

The right to reject any or all bids within forty-five (45) days from the date herein specified is reserved by the Commission.

Bidders are requested to examine the location before submitting bids.

Following are the estimated approximate quantities:

(a) Wood sheet pile bulkhead, length 2,288 lineal feet.
(b) Wood piles for retaining wall and pedestal foundation. Number of piles 879.
(c) Lumber for bulkhead caps, wales and flooring. Number of feet B. M. 102,614.
(d) Concrete for bulkhead, retaining wall and foundation pedestals. Number of cubic yards 2,186.
(e) Concrete platform piles. Lineal feet 19,526.
(f) Straight concrete plaform, thirty (30) feet wide, with railroad track. Number of lineal feet 1,476.
(g) Straight concrete platform, thirty (30) feet wide, without railroad tracks. Number of lineal feet 695.
(h) All concrete platform other than straight work. Number of square feet of platform 3,848.
(i) Rock fill. Number of cubic yards 15,000.
(j) Earth fill. Number of cubic yards 40,000.
(k) Sewer outlet 36 in. cast iron pipe. Number of lineal feet 84.

R. D. MARTIN, City Engineer.
A. W. D. HALL, City Manager.
SIGNED: C. H. BROWN,
Mayor-Commissioner.
ATTEST: WM. E. DUNCAN,
City Clerk.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, P. O. Box 72, Louisville, Ky. Sealed proposals will be received here until 2 p.m., Central Time, July 18, 1922, and then opened for furnishing and delivering steel sheet piling for Dam No. 44, Ohio River. Further information on application.

PROPOSALS FOR STEEL HULL.—U. S. Engineer Office, Montgomery, Ala. Sealed proposals will be received here until 11 A. M., July 31, 1922, and then opened, for furnishing one steel hull for dipper dredge Upatoi. Further information on application.

U. S. ENGINEER OFFICE, Buffalo, N. Y. Sealed proposals will be received here until 11 a.m. (Eastern standard time), July 27, 1922, and then opened, for constructing rubble mound east breakwater extension at Fairport Harbor, O. Further infomation on application.

PROPOSALS FOR LEVEE WORK—Office, Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn.—Sealed proposals will be received here until 11 a.m., July 20, 1922, and then opened, for constructing about 690,000 cubic yards of earthwork in the White River Levee District. Further information on application.

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y. Sealed proposals will be received here until 12 m., August 7, 1922 (daylight saving time), and then opened, for dredging and rock removal in Bronx River, N. Y. Further information on application.

U. S. GOVERNMENT

PROPOSALS FOR ONE MARINE TYPE REFRIGERATING AND ICE MAKING PLANT.—Office, Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn.—Sealed proposals for furnishing and delivering one Marine Type Refrigerating and Ice Making Plant will be received at this office until 11 a.m., July 15, 1922, and then opened. Further information on application.

U. S. ENGINEER OFFICE, Pittsburgh, Pa. Sealed proposals will be received here until 12 noon (Eastern time) July 19, 1922, and then opened, for furnishing and delivering one steel derrick boat hull. Further information on application.

U. S. ENGINEER OFFICE, Buffalo, N. Y. Sealed proposals will be received here until 11 a.m. (Standard Time), July 17, 1922, and then opened, for constructing rubble mound extension of west breakwater, Ashtabula Harbor, O. Further information on application.

U. S. ENGINEER OFFICE, P. O. Box 72, Louisville, Ky. Sealed proposals will be received here until 2 p.m., Central Time, July 17, 1922, and then opened, for furnishing and delivering Metal Work for Navigable Pass for Dam No. 44, Ohio River. Further information on application.

DEPARTMENT OF THE INTERIOR, UNITED STATES RECLAMATION SERVICE, Washington, D. C., July 5, 1922.—SEALED PROPOSALS will be received at the office of the United States Reclamation Service, Denver, Colorado, until 2 o'clock p.m., August 18, 1922, and will at that hour be opened, for furnishing radial gates, radial gate hoists, geared hoists, operating machinery and other metal work, for the Riverton project, Wyoming. The material to be furnished will require approximately 170,000 pounds of metal work. For particulars address the United States Reclamation Service, Washington, D. C., Denver, Colorado, or Riverton, Wyoming. A. P. Davis, Director.

U. S. GOVERNMENT

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., July 5, 1922.—SEALED PROPOSALS will be opened in this office at 3 p.m., July 31, 1922, for the construction (exclusive of mechanical equipment) of an Additional Wing to the Main Hospital Building, of the United States Public Health Service Hospital at Tanner's Creek, Norfolk, Va., in accordance with drawings and specifications, which may be obtained from Neal A. Melick, Superintendent of Construction, at the Site of the Hospital, Norfolk, Va., or at this office, in the discretion of the Supervising Architect. Proposals will be considered only from individuals, firms, or corporations possessing satisfactory financial and technical ability, equipment and organization to insure speedy completion of the contract, and who have established a record for expedition on contracts of similar character and magnitude. The fact that any concern obtains a set of the plans and specifications from any source whatever and submits a bid, shall not constitute a waiver of the foregoing stipulations. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, 815 Witherspoon Bldg., Philadelphia, Pa. Bids are wanted until Aug. 7, 1922, for dredging in Delaware River in front of Camden, N. J. Further information on application.

U. S. ENGINEER OFFICE, 250 Old Land Office Building, Washington, D. C. Sealed proposals will be received here until 12 m., July 17, 1922, and then opened for the construction of item b, section No. 2 of Division No. 1: Division No. 2: and Division No. 3 of the water supply conduit for the District of Columbia. Further information on application.

PROPOSALS FOR WIRE MESH AND MACHINE BOLTS. — Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn.—Sealed proposals for furnishing and delivering wire mesh and machine bolts will be received at this office until 11 a.m., July 25, 1922, and then opened. Further information on application.

U. S. GOVERNMENT

SEALED PROPOSALS, INDORSED "PROPOSALS FOR DISTILLING PLANT, KEY WEST, FLA., Specification No. 4546," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., August 2, 1922, and then and there publicly opened, for an addition to power house, including foundations for all equipment; for laying approximately 800 lineal feet of 20-inch, cast iron, bell and spigot circulating water pipe; for the installation of six evaporators, two condensers, two distilled water and two dense sea water pumps, one drip trap, and certain fittings and valves to be furnished by the Government, and for furnishing and installing a traveling crane, two turbine-driven, centrifugal circulating pumps, a combined twin pump and receiver, three drip traps, oil separator, sluice gates, and strainers including operating mechanism in connection with the circulating water mains, all necessary accessories and complete piping systems for distilling plant equipment at the Naval Operating Base, (Naval Station) Key West, Fla. The distilling house will have concrete foundations, supported on concrete piles, concrete ground floor and equipment foundations, brick walls, asbestos shingle roof, steel roof trusses and steel sash, doors, platforms and stair. Drawings and Specification No. 4546 may be obtained on application to the Bureau or to the Commandant, Naval Operating Base, Key West, Fla. Deposit of a check or postal money order for $10, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the drawings and specification. L. E. GREGORY,
Chief of Bureau.

June 6, 1922.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., July 5, 1922—SEALED PROPOSALS will be opened in this office at 3 p.m., August 2, 1922, for clearing the site of the United States Post Office at Spanish Fork, Utah. Specifications may be obtained from the Custodian of the site at Spanish Fork, Utah, or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Engineering News-Record

(Circulation over 30,000 weekly)

prints more than twice as many announcements advertising contracts to be let than appear in any other one publication

Practically every form of public work and the furnishing of material and supplies were printed in the Official Proposal Columns of *Engineering News-Record* last year. They include calls for bids on:

- Boilers
- Bridges
- Building Alterations
- Canal Construction
- Cast Iron Pipe
- Dams
- Drainage
- Dredging
- Engines
- Excavation
- Filling
- Filtration Plants
- Generators
- Heating and Ventilating
- Highway Construction
- Paving
- Pumps
- Pumping Plants
- River and Harbor Improvements
- Road Oil
- Road Building Equipment
- Schools and Public Buildings
- Sewage Disposal Plants
- Sewers
- Street Improvements
- Street Lighting Systems
- Supplies and Material
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- Well Drilling, Etc.

THIS wide use of *Engineering News-Record's* Official Proposal Columns and the rapidly growing recognition of this paper's value as an advertising medium is due to RESULTS—keen competition, lower bids, better work—and savings.

For more than 40 years contractors, manufacturers, and dealers everywhere have consulted the Official Proposal Columns of *Engineering News-Record* and its predecessors for opportunities for business. Today, many of those interested in bidding on contracts for work, material, and supplies depend entirely upon the advertisements that appear in this dominant paper and would be unlikely to see those printed elsewhere.

The Dominant Proposal Medium

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
July 25	**Newton, N. C.**	July 20
July 25	Long Island City, N. Y.	July 20
July 25	**East Syracuse, N. Y.**	July 13
July 26	Phila., Pa.	July 20
July 28	**Emery, S. D.**	July 20
July 28	**Ebensburg, Pa.**	July 13
July 31	**Murdo, S. D.**	July 13
Aug. 1	**Coalport, Pa.**	July 20
Aug. 1	**Reedley, Cal.**	July 20
Aug. 1	**Santa Rosa, Cal.**	July 20
Aug. 2	Oklahoma City, Okla.	July 20
Aug. 7	**Mitchell, S. D.** **Adv. July 13 and 20.**	July 13
Aug. 8	**Walbridge, O.**	July 20

SEWERS

Bids Close		See Eng. News-Record
July 24	Bridgeport, Conn.	July 20
July 24	**Hackensack, N. J.**	June 29
July 24	Annville, Pa. Adv. July 13 and 20.	July 13
July 24	South Chicago Heights, Ill. Adv. July 20.	July 20
July 25	Wheeling, W. Va. Adv. July 20.	July 20
July 25	Oklahoma City, Okla.	July 13
July 25	Gloversville, N. Y.	July 13
July 25	Columbus, O.	July 20
July 26	Louisville, Ky.	July 13
July 26	Miami Beach, Fla.	July 13
July 26	Rye, N. Y. Adv. July 13 and 20.	July 13
July 26	Long Island City, N. Y.	July 20
July 26	Brooklyn, N. Y.	July 20
July 27	San Luis Obispo, Cal.	July 20
July 27	Brainerd, Minn.	July 13
July 28	Emery, S. D.	July 20
July 31	St. Charles, Minn.	July 20
July 31	**Indianapolis, Ind.** Adv. July 13 and 20.	July 13
Aug. 1	**Lake Worth, Fla.** Adv. July 13 and 20.	July 13
Aug. 1	Knoxville, Tenn.	July 20
Aug. 2	**Avon, S. D.**	July 13
Aug. 4	**Gregory, S. D.**	July 13

WASTE DISPOSAL

Bids Close		See Eng. News-Record
July 25	Buffalo, N. Y.	June 22
July 31	Chatham, Ont. Adv. July 13 and 20.	July 13

BRIDGES

Bids Close		See Eng. News-Record
July 24	California	July 13
July 25	New Castle, Pa.	July 20
July 25	Alabama	July 6
July 25	North Carolina	July 6
July 25	North Carolina	July 13
July 26	South Carolina	July 13
July 28	Tennessee	July 13
July 29	Cleveland, O.	July 13
July 31	Ohio	July 20
Aug. 1	Georgia	July 20
Aug. 1	Ft. Lauderdale, Fla.	July 20
Aug. 4	Seattle, Wash. Adv. June 29. July 6 and 20.	June 29
Aug. 4	Kingman, Kan.	July 20
Aug. 8	Stockton, Cal.	July 20
Aug. 10	Atlanta, Ga. Adv. July 20.	July 20
Aug. 10	Columbus, O.	July 20
Aug. 29	Wellington, New Zealand	July 13
Oct. 1	Siam	July 13
Oct. 31	Sydney, Australia	Jan. 12

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
July 25	Brooklyn, N. Y. Adv. June 29 to July 20.	June 29
July 25	**Lawtell, La.**	July 13
July 26	**Olivia, Minn.**	July 13
July 26	Brooklyn, N. Y.	July 20
July 28	Boone, Ia.	July 20
Aug. 1	Hampden, Wis.	July 20
Aug. 1	Merced, Cal.	July 20
Aug. 8	Grants Pass, Ore.	July 20
Aug. 10	**Wooster, O.** **Adv. July 13 and 20.**	July 13
Aug. 12	**Kokomo, Ind.** **Adv. July 20.**	July 20
Aug. 14	**Benton, Mo.** Adv. July 20.	July 20
Aug. 15	Ft. Lauderdale, Fla. Adv. July 13 and 20.	July 13
Aug. 18	Bloomington, Ill. Adv. July 20.	July 20

STREETS AND ROADS

Bids Close		See Eng. News-Record
July 21	New York Adv. July 6 to 20.	July 13
July 24	Ripley, W. Va.	July 13
July 24	**California**	July 13
July 24	**Columbia, Mo.** Adv. July 13 and 20.	July 13
July 24	Wilson, Pa.	July 20
July 24	Dayton, O.	July 20
July 24	Waukon, Ia.	July 20
July 25	Columbia, S. C.	July 20
July 25	Long Island City, N. Y.	July 20
July 25	Syracuse, N. Y. Adv. June 29 to July 20.	June 29
July 25	**Cameron, Tex.**	July 13
July 25	**Louisiana**	July 13
July 25	**Alabama**	July 6
July 25	**Maryland** Adv. July 13 and 20.	July 13
July 25	North Carolina Adv. July 13 and 20.	July 13
July 25	**Clarksburg, W. Va.**	July 13
July 25	**Blue Island, Ill.** Adv. July 20.	July 20
July 25	**Lufkin, Tex.**	July 20
July 25	**Columbus, O.**	July 20
July 25	**Missouri**	July 20
July 25	**Phila., Pa.**	July 20
July 26	**Upper Arlington, O.**	July 20
July 26	**Missouri**	July 20
July 26	**Rochester, N. Y.**	July 20
July 26	**Connecticut** Adv. July 20.	July 20
July 26	**Westfield, Mass.**	July 13
July 26	**Delaware**	July 13
July 26	**Michigan**	July 13
July 26	**Brooklyn, N. Y.**	July 20
July 26	Cleveland, O.	July 20
July 26	Eldorado, Tex.	July 20
July 26	Lufkin, Tex.	July 20
July 26	Wisconsin	July 20
July 27	Sonora, Tex.	July 20
July 27	Missouri	July 20
July 27	Michigan	July 20
July 28	Tennessee	July 20
July 28	Fargo, N. D.	July 20
July 28	Walworth, Wis.	July 20
July 28	Austin, Tex.	July 20
July 28	Clarksburg, W. Va.	July 20
July 28	Michigan	July 20
July 28	**Larned, Kan.**	July 13
July 28	**Tennessee**	July 13
July 29	**Wheeling, W. Va.**	July 13
July 29	**Lockport, N. Y.**	July 20
July 31	**California**	July 13
July 31	**Greenville, N. C.**	July 13
July 31	**Washington, Pa.** Adv. July 13 and 20.	July 13
July 31	Wash., D. C. Adv. July 20.	July 20
July 31	**Ohio**	July 20
July 31	Winona, Minn.	July 20
July 31	Goshen, Ind.	July 20
July 31	Crown Point, Ind.	July 20
Aug. 1	**Georgia**	July 20
Aug. 1	Georgetown, Tex.	July 20
Aug. 1	**Minnesota**	July 13
Aug. 1	**Oil City, Pa.**	July 13
Aug. 1	**Quebec**	July 20
Aug. 1	**Louisiana**	July 20
Aug. 1	**Centerburg, O.**	July 20
Aug. 1	**Maryland** Adv. July 20.	July 20
Aug. 2	**Woodland, Cal.**	July 20
Aug. 2	**South Carolina**	July 20
Aug. 2	**Minnesota**	July 13
Aug. 2	**Akron, O.**	July 20
Aug. 3	**Lenoir, N. C.**	July 20
Aug. 4	**Hallstead, Pa.** Adv. July 13 and 20.	July 20
Aug. 4	**Roswell, N. M.**	July 13
Aug. 7	**California**	July 20
Aug. 8	**San Rafael, Cal.**	July 20
Aug. 8	**Louisiana**	July 20
Aug. 9	**Ft. Myers, Fla.**	July 6
Aug. 9	**Hackensack, N. J.** Adv. July 20.	July 20
Aug. 10	**Woodbury, N. J.** Adv. July 20.	July 20
Aug. 10	**Fredericktown, O.**	July 20
Aug. 15	**Wadsworth, O.** Adv. July 20.	July 20
Aug. 15	**Knoxville, Tenn.**	July 20
Sept. 19	**New Orleans, La.**	July 6

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
July 28	**Homestead, Fla.**	June 29

BUILDINGS

Bids Close		See Eng. News-Record
July 25	Wende, N. Y.	July 20
July 26	Phila., Pa.	July 20
July 26	Siler City, N. C.	July 20
July 27	New York, N. Y.	July 20
July 28	Dickinson, N. D.	July 13
July 29	Southern Pines, N. C.	July 20
July 30	Westwood, N. J.	June 22
Aug. 1	Taft, Cal.	July 20
Aug. 2	Perry, N. Y. Adv. July 20.	July 20
Aug. 2	Berkeley, Cal.	July 13
Aug. 2	Brunswick, Ga.	July 13
Aug. 5	Belfast, Me.	July 13
Aug. 10	Mt. Sterling, O.	July 20
Aug. 14	Oakland, Cal.	July 20
Aug. 15	Grandview Heights (Columbus P. O.).	July 20
Aug. 20	Erie, Pa.	July 13
Sept. 30	Duluth, Minn.	July 13
Sept. 1	Knoxville, Tenn.	July 20

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
July 24	Sewer—Eagle Pass. Tex.	July 20
July 25	Wire Mesh, etc.—Memphis, Tenn. Adv. July 13 and 20.	July 13
July 26	Heating Plant — Hampton Roads, Va.	July 20
July 26	Equipment—Hampton Roads, Va.	July 20
July 27	Breakwater Extension — Fairport, O. Adv. July 6 to 20.	July 6
July 31	Steel Hull — Montgomery, Ala. Adv. July 6 to 20.	July 6
July 31	Hospital, Norfolk, Va. Adv. July 13 and 20.	July 13
July 31	Mechanical Equipment—Norfolk, Va.	July 20
Aug. 2	Dredges—Wash., D. C.	June 15
Aug. 2	Ordnance Buildings, etc.—Pearl Harbor, H. T.	June 15
Aug. 2	Distilling Plant—Key West, Fla. Adv. July 13 and 20.	July 13
Aug. 7	Dredging, etc. — New York, N. Y.	July 6
Aug. 7	Dredging—Camden, N. J. Adv. July 13 and 20.	July 13
Aug. 10	Tank — Ft. MacKenzie, Wyo.	July 20
Aug. 11	Piping — North Platte, Neb.	July 20
Aug. 14	Scow—Duluth. Minn. Adv. July 20.	July 20
Aug. 15	Excavation — Wilmington, Del. Adv. July 20.	July 20
Aug. 15	Rock Removal — Providence, R. I. Adv. July 20.	July 20
Aug. 15	Dredging—Galveston, Tex. Adv. July 20.	July 20
Aug. 15	Stone—New Orleans. La. Adv. July 20.	July 20
Aug. 18	Radial Gates, etc.—Riverton, Wyo.	July 13
Aug. 19	Dredging—New York, N. Y. Adv. July 20.	July 20
Aug. 21	Catamarans — Portland, Ore. Adv. July 20.	July 20
Aug. 23	Quarrywalls, etc.—Pearl Harbor, H. T.	July 20
Sept. 1	**Refrigerating Plants—Perryville, Md.** Adv. July 20.	July 20

MISCELLANEOUS

Bids Close		See Eng. News-Record
July 24	**Pier—Sarasota, Fla.**	July 13
July 24	**Basement — Milwaukee, Wis.**	July 20
July 24	**Structural Steel, etc. — St. Paul, Minn.**	July 20
July 25	**Frogs, Switches, etc. — New York, N. Y.**	July 13
July 26	**Wharf and Transit Shed Foundation—Tampa, Fla.** Adv. July 6 to 20.	July 6
July 26	**Fill—Tampa, Fla.**	July 13
July 26	**Paving Materials—St. Paul, Minn.**	July 20
July 27	**Transmission Line, etc. — Black Creek, N. C.**	July 20
July 27	**Dumping Platform and Ramp —New York, N. Y.**	July 20
July 31	**Paving Brick—Washington, Pa.**	July 13

Bids Close		See Eng. News-Record
Aug. 1	Paving Blocks — Farrell, Pa.	July 20
Aug. 1	Drainage Pumps—New York, N. Y.	July 20
Aug. 3	Transmission Line—Turlock, Cal.	July 20
Aug. 7	Engines and D. C. Generators —Rome, N. Y.	July 13
	Adv. July 13 and 20.	
Aug. 7	Scarifier Attachment—St. Paul, Minn.	July 20
Aug. 9	Transformers, etc. — San Francisco, Cal.	July 20
Aug. 15	Hydro-electric Development—Dothan, Ala.	June 29
	Adv. June 22 to July 20.	
Aug. 15	Foundation — Minneapolis, Minn.	July 13

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Mich., River Rouge—Having plans prepared for submerged water mains under River Rouge to connect city system with that of Detroit, incl. 600 ft. 30 in. c.i. or steel pipe, 40 ft. below water surface. $75,000. M. L. Brown & Son, Capitol Bldg., Detroit, engrs.

Wis., Dodgeville—Plans mains in Merrimac, West Division, 11th and Washington Sts., and improvements to pumping station. $25,000. J. B. Lewis, clk. Engineer not selected.

Ont., Eastview—Soon receives bids water mains, cement or c.i. $52,000. J. C. S. Wolfe, town clk.

BIDS DESIRED

N. Y., Long Island City—July 25, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Alburtis and Polk Aves., Edson, Madison, Mortense Sts., etc.

Pa., Coalport—Aug. 1 by Boro. Council concrete reservoir $25,000. E. W. Hess, Murray Bldg., Clearfield, engr.

Pa., Phila.—July 26, by F. H. Caven, dir. pub. wks., furnishing and laying 75 ton 30 in. c.i. mains and 1,350 ton 30 in. steel mains, 2,000 cu.yd. earth and 500 cu.yd. rock excav., etc., $50,000; 1,400 ton 6-8 and 12 in. c.i. mains, 23,000 cu.yd. earth and 2,000 cu.yd. rock excav., $90,000; 500 ton c.i. mains and 100 ton steel mains, 36 and 48 in., 3,000 cu.yd. earth and 300 cu.yd. rock excav., $50,000; furnishing 1,000 ton 6-8 and 12 in. c.i. pipe and 100 ton specials, $40,000; 50,000 lb. pig lead, $20,000; 400 fire hydrants, $5,000; three hundred 6 in., three hundred 8 in. and one hundred 12 in. stop valves, $17,000; piping and equipment in 5 pumping plants for Water Dept., $25,000; furnishing and installing exhaust system for machine and blacksmith shops, $8,000. C. E. Davis, City Hall, engr.

N. C., Newton—July 25, filtration plant, water and sewer extensions. $75,000. Mees & Mees, Kinney Bldg., Charlotte, engrs.

O., Akron—Fairlawn Heights Co., 41 East Mill St., taking bids 27 ton 8 in. Class B or C c.i. water pipe.

O., Columbus—See "Streets and Roads."

O., Upper Arlington—See "Streets and Roads."

O., Walbridge—Aug. 8, by N. Gordon, clk. Bd. Trustees of Pub. Affairs, waterworks system, pump building, deep well pump, 111.9 ton 6 and 8 in. c.i. pipe, 64.9 ton 4 in. c.i. pipe, laying 13,120 lin.ft. 4-6 in. c.i. pipe, etc. G. Champe, Toledo, civil engr.

Minn., Thief River Falls—Having Plans prepared filtration plant, 500,000 gal. capacity. $30,000. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engr.

S. D., Emery—July 28, by L. Schroeder, city aud., 13,208 lin.ft. 5-8 in. c.i. mains, one 60,000 gal. steel tank on 100 ft. tower. $30,000. Smith & Reeves, Mitchell, engrs. Noted April 6.

Okla., Oklahoma City—Aug. 2, by C. F. Jemmelbeck, city clk., constructing aerator, mixing chamber, two clear water reservoirs, head house and eight 2,000,000 gal. filter units.

Cal., Reedley—Aug. 1, by City Trustees, 60,000 gal. steel water tank and tower. H. Trebley, city clk.

Cal., Santa Rosa—Aug. 1, by City Council, extending water system. To exceed $25,000. L. L. Mills, city engr.

BIDS RECEIVED

N. Y., Buffalo — Dept. Pub. Wks., Municipal Bldg., opened bids July 11, filtration plant 1, from Thompson-Starrett Co., 79 Wall St., New York, $1,800,480; A. Bentley & Sons, 201-31 Belmont Ave., Toledo, O., $1,801,765; J. Johnson Constr. Co., 765 Abbott Rd., $2,014,275. Noted June 22.

N. Y., New York—Bd. Water Supply, Municipal Bldg., Park Row, Centre and Chamber Sts., opened bids July 11, furnishing and delivering sluice-gates, hydraulic cylinders, etc., for intake shaft of Shandaken Tunnel, f.o.b. at Grand Gorge Sta. on Ulster and Delaware R.R., Delaware Co., Contr. 208, from Coffin Valve Co., Neponsett, Mass., (Item 1) $9,000 (2) $8,700 (3) $125 (4) $75 (5) $150 (6) $65 (7) $0.10 (8) $2 (9) $0.15 (10) $0.05, total $78,665. Noted June 22.

CONTRACTS AWARDED

N. Y., Brooklyn—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Ave. T. Dahill Rd., Atkins, Flatlands, Lorraine Aves., etc., here, to Knight & Demicco, 448 East Tremont Ave., New York, $11,471. Noted June 22.

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Arcadia, Graham, Van Alst, Vanderventer Aves., etc., to Dominick Constr. Co., 246 Bowery, New York, $10,072. Noted June 22.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in White Plains Rd., Tudor Pl., Bronx Blvd., Grand Concourse, Bissel, Davidson, De Kalb Aves., etc., to Knight & Demicco, 448 East Tremont Ave., $13,870; transferring and rearranging connections in existing mains in Ludlow, Suffolk, East 11th, West 20th and West 51st Sts., etc., to Beaver Eng. & Contg. Co., 57 Chambers St., $8,652. Noted June 22.

Ky., Hazard—A. G. Taylor, city clk., constructing filter plant, etc., Items 1-2-5, 6-10 inclusive and 22-29 inclusive, to G. B. Howard & Co., 148-B 4th Ave., N., Nashville, Tenn., $29,886; Items 3, 4 and 30, to Roberts Filter Mfg. Co., Darby, Pa., $13,525; Items 11, 31, 32, 33 and 34, to Mine Service Co., Lothair, $9,049; Items 12-16 inclusive, to Amer. Cast Iron Pipe Co., Birmingham, Ala., $8,773; Items 17-21 inclusive, to Darling Valve & Mfg. Co., foot of Walnut St., Williamsport, Pa., $832. Noted June 15.

O., Cleveland—Placing 3,750 cu.yd. rubble concrete on crib pocket at Crib 3, 3.8 mi. from Cuyahoga River, to Amer. Constr. Co., Marion Bldg., $81,052. Noted July 13.

Mich., Detroit—Water Bd., East Jefferson Ave., will lay 4,829 ft. 6-12 in. c.i. mains in Grosse Point Manor, Calvert, Kensington, Burlingame and Turner Ave., by day labor. $25,000.

Wis., West Allis—To F. E. Kaminski, Berlin, mains in Lapham St. and 56 Ave., 2,824 lin.ft. 24 in. pipe, $9.90 per ft., 508 lin.ft., 16 in. $6.65, total $31,336; mains on 8 streets, 12,832 ft. 6 in. c.i. $220, 2,020 ft. 8 in. c.i. $2.60, total $33,482. Noted July 6.

Wis., Wauwatosa—Drilling artesian well to depth of 1,700 ft. with 500 ft. casing, to M. T. Peterson, 120 North Franklin St., Madison, $14,800. Noted June 15.

S. D., Harrold — Waterworks system to Bruce-Bicklehaupt, Yankton, $20,000. Noted June 22.

S. D., Waubay—For 11,000 lin.ft. 4-6 in. c.i. mains, to Phelps-Drake Co., 719 Metropolitan Life Bldg., Minneapolis, Minn., $17,108; 80,000 gal. steel tank on steel tower, to Pittsburgh-Des Moines Steel Co., 9th and Tuttle Sts., Des Moines, Ia., $6,250. Noted June 15.

Okla., Fairland—Water tower tank, deep well with pump, motor and distributing system, to Gains Bros., Fairland, and Peabody Electric Co., Muskogee, $22,800 and $12,830 respectively. Noted June 15.

Sewers

PROPOSED WORK

N. Y., Long Island City—M. E. Connelly, pres. Queens Boro, Queens Subway Bldg., rejected bids opened June 19, sewers in Brown Pl., Bittman St., Whitlock, Juniper and Firth Aves., etc. Will readvertise. Noted June 29.

Pa., Ellwood City—Plans to vote on $135,000 bonds for new sewage disposal plant, comfort station and improving various streets. Engineer not announced.

Pa., Morrisville—Making plans 14.3 mi. sewers and sewage treatment plant $316,000. W. F. Bowe, 110 William St., New York, engr.

Pa., Sharon—Completing plans for new sewage disposal plant, 1,735,000 gal. capacity, to exceed $50,000. P. S. Wickerham, city sanitary engr.

Wis., Madison—Plans sewage disposal plant on Lake Monona. H. C. Buser, city clk. Engineer not selected.

Wis., Marshfield—Making plans sanitary and storm sewers and septic tank. $40,000. T. Pankow, Washington Bldg., Madison, engr.

Ia., Glidden—Making plans sanitary sewerage system. $30,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Ont., Eastview—Soon receives bids extending sewers in Hannah and Durocher Sts., concrete or vitr. brick. $38,000. J. C. S. Wolfe, town clk.

BIDS DESIRED

Conn., Bridgeport—July 24, by Paving and Sewer Comrs., storm, sanitary and combined sewers in various streets. $100,000. J. A. McElroy, city engr.

N. Y., Brooklyn—July 26, by E. Riegelmann, boro pres., Boro Hall, sewers in Rochester Ave., between Carroll St. and East New York Ave., East New York Ave. between Rochester and Remsen Aves., Montgomery St. between Utica and East New York Aves., Ashford St. between Hegeman Ave. and end of existing sewer about point 532 ft. north and in Hegeman Ave. between Ashford and Elton Sts., Van Sicklen St. between Ave. U and Ave. T, Ave. Q between East 16th and East 17th Sts., 57th St. between 17th and 18th Aves., Union St. between Ralph Ave, and Portal St., East 28th St. between tracks of Long Island R.R. and Ave I, Nostrand Ave., between tracks of Long Island R.R. and Ave I; sewer basins on Rochester Ave., northwest and southwest corners of Union St., northeast, northwest and southwest corners of President St., northwest and southwest corners of Carroll St.

N. Y., Long Island City—July 26, by M. E. Connolly, pres., Queens Boro., Queens Subway Bldg., sewers in Brown Pl. from Grand St. to Whitlock Ave., Whitlock Ave. from Brown Pl. to Bittman St., Juniper Ave. from Whitlock to Caldwell Aves., Firth Ave. from Grand St. to Whitlock Ave., Bittman St. from Grand St. to Caldwell Ave., Caldwell Ave. from Juniper Ave. to Bittman St. with temporary connections to sewers in Juniper Ave. and Bittman St., 2nd Ward; receiving basins on southerly corner of Sothern and Corona Aves., easterly side of Corona Ave. near angle point between Sothern Ave. and Merritt Pl., 2nd Ward.

N. Y., Long Island City—July 26, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Ave. Q, Rochester and Nostrand Aves., Van Sicklen, Ashford, 57th, Union and East 28th Sts.

N. Y., Rochester—See "Streets and Roads".

W. Va., Wheeling—July 25, sewers in Market, Main, 12th and South Market Sts. H. A. Conrad, city engr.; adv. this issue.

N. C., Newton—See "Waterworks."

Tenn., Knoxville—Aug. 1 by J. L. Green, recdr., 6,000 yd. sewers in South Knoxville. $75,000. A. R. Frierson, Knoxville, engr.

O., Akron—See "Streets and Roads."

O., Columbus—See "Streets and Roads".

O., Columbus—July 25, by W. H. Duffy, dir. Pub. Serv., 28,480 ft. 6-15 in. sanitary sewers in Dunedin Rd. $43,844. R. H. Simpron, City Hall, engr.

O., Upper Arlington—See "Streets and Roads."

Ill., South Chicago Heights—July 24, by Bd. Village Trustees constructing main sanitary sewer outlet. A. L. Fox, Commercial Bank Bldg., Chicago Heights, engr.; adv. this issue.

Minn., St. Charles—July 31, by city, new sanitary sewerage system, 33,846 lin.ft. 8 in. and 1,775 lin.ft. 10 in. pipe, 81 manholes, 15 lampholes, 1 Imhoff tank. R. M. Dixon, clk. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs. Noted June 22.

S. D., Emery—July 28, by L. Schroeder, city aud., 15,868 lin.ft. 8-12 in. sewers, 35 manholes, 6 flush tanks, 1 Imhoff tank and sludge bed. $40,000. Smith & Reeves, Mitchell, engrs. Noted April 6.

Cal., San Luis Obispo—July 27, 10,900 lin.ft. 6 in. vitr. salt glazed sewer pipe, etc. W. Burch, Lowe Bldg., engr.

Sewers (Consinued)

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids July 12, sewer in (1) Troy Ave., (2) West 36th St., (3) 72nd St., (4) East 17th St., (5) Ridge Blvd., (6) Ft. Hamilton Parkway. west side between 70th and 71st Sts.. repairing sewer in (7) Ft. Hamilton Parkway near 60th St. and in 60th St. between Fort Hamilton Parkway and 19th Ave., sewer basins in (8) Otsego St., etc., from J. Jennings, 367 Fulton St., (1) $29.705. (6) $1,646, (8) $960; F. Frey, 818 Ocean Parkway, (1) $30,838, (3) $3,256, (5) $2,229, (6) $1,832, (8) $1,048; Tomasetti & Co., 1133 60th St., (1) $31,467, (2) $8,713; B. J. Donlon Contg. Co., 84 Bway., (2) $8,440; Nazarro & Querriero, Inc., (2) $9.532, (3) $3,541, (4) $3,182, (6) $1,704; Edwards & Flood, 26 Court St., (3) $3,604, (4) $3,395, (5) $1,970; Dady & Merrindino, 367 Fulton St., (4) $2,940, (5) $1,987; J. F. Cogan Co., 233 Bway., New York, (7) $76,490; Necaro Co., 97 Court St., (7) $115,895. Noted July 6.

O., Akron—M. P. Tucker, dir. Pub. Serv. opened bids July 10, (a) brick, (b) segmental block sewers in (1) 4,300 ft. Miller Ave. (2) 2,600 ft. Sweitzer Ave., (3) 2,755 ft. Crozier Ave., from Shullo Constr. Co., 932 Second Natl. Bldg., (1a) $31,746 (1b) $31,031; D. E. Beattie, 715 Chitty Ave., (1a) $34,727 (1b) $40,277 (3a) $22,261 (3b) $20,936; T. E. McShaffrey Constr. Co., 171 South Forge St., (1a) $42,273 (1b) $38,918 (2a) $30,490 (2b) $36,465 (3a) $21,626 (3b) $20,267; E. and W. McShaffrey Co., 574 Rhodes Ave., (2a) $35,780 (2b) $38,118; J. Duff Constr. Co., Marshall Bldg., Cleveland, (2a) $37,661 (3a) $24,310 (3b) $21,276. Noted July 6.

CONTRACT AWARDED

N. Y., Rochester—See "Streets and Roads."

O., Akron—M. P. Tucker, dir. Pub. Serv., segment block trunk sewer in East Tallmadge Ave., to McAlonan Bros., 506 Woodland Ave., $55,307. Noted July 13.

Mich., Detroit—For 5.358 ft. sewer Sect. 4 Clark Ave. and in Lovett Ave. from Michigan to Herbert Aves., 11 ft. 6 in. to 11 ft. 3 in. in diam., to G. R. Cooke, 1260 Penobscot Bldg., $404,648; 4,302 ft. Harper Ave. Arm Sect. 1, Connors Creek Sewer in Harper Ave. and Annsburg Ave. from Connors to Wade Aves., 6 ft. 3 in. to 6 ft. 6 in. in diam. also 3,576 ft. Piquette Ave. Arm of Bates St. Sewer in Piquette Ave., 3 ft. to 5 ft. 6 in. in diam., to J. A. Mercier, 216 Hammond Bldg., $93,827 and $59,655 respectively, 2,813 ft. Harper Ave. extension of Ashland Ave. Sewer in Harper and Nelson Aves. from Newport to Wade Aves., 3 ft. 3 in. to 4 ft. 3 in., to R. D. Baker, 1631 Elmhurst Ave., $35,703. Noted July 6.

Wis., Milwaukee—Storm and sanitary sewers, to T. Szukalaski, 1089 American Ave., Chambers St., 1.077 ft. 8-12 in. vitr. pipe, etc., $5,084, 45th St., 2,521 ft. 8-15 in. vitr. pipe, $5,780, 47th St., 3,543 ft. 8-18 in. vitr. pipe, 331 ft. 21 in. concrete pipe, $9,150, 48th St., 3,895 ft. 8-15 in. vitr. pipe, $7,911, 49th St., 2,680 ft. 8-18 in. vitr. pipe, 660 ft. 30 in. concrete pipe, $11,479, 50th St., 3,620 ft. 8-18 in. vitr. pipe, $8,242; to G. Zimmerman, 3402 Grand Ave., 44th St., 2,521 ft. 8-18 in. vitr. pipe, $7,962, 46th St., 3,131 ft. 8-15 in. vitr. pipe, 667 ft. 21-24 in. concrete pipe, $9,246; to Wenzel & Henoch, 498 27th St., Hadley St., 1,326 ft. 8-12 in. vitr. pipe, $2,859, 27th St., 235 ft. 12 in. vitr. pipe, $763; to M. Synovitz, 944 2d Ave., Locust St., 3,861 ft. 8-24 in. vitr. pipe. 273 ft. 30 in. combination pipe, 952 ft. 54 in. concrete pipe, $45,018.

Wis., West Allis—Storm sewers in 12 streets, to F. E. Kaminski, Berlin, 662 ft. 8 in. concrete pipe $0.78 per ft., 134 ft. 10 in concrete pipe, $0.86, 1,013 ft. 12 in. concrete pipe $0.95, 2,225 ft. 15 in. concrete pipe $1,18, 1,690 ft. 18 in. concrete pipe $1.43, 316 ft. 24 in. concrete pipe $2.36, 909 ft. 42 in. circular rein.-con. $6.20, 73 ft. 1 ft. 6 in. x 7 ft. inside diameter $13, 119 ft. 2 ft. x 5 ft. 4 in. inside diameter $12, 26 manholes $40 each, 59 catchbasins, $38 each; sanitary sewers in 13 streets, to Ganser & Klein, 439 64th Ave., 5,914 ft. 8 in. pipe $1.52 and $1.80 per ft., 3,248 ft. 10 in. $1.58 and $1.85 1,746 ft. 12 in. $1.65, 32 manholes $75 each. Noted July 6.

S. D., Philip—For 13,000 lin.ft. sewers and 9,100 lin.ft. water mains, etc., to W. B. Carter, 506-7 United Bank Bldg., Sioux City, Ia., $35,500.

Wash., Seattle—For 6,609 ft. 8 in. and 2,410 ft. 10 in. clay or rein.-con. sewers in 32nd Ave. S., et al., to Interstate Sonstr. Co., Seattle. Engrs. est. $36,845. Noted July 13.

Waste Disposal

PROPOSED WORK

Mich., Detroit—Detroit Reduction Co., 1116 Book Bldg., having plans prepared by Vernor, Wilhelm & Molby, archts., 520 Book Bldg., 1 story, 38 x 100 ft. rein.-con. garbage disposal plant.

Bridges

PROPOSED WORK

Pa., Curwensville—Buffalo, Rochester & Pittsburgh R. R., 155 West Main St., Buffalo, N. Y., having plans prepared for 65 ft. single track steel bridge, with concrete abutments, near here. $75,000. E. R. Robinson, c/o owner, engr.

Pa., Renovo—Plans to eliminate grade crossing and build large viaduct over 5 tracks of Pennsylvania R.R., on Main St. $161,121.

Mich., Bad Axe—State Hy. Dept., Lansing, soon takes bids Bridge 322,801, 90 ft. concrete girder, 24 ft. wide, Winsor Twp., Huron Co.

Ont., Ottawa—Bronson Co., Middle St., plans to purchase light steel highway bridge, 60 ft. span, truss or girder.

BIDS DESIRED

Pa., New Castle—July 25, by J. R. Lamorie, clk. Lawrence Co. Com. building six bridges as follows:—(1) and (2) 33 ft clear span, rein.-con. through girder bridge over Jenkins Run, on Route 77, with new stone abutments, etc., to be removed from present steel bridge (3) taking down, cleaning, painting and renewing wooden floor system, moving about 1 mi. and erecting on new plain concrete abutments a 72 ft. span, steel bridge over Hickory Creek, on Route 77, (4) building on present stone abutments a 45 ft. clear span, rein.-con. girder bridge at McConnells Mills, (5) 33 ft. span rein.-con. girder bridge on plain concrete abutments over Potters Run, (6) 18 ft. clear span rein.-con. slab floor bridge over Eckles Run, to exceed $25,000. G. Zahniser, co. engr.

Georgia—Aug. 1, by W. R. Neel, state highway engr., Atlanta, 3 steel and concrete bridges on Gainesville-Cleveland Rd., White Co., 2 to have three 22 ft. spans and other four 26 ft. spans. State to furnish cement. H. W. Morgan, Jackson Bldg., Gainesville, engr.

Ga., Atlanta—Aug. 10, by J. N. Landers, purch, agt., City Hall, Spring Street Viaduct, Contrs. 1 and 2. Harrington, Howard & Ash, Kansas City, and Robert & Co., Inc., Atlanta, associated consult. engrs.; adv. this issue.

Fla., Ft. Lauderdale—Aug. 1, by Broward Co. reconstructing bridge over New River Sound, incl. 9 piles, 60 pedestals, 2 rest piers all concrete, 700 cu.yd. rein.-con. and boulder, riprap and timber bulkheads on Lasolas Blvd. with some fill. H. C. Davis, Ft. Lauderdale, engr.

Tennessee—See "Streets and Roads."

Ohio—July 31, by Dept. Highways and Pub. Wks., Columbus, bridges in following counties:

Union Co., Sect. "M" Marysville-Kenton Rd., girder, $3.761.

Pickaway Co., Sect. "U" Columbus-Portsmouth Rd., $12,565.

Hancock Co., Sect. "F" Lima-Sandusky Rd., girder and abutments, $3,446.

Ashtabula Co., Sect. "R" Cleveland-Buffalo Rd., rein.-con. viaduct, $371,900.

Clark Co., Sect. "G" Springfield-Washington C. H. Rd., rein.-con. beam, $3,056.

Athens Co., Sect. "E" Logan-Athens Rd., rein.-con., $5,717.

Brown Co., Sect. "F" Milford-Hillsboro Rd., $2,777.

Holmes Co., Sect. "B-1" Mansfield-Millersburg Rd., $5,829.

Knox Co., Sect. "A" Columbus-Wooster Rd., $4,519.

Knox Co., Sect. "E" Columbus-Wooster Rd., $4,022.

Muskingum Co., Sect. "N" National Rd., $9,884.

Clark Co., Sect. "N" National Rd., repairing bridges, $2,349. L. C. Herrick, dir. highways.

O., Columbus—Aug. 10, by Franklin Co. constructing approaches and paving Greenlawn Ave. bridge, 2,800 sq.yd. bituminous macadam and 8,100 cu.yd. fill, $21,400; furnishing materials for repairs to bridge at Taylors Sta., $1,100; extending Bridge 179 on McKinley Ave., Franklin Twp., $1,623; constructing culvert 174, on McKinley Ave., Franklin Twp., $2,933.

Kan., Kingman—Aug. 4, by Clerk Kingman Co., 266 ft. bridge, with seven 38 ft. deck girder spans, 6 piers, 2 concrete abutments; Red Creek Bridge. 67½ ft. long, with three 22½ ft. spans, 2 concrete piers, 2 concrete abutments, $7,500; Wild Horse Creek Bridge, 67½ ft. long, with three 22½ ft. spans, 2 concrete piers, 2 abutments. $6,000. C. C. Martin, Kingman, engr.

Cal., San Francisco—City and San Francisco Co. taking bids 585 lin.ft. plate girder bridge at Six-Bit Gulch on Hetch Hetchy R.R., 9 single track deck spans, each 65 ft. long. M. M. O'Shaughnessy, city engr.

Cal., Stockton—Aug. 8, by Supervs. San Joaquin Co., 9 rein.-con. bridges on Jack Tone Rd., 764 cu.yd. concrete, 61,391 lb. reinforcing, $16,800; 2 rein.-con. bridges on McKinley Ave., one with four 17 ft. spans, other with four 16 ft. spans, 335 cu.yd. concrete, 28,289 lb. reinforcing, $10,080. F. E. Quail, co. surv.

BIDS RECEIVED

N. Y., Long Island City—G. A. Whalen, comr. Plant & Structures. Municipal Bldg., New York, opened bids July 14, reconstructing centre pier fender of Meeker Ave. Bridge over Newtown Creek, from Shelbourne & Blake Co., 74 Bway., New York. $19,407; A. M. Hazell, Inc., 26 Cortlandt St., New York, $19,549; A. N. Spooner & Son, Pier 11, North River, New York, $24,960. Noted July 6.

Pa., Williamsport—Comrs. Lycoming Co. opened bids July 11, 1,500 ft. concrete bridge over west branch of Susquehanna River between Arch St., West Williamsport and Hight St., Duboistown, 13 open spandrel arches, 98 ft. clear space, from Whittaker & Diehl, Union Trust Bldg., Harrisburg, $372,839; alternate, steel truss, 7 spans on rein.-con. piers from Bethlehem Steel Bridge Co., Bethlehem, $271,170. Noted June 15.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids July 14, bridges in following counties: Ottawa Co., Sect. "L" Toledo-Elmore Rd., concrete, from La Boiteaux & Hayes, Toledo, $7,001, J. H. Murphy Sons, Burgoon, $7,137, F. F. Walton, Upper Sandusky, $7,582; Preble Co., Sect. "Eaton Bridge" Dayton-Indianapolis Rd., from E. F. Smith, Indianapolis, Ind., $24,571, I. E. Smith, Richmond, Ind., $24,598, F. K. Vaughn Co., Hamilton, $24,740; Ross Co., Sect. "G" Chillicothe-Jackson Rd., from E. F. Bearce, Chillicothe, $5,456, M. M. Girton, Washington C. H., $5,779; Athens Co., Sects. "E, C and J" Logan-Athens Rd., from O. R. Couch, Kent, $13,732; Erie Co., Sect. "H" Cleveland-Sandusky Rd., timber retaining wall, from H. A. McDonald, Norwalk, $4,335, J. J. Cuddeback, Vermillion, $4,845, A. N. Richards & Sons, Willard, $4,972. Noted July 6.

CONTRACTS AWARDED

N. Y., Hewitville (Potsdam P. O.)—Town Clerk, Potsdam, 340 ft. rein.-con. and steel bridge, 16 ft., over Raquette River, here, to McCormick & Gregor, Herkimer. $27,000. Noted June 29.

N. J., Salem—Salem Co. for Bridge 57 M. P. O. O. W. on Route 6 State Highway System, over Fennick Creek, to S. Campbell, 197 North Pearl St., Bridgeton. $58,645. Noted June 22.

West Virginia—See "Railways."

South Carolina—State Hy. Dept., Columbia, rein.-con. bridge with four 22 ft. spans also bridge with thirteen 22 ft. concrete spans and one 168 ft. steel span, Project 175, Union Co., to Genl. Rd. and Drainage Constr. Co., Liberty Bank Bldg., Columbia, $38,099. Noted June 15 under Union.

Fla., Century—Escambia Co. (Pensacola). rein.-con. deck girder bridge on 6 rein-con. piers and 2 rein.-con. abutments, timber foundation piles, 18 ft. clear roadway, over Escambia River, here, to H. C. Turner Constr. Co., Pensacola, $30,125. Noted June 15.

Tennessee—State Hy. Dept., Nashville, substructure for Clarksville Tennessee Bridge over Cumberland River, Federal Aid Project 16, to Gould Contg. Co., Independent Life Bldg., Nashville, $196,891. Noted June 22.

Ohio—See "Streets and Roads."

Mich., Grand Haven—F. F. Rodgers, state highway comr. at office City Manager, substructure and channel protection work for swing bridge No. 701,302 with three 100 ft. deck truss spans, one 212 ft. through swing span, 24 ft. roadway and two 5 ft. walks, incl. 1,869 cu.yd. rein.-con., 2,104 cu.yd. concrete, 230,910 lb. steel, to J. H. Baer, 402 Owen Bldg., Detroit, $97,451. Noted June 1.

Ia., Sioux City—For 340 ft. concrete bridge over Big Sioux River, near here, eight 42 ft. concrete deck girder spans, 30 ft. roadway and 6 ft. sidewalks, to Schreiber Constr. Co., Watertown, S. D., $58,800. Engrs. est. $50,000. Noted June 8.

Kan., Troy—See "Streets and Roads."

Colorado—State Hy. Dept., Denver, 0.52 mi. bridge on State Rd. 45, new Sante Fe Trail, three 120 ft. trusses, 20 ft. roadway, to Rogers & Pickard, 302 Tramway Bldg., Denver, $61,264. Noted July 6.

Cal., Salinas—Supervs. Monterey Co., (a) Proposition 1, including two 80 ft. pony

Bridges (Continued)

trusses, three 180 ft. through spans, 21 ft. roadway, (b) Proposition 2, three 180 ft. through steel spans and two 80 ft. pile trestles, from Standard Industrial Eng. Corp., 550 Montgomery St., San Francisco, (a) $119,000, (b) $104,000; E. Nommensen, 134 South 8th St., San Jose, (a) $129,400, (b) $104,336; Security Bridge Co., Santa Maria, (a) $137,500, (b) $111,110. Contract awarded to Standard Industrial Eng. Corp., on (a) $119,000. Noted June 22.

Dams

PROPOSED WORK

O., Chagrin Falls—I. H. Huggett, 736 Society for Savings Bldg., Cleveland, plans to dam Aurora and Chagrin Rivers near here, also construct roadways, bathing beach, dance pavilion buildings and clubhouse. $35,000-$50,000.

CONTRACTS AWARDED

Cal., Palmdale — Palmdale Irrigation Dist., Little Rock Irrigation Dist. and Palmdale Water Co., concrete dam 700 ft. long at top, 145 ft. high, 23,000 cu.yd. concrete, to Bent Bros., 1714 Eagle St., Los Angeles, about $500,000. Owners furnish cement, reinforcing steel and gates.

Railways

PROPOSED WORK

California—City and County of San Francisco plan loop track for Municipal Ry. at Market St. and Grant Ave. $40,000. M. M. O'Shaughnessy, San Francisco, city engr.

CONTRACTS AWARDED

West Virginia—Hardy Coal Co., Huntington, 5.8 mi. branch railroad up Four Pole Creek near Panther leading from Norfolk & Western Lines, to H. M. Waugh, Bluefield.

West Virginia—Virginian R.R. Co., 60 Wall St., New York, 3.6 mi. heavy railroad down Laurel Fork from Virginian & Western R.R. at Virwest, incl. 7 concrete bridges, to H. M. Waugh, Bluefield.

Texas—Chicago, Burlington & Quincy R.R., 179 West Jackson Blvd., Chicago, 14 mi. standard gauge branch line from Byers, Tex., to Waurika, Okla., to F. Kell, Wichita Falls, Tex.

Excavation and Dredging

PROPOSED WORK

Cal., Fall River Mills—Fall River Mills Irrigation Dist. plans system including canals and 3 pumping plants. J. H. Creighton, Glenburn, trustee. Engineer not se-

Wis., Shawano—Farm D. D. No. 1, rejected bids draining 7.7 mi. Will readvertised. A. L. Schmitz, Shawano, secy. Noted June 29.

BIDS DESIRED

N. Y., Brooklyn—July 26, by E. Riegelmann, boro pres., dredging in Newtown Creek Canal, English Kills, Stagg St. basin, basin between Johnson and Montgomery Aves., and in Metropolitan Ave. basin.

Ind., Kokomo—Aug. 12, by E. Hunt, surv. Howard Co., dredging Kokomo Creek; adv. this issue.

Ill., Bloomington—Aug. 18, by Trustees Bloomington & Normal Sanitary Dist., 404 Unity Bldg., constructing open channel work. Taylor & Woltmann, 428 Unity Bldg., engrs.; adv. this issue.

Wis., Hampden—Aug. 1, by Columbia Co. Farm Drainage Bd., cleaning out and reconstructing 4 mi. open ditch, 14,000 cu.yd. earth and 500 cu.yd. rock excav. H. V. Tennant, Portage, engr.

Ia., Boone—July 28 by Auditor Boone Co., County Drain 195, 22,883 lin. ft. 6-26 in. tile. $25,000. J. A. Illeman, Boone, engr.

Mo., Benton—Aug. 14, by Scott Co., ditches in D. D. 15. C. E. Swank, Charleston, engr.; adv. this issue.

Ore., Grants Pass—Aug. 8, by Grants Pass Irrigation Dist., 4 mi. new canal and enlarging 2 mi. old canal, 167,000 cu.yd. earth, and 13,000 cu.yd. rock excav. Probably steam shovel work. $100,000. J. H. Fertig, Grants Pass, engr.

Cal., Merced—Aug. 1, by Directors, Merced Co. Irrigation Dist., excavation and earthwork construction of Lake Yosemite-LeGrand canal (bids may be submitted on all or any division) canal in Div. 1, 16 ft. wide on bottom and 7.8 ft. deep, approximately 49,900 ft. long; canal in Div. 2, varying sizes to wit; 6,400 ft. 16 ft. wide on bottom and 7.8 ft. deep, 14,400 ft. 10 ft. wide on bottom and 6 ft. deep, 6,850 ft. 8 ft. wide on bottom and 5.5 ft. deep, about 7,450 ft. 5 ft. wide on bottom and 5.5 ft. deep; canal in Div. 3, varying sizes to wit: 23,535 ft. 8 ft. wide on bottom and 5.5 ft. deep, 16,425 ft. 5 ft. wide on bottom and 5.5 ft. deep, 4,740 ft. 5 ft. wide on bottom and 4.2 ft. deep. R. C. Starr, ch. engr. Noted Feb. 23.

BIDS RECEIVED

N. C., New Bern—Bd. Drainage Comrs., drainage improvements in Beaufort Co. D. D. 10, Beaufort and Craven Counties, from Indiana Dredging Co., Royal Centre, Ind., $113,260; E. M. Williams, Monroe, Ga., $115,333; A. V. Wills & Sons, Title Guaranty Bldg., St. Louis, Mo., $123,094. Noted June 8.

Streets and Roads

PROPOSED WORK

N. Y., La Salle—Marquette Parkway Corp., Niagara Falls, purchased 157 acres here and plans extensive improvements, incl. building of 1 mi. macadam boulevard 100 ft. wide, with double driveways; paving and constructing many streets; grading, placing sewers and water mains in all streets. Will construct boat houses, beach, etc., later. To exceed $100,000. W. E. Hosler, 556-11th St., Niagara Falls, pres. Engineer not announced.

N. Y., Salamanca—State Park Comn. plans macadamizing road from here to new Alleganey State Park. $200,000. Address A. T. Fancher, Salamanca.

Pa., Ellwood City—See "Sewers."

Pa., Erie—Rejected bids paving 17 streets. $38,000. Will readvertise. F. G. Lynch, city engr. Noted June 15.

Pa., Erie—Soon takes bids asphalt paving Cranberry St. $22,800, Perry St. $7,850, 26th St. $7,200, also sanitary sewer in Front Ave., $500. F. G. Lynch, city engr.

Pa., Erie—Soon takes bids paving Chestnut St. from 26th to Peach Sts., asphalt. $26,000. F. G. Lynch, city engr.

W. Va., Morgantown — Battell Dist., Monongalia Co., to vote Aug. 19, on $375,000 bonds for roads. A. J. Barrtell, co. engr.

W. Va., Wayne—Lincoln Dist., Wayne Co., to vote Aug. 8, on $150,000 bonds for roads. H. Adkins, clk.

N. C., Greensboro—Plans paving Gaston, Florence and North Cedar Sts. and widening Greene St. $50,000. P. C. Painter, city mgr.

N. C. Greensboro—Guilford Co. plans concrete or asphaltic surfacing 9 mi. road between here and Pleasant Garden via Vandalia. $215,000. W. C. Jones, High Point, comr.

N. C., Lumberton—Bd. Aldermen authorized sale of additional $200,000 bonds for street improvements.

Fla., Pensacola—Having plans prepared grading, curbing and paving with vitr. brick, asphalt, concrete or asphaltic concrete on concrete base, 14th Ave., Independence, La Rua, Barcelona, Strong and Gonzaley Sts. $50,000. F. Janett, city engr.

Ohio—Dept Highways and Pub. Wks., Columbus, cancelled bids which were to be opened July 14, grading, bridging and paving 3.96 mi. Sects. "D-2 and E" Alliance-Minerva Rd., Stark Co. Noted July 6.

Ohio—Dept. Highways and Pub. Wks., Columbus, received no bids opened July 14, grading, bridging and improving 0.86 mi. Sect. "A-1" Gallipolis-Crown City Rd., Gallia Co., plain concrete 2.157 mi., Sect. "K-1" Ohio River Rd., Jefferson Co., brick. Noted July 6.

Ohio—Dept. Highways and Pub. Wks., Columbus, rejected bids received June 30 grading, bridging and paving 1.65 mi. Sect. "L-1" Springfield Washington C. H. Rd., Clark Co. Noted July 13.

O., Akron—M. P. Tucker, dir. Pub. Serv., takes bids in August grading and paving 2,600 ft. North Main St., 56 ft., brick or asphalt. $60,000-$90,000. E. A. Kemmler, Delaware Bldg., engr.

O., Chagrin Falls—See "Dams."

O., Columbus—Franklin Co. plans grading and paving 0.492 mi. Belknap Rd. in Plain Twp., $10,046; 0.86 mi. Mix Rd., Prairie Twp., $21,970; both waterbound macadam. C. C. Lattimer, Court House, engr.

O., Columbus—Plans grading, curbing and paving 5th Ave. from Sunbury Ave. to point 490 ft. east of Nelson Rd., north St. from High St. to Neil Ave., 16th Ave. from Lexington to Brooks Aves. R. H. Simpson, city engr.

Michigan—State Hy. Dept., Lansing, rejected bids grading and surfacing 2.564 mi. State Trunk Line Rd. 13-16, Kent Co., 15,491 cu.yd. excav., 27,073 sq.yd. asphalt, concrete or bituminous concrete Will readvertise. L. H. Belknap, ch. engr. Noted May 18.

Michigan—State Highway Dept., Lansing, soon takes bids grading and surfacing 3 mi. Assessment Dist. Rd. 209, Bay, Saginaw and Tuscola Counties, 16 ft. stone gravel or macadam; 2½ mi. Federal Aid Project 45, Sect. B-1, Ingham Co., 18 ft. asphalt, concrete or bituminous concrete. L. H. Belknap, ch. engr.

Mich., Detroit—Had plans prepared paving with 3½ in. sheet asphalt on 8 in. concrete, Dickerson St. $26,830, Gray St. $27,260, Bezner St. $28,130, Springle St. $27,700, Malvern Ave. $7,740, Dakota St. $16,180, St. John St. $33,930, all above 26 ft. wide, Fairfield Ave., 24 ft., $44,550; paving 4 alleys with one-course concrete, totalling $17,980. J. W. Reid, city engr.

Mich., Detroit—Having plans prepared grading and paving Wildemere Ave., $17,230, 14th Ave., $5,420, with 3½ in. sheet asphalt on concrete, also 7 alleys with one course concrete totaling $28,455. J. W. Reid, city engr.

Wis., Janesville—Making plans paving Ringold, Reeger, 2nd and North 1st Sts., 25 ft., asphalt or one course concrete. $25,000. C. V. Keich, City Hall, engr.

Ia., Albia—Plans paving and curbing 12 blocks. $40,000. C. C. Atchison, clk.

Ia., Davenport—Plans paving various streets, asphaltic concrete, sheet asphalt, Willite or bitulithic, $35,458; alleys with concrete, $7,490. R. Earle, city engr.

S. D., Mitchell—Making plans paving 6 blocks East 6th St. $25,000. F. McGovern, city aud.

S. D., Sioux Falls — Plans paving 15 blocks 8th St. between Weber and Cliff Aves. and between Cliff and Asylum Aves., 2nd Ave. between 10th St. and Chicago, St. Paul, Minneapolis & Omaha Ry. tracks. $45,000. W. C. Leyse, city aud.

S. D., Sioux Falls—Minnehaha Co., (Sioux Falls) and Moody Co. (Flandreau), plan grading and graveling 10 mi. road between Dell Rapids, S. D., and Jasper, Minn. $35,000. F. E. Ward, aud. Minnehaha Co. E. A. Hornby, aud. Moody Co.

Missouri—State Hy. Dept., Jefferson City, plans 6.7 mi. road from Paris, eastward, westward and northeastward, State Aid Project 20.181, Monroe Co., 37,266 cu. yd. earth excav., 3,536 cu.yd. borrow, 198.1 cu. yd. concrete masonry, etc.; surfacing road from Bethany northward and southward, Federal Aid Project 8, Harrison Co., 2.471 mi. 1½-2 in. rock asphalt on 8 in. sledged stone, 3,115 mi. 2½ in. penetration bituminous macadam on 8 in. sledged stone, 2.66 mi. 2 in. asphaltic concrete on 8 in. sledged stone, 3,361 mi. 4 in waterbound macadam intermediate course and lin. inverted penetration macadam surface course on 6 in. sledged stone, all foregoing 18 ft. wide, 2,717 mi. 1 course cement concrete, 7 in thick, 16 ft. wide. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept. at div. office Liberty, rejected bids opened bids June 5, improving road from Liberty to Excelsior Springs, Federal Aid Project 25 and road from North Kansas City to Nashua, Federal Aid Project 6A, both Clay Co Noted July 13.

Tex., Anson—Jones Co. defeated $400,000 bond issue for roads and bridges in Dist. 5, Precinct 2. New election will probably be held. H. D. Wade, Chamber of Commerce, Stamford, secy. Noted June 8.

Tex., Brownsville—Cameron Co. making plans grading and surfacing with 2 course concrete, 10.3 mi. State Highway 12 from Harlingen to Hidalgo Co. line, 345 cu.yd. concrete, 109,020 sq.yd. concrete pavement. $406,234. W. O. Washington, co. engr. Noted June 29.

Tex., Center—Shelby Co. Jonaquin Dist. voted $75,000 bonds for highway improvements. T. H. Dillon, co. engr.

Tex., Ennis—Defeated $75,000 bond issue for street paving. R. A. McCulloch, city mgr. Noted June 1.

Tex., Marlin—Falls Co. making plans grading and gravel surfacing 12 mi. State Highway 44 from north line Precinct 3 to south line Dallas Co., 36,000 cu.yd. borrow, 36,000 cu.yd. roadway excav., 2,110 cu.yd. concrete, 42,240 cu.yd. gravel surfacing. $200,057. G. W. Courter, co. engr.

Tex., Paris—Lamar Co. making plans surfacing 6.06 mi. State Highway 5 east of here to Red River Co., 12 ft., incl. 17,400 cu.yd. gravel, $41,563; 9.24 mi. State Highway 19, south of here to Delta Co. line, 12 ft., 12,983 cu.yd. sledged limestone rock base and 8,124 cu.yd. gravel topping, $74,122. W. M. Fooshee, co. engr.

Tex., Seguin—Guadalupe Co. making plans surfacing state highway 3, 18 ft., 173,896 sq.yd. 1 in. bituminous topping, 202,646 lin.ft. concrete curbing, 6,000 cu.yd. earth excav. $125,000. S. C. McCarty, Seguin, engr.

Cal., San Bernardino—Bd. Supervs. San Bernardino Co., takes new bids about August 1, 380,160 sq. ft. 4 in. concrete pavement, Hellman Ave. et. al. $108,500.

Streets and Roads (Continued)

Former contract rescinded. H. L. Allison, co. clk. Noted July 6.

Cal., Yuba City—O. W. Lanzendorf, engr. of Sutter Co. plans to create joint highway dist. for purpose of levying assessment to provide for completion of 13 mi. stretch to make continuous highway between here and Sacramento. State will appropriate $15,000 of total cost which is $150,000. Supervs. of Sacramento Co. are expected to take similar action.

Que., Montreal—Plans cement sidewalks on St. Charles St. $2,714; 562 ft. Iberville St. $3,437; 187 ft. Chenier St. $1.057: 562 ft. Harvard St. $3,515; 750 ft. Poupart St. $3,814; 2,437 ft. Wustele St. $15,876; 562 ft. Frontenac St. $3,086; 469 ft. Chateaubriand St. $1,589; 750 ft. St. Denis St. $2,286; 1,874 ft. Castelnan St. $4.701: 937 ft. Decarie Blvd. $3,530; 281 ft. Delormier Ave. $1,434; 2,250 ft. Henrie Julien Ave. $13,482; also roads on 562 ft. Van Horne Ave., 62 ft. wide, $12,258; 938 ft. Mazarin St., 50 ft. wide, $15,354; 16,000 ft. Comte St., 50 ft. wide, $28,419.

Ont, Pembroke—Soon takes bids paving Trafalgar Rd., Pembroke St., E., Huicks and Isabella Sts., asphaltic concrete and bituminous macadam. $53,000. S. L. Briggs, town clk.

Ont., Simcoe—Having plans prepared and takes bids early in August, paving Argyle, Robinson, Queen and West Sts., tarvia macadam. $35,000. G. R. Marston, Simcoe, engr.

Mexico-Tampico—Plans 7 kilometer road from here to Gulf of Mexico, Willite top on macadam base. $200,000. Address J. D. Hickerson, Tampico, Amer. Vice Consul.

BIDS DESIRED

Connecticut—July 26, by C. J. Bennett, state highway comr., Hartford, paving 20,125 lin.ft. in Coventry, bituminous macadam; 3,000 lin.ft. in Ellington, gravel; and 2,650 lin.ft. in Norwich, cement concrete; adv. this issue.

Conn., Farmington—L. C. Root, chn. street com., taking bids paving 5,125 ft. Gorden St., 16 ft., bituminous macadam. $25,000. Private plans.

N. Y., Brooklyn—July 26, by E. Riegelmann, boro pres., Boro Hall, paving Division Pl., Bay 32nd, Dikeman, Midwood, 85th and Bradford Sts., Dumont, Hegeman and 19th Aves., Midwood and Rutland Rds.; grading and curbing Hegeman Ave., Beadel and East 2nd Sts.; grading Empire Blvd., Schenectady and Hinsdale Aves.; curbing Ave. K, Hinsdale Ave. and Sunnyside court; repaving Wilson and Johnson Aves., High, Wyona, 7th and 17th Sts.

N. Y., Lockport—July 29, by F. H. Krull, clk. Niagara Co., concrete paving 2 mi. Shawnee Rd. 16, 16 ft. wide. $25,000. T. Brennan, co. engr. Noted July 13.

N. Y., Long Island City—July 25, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading and laying sidewalks on Buckley St., etc.; paving Kingsland Ave., sheet asphalt and granite block, Newtown Road. and Washington Ave.; regulating 13th and Jamaica Aves.; curbing John St.; curbing and laying sidewalks on Park Lane; grading, curbing, recurbing, flagging and reflagging 46th St., etc.; repairing sheet asphalt pavements in 1st and 2nd Wards.

N. Y., Rochester—July 26, by Bd. Contract & Supply paving Lafayette Pl., $3,700; resurfacing Wilmer St., $6,600 both asphalt; sewers and walks on Merchants Rd., $33,000; grading, sewers and walks on Arnett St., $11,300. C. A. Poole, city engr. Noted June 29.

N. J., Hackensack—Aug. 9, by Bd. Freeholders Bergen Co., Court House, constructing Sect. 3, Route 10 from Boro of Little Ferry to Boro of Ridgefield, rein.-con. J. M. Harkness, clk.; adv. this issue.

N. J., Woodbury—Aug. 10, by Gloucester Co. constructing Route 6, Sect. 14 in city of Woodbury, reinforced cement concrete. W. C. Cattell, co. engr.; adv. this issue.

Pa., Hallstead—Aug. 4, by Boro Council, concrete highway on Susquehanna Ave., Franklin, Pine and Main Sts. Hoadley & Giles, 415 Phelps Bldg., Binghampton, N. Y., civil engrs.; adv. this issue.

Pa., Phila.—July 25, by F. H. Caven, di. pub. wks., grading Chew Ave. from 12th to 13th Sts. and Marshall St. from Bristol to Cayuga Sts., 5,659 cu.yd. excav., $10,000; paving Water St. from Tabor Rd. to Clarkson Ave., 2nd St. from Mentor St. to Roosevelt Blvd., 1,561 sq.yd. vitr. brick, 3,904 sq.yd. asphalt, 782 sq.yd. concrete, $25,000; Mascher St. from Tioga to Venango St., Wakeling St. from Horrocks to Large Sts., 1,579 sq.yd. vitr. brick, 3,172 sq.yd. asphalt, 761 cu.yd. concrete, $26,000; Fillmore St. from Oakland to Lapeer Sts., 658 sq.yd. vitr. brick, 4,829 sq.yd. asphalt, 500 ft. concrete curb, 1,021 cu.yd. concrete, $25,000; C St. from Ruscomb to Eleanor Sts., 1,316 sq.yd. vitr. brick, 11,959 sq.yd. asphalt, 2,213 cu.yd. concrete, $30,000; Watts St. from Girard Ave. to Thompson St., 2,627 sq.yd. granite block, 580 ft. cement curb, 821 cu.yd. concrete, $25,000; Green St. from 19th to 21st Sts., 544 sq.yd. granite block, 1,852 sq.yd. wood block, 644 cu.yd. concrete, $26,000; Alleghany Ave. from Chatham to Miller Sts., 800 sq.yd. vitr. brick, 585 sq.yd. granite block, 11,950 sq.yd. asphalt, 1,194 cu.yd. concrete, $35,000; Robbins St. from Rising Sun Ave. to end of street, 5,940 sq.yd. bituminous, $25,000; 2nd St. from Wyoming Ave. to Mentor St., 3,620 sq.yd. vitr. brick, 240 ft. concrete curb, 1,210 sq.yd. concrete, $28,000. F. C. Dunlap, City Hall, engr.

SEWERAGE SYSTEM—BRIARCLIFF MANOR, N. Y.

Following are lowest bids opened June 21 for constructing (1) sewerage system, (A) Orange Eng. Constr. Co., 106 South Essex Ave., Orange, N. J., (awarded contract); (B) M. Averill, 196 Woodside Ave., Newark, N. J.; (C) M. Delfino, 9 North Highland Ave., Ossining; (2) sewage disposal works, (A) Broadhurst Co., Court St., Hackensack, N. J., (awarded contract); (B) Linde & Griffith Co., foot 4th Ave., Newark; (C) Francis Donaldson, 37 West 39th St., New York City. The unit bids were as follows:

(1)	A	B	C
2,640 lin.ft. 8-in. vitrified tile, 0-6	$1.29	$1.90	$1.35
1,460 lin.ft. 8-in. vitrified tile, 6-8	1.55	2.15	1.55
4,300 lin.ft. 10-in. vitrified tile, 0-6	1.44	2.10	1.55
3,600 lin.ft. 10-in. vitrified tile, 6-8	1.70	2.35	1.75
175 lin.ft. 10-in. c.i. pipe	6.00	4.00	2.60
60 manholes, 0-8	65.00	75.00	98.00
70 M. ft. b.m. sheeting	80.00	70.00	60.00
3,000 cu.yd. rock	4.00	2.00	5.00
Extended totals (25 items)	$43,224	$45,424	$47,656

(2)	A	B	C
Settling tank (lump sum)	$26,980.00	$30,500.00	$31,000.00
145 lin.ft. 12-in. c.i. pipe	5.70	2.50	3.20
36 cutting ex. piles	10.00	15.00	6.00
6,400 ft. new piles	.58	.65	.75
Extended totals	$29,097	$36,663	$37,210

Pa., Wilson—July 24, by E. C. Yeager, boro. secy., grading, curbing and paving with Telford macadam bituminous, Freemansburg Ave., from 20th to 24th Sts., and from 24th to 25th Sts., $25,000. L. A. Weaver, boro. engr.

Maryland—Aug. 1, by State Roads Comn., Baltimore, concrete paving 1.35 mi. highway, Contr. F-52, Frederick Co.; 1.5 mi. Contr. H-23, Howard Co.; 1 mi. Contr. H-29, Harford Co.; 2 mi. Contr. C-41, Cecil Co.; 2 mi. Contr. Q-22, Queen Annes Co.; 1 mi. Contr. D-25, Dorchester Co.; 2 mi. Contr. Wi-21, Wicomico Co.; graveling 2.6 mi. Contr. Ch.-23, Charles Co., J. N. Mackall, chn.; adv. this issue.

D. C., Wash.—July 31, by Dist. Comrs., 509 Dist. Bldg., grading, improving and paving streets, roads and avenues; adv. this issue.

W. Va., Clarksburg—July 28, improving Milford, North 4th, 1st, School, Farris, Sumner, Virginia, West Pike, Adamston, Webster, Hartway, Locust, South 7th, South 3rd, Lee, Wilson, Werninger, Fayette and Rolland Sts., Euclid, Magnolia, Hamill, Goff, Virginia, Traders and Woodland Aves., and constructing Adamston Bridge and approaches, work involves 40,500 lin. ft. straight curb, not armored, 3,000 lin. ft. radius curb, armored 10,000 cu.yd. earth excav., 14,000 sq.yd. brick paving, 2,500 cu.yd. concrete base, 6,000 cu.yd. rein.-con. paving 300 sq.yd. of 4 in. concrete sidewalks, 1,200 lin.ft. 12-24 in. vitr. pipe. D. H. Hamrick, city clk.

N. C., Albemarle—Bd. Comrs. receiving bids 30,000 sq.yd. cement concrete sidewalks, 9,000 cu.yd. grading. $35,000. G. C. White, Durham, engr.

N. C., Lenoir—Aug. 3, 35,000 sq.yd. concrete or asphaltic paving, 26,000 ft. combined concrete curb and gutter, 12,000 sq. yd. cement sidewalks, etc. Ludlow Engrs., Winston-Salem, engrs. Noted May 18.

South Carolina—Aug. 2, by Richland Co. Permanent Rds. Com., at Room 31, Arcade Bldg., Columbia, grading and paving 15.1 mi. Columbia-Camden Highway, Richland Co., 27,000 cu.yd. excav., 161,000 sq.yd. pavement. Alternate proposals on 7 in. plain cement concrete pavement or 5 in. concrete base with asphaltic concrete or sheet asphalt wearing surface. J. R. Pennell, Arcade Bldg., Columbia, engr.

S. C., Columbia—July 25, by Mayor and City Council, for 15,000 sq.yd. roadway pavement, 5,000 cu.yd. excav., 2,600 lin.ft. combination curb and gutter, 500 lin. ft. reset curb, 2,500 lin.ft. storm drains and necessary appurtenances, 1,500 sq.yd., sidewalks, 1,200 sq.yd. gutter. W. S. Tomlinson, city engr.

Georgia—Aug. 1, by W. R. Neel, highway engr., Atlanta, gravel surfacing 2½ mi. Dixie Highway between Barretts Creek and Bartow Co. line, Federal Aid Project 224, Gordon Co., 199 cu.yd. concrete, 16,966 cu.yd. earth and 400 cu.yd. rock excav., 5,749 cu.yd., sand clay surfacing, bridges incl. 198 lin.ft, concrete pipe, 20,540 lb. reinforcing, 70 cu.yd. dry and 120 cu.yd. wet excav.; topping 7.5 mi. Gainsville Cleveland Rd. between Hall Co. line and Cleveland, Federal Aid Project 281, White Co., 389 cu.yd. concrete, 18,761 lb. reinforcing, 2,622 lin.ft. drain pipe, 1,466 cu.yd. surfaced ditches, 19,629 cu.yd. topsoil, 41,023 cu.yd. earth and 7,803 cu.yd. rock excav.; grading 2.4 mi. Clayton Hiawassee Rd. between Clayton and Hiawassee, Federal Aid Project 187, Rabun Co., 112.08 cu.yd. concrete, 20,314 cu.yd. earth and 7,290 cu.yd. rock excav., 7,627 lb. reinforcing. All cement furnished by state.

Louisiana—Aug. 1, by State Hy. Comn., Redmond Bldg., Baton Rouge, gravel surfacing 9.17 mi. Greenburg-Fluker Highway. Sects. A and B, Tangipahoa and St. Helena Parishes. J. M. Fourmy, ch. engr.

Louisiana—Aug. 8, by State Hy. Comn., Redmond Bldg., Baton Rouge, paving 1.61 mi. Baton Rouge-St. Francisville Highway from city limits of Baton Rouge to Weller. East Baton Rouge Parish, asphaltic concrete, warrenite bitulithic or vitr. brick on 6 in. concrete. J. M. Fourmy, ch. engr.

Tennessee—July 28, by State Hy. Dept., Nashville, paving and bridging 10.04 mi. road between Rockwood and Kingston, Roane Co., 20 ft., 94,000 cu.yd. earth and 8,000 cu.yd. rock excav., (to be bid on as whole or roadway and bridges separate). $260,400. D. A. McComb, Nashville, ch. engr.

Tenn., Knoxville—Aug. 15, by J. L. Green, recdr., curbing, guttering and paving 25,000 yd. Patton, Walker, Woodbury, Ivy, Lynch and Payne Sts., 20-30 ft., asphalt, $50,000; repairing macadam base and topping with bituminous 7 blocks Central Ave. to end of city limit, 20-30 ft., $27,000, (contract for this portion of highway must contain five years maintenance clause). H. Kidd, city engr.

Ohio—July 31, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties:

Allen Co., Sect. "Elida" Lima-Delphos Rd., 0.494 mi., rein.-con., $15,131.

Allen Co., Sect. "F" Lima-Delphos Rd., 4.178 mi., bituminous macadam, asphalt or tar, $113,925; Kentucky rock asphalt, $131,730; bituminous concrete, $131,564; rein.-con., $126,335.

Ashtabula Co., Sect. "R" Cleveland-Buffalo Rd., 0.371 mi., brick, $31,508.

Fulton Co., Sect. "C" and "Wauseon" Wauseon-Napoleon Rd., 0.998 mi., rein.-con., $29,866.

Fulton Co., Sect. "L-1" Archbold-Fayette Rd., 1.018 mi., rein.-con., $21,541; bituminous macadam asphalt or tar, $19,249.

Harrison Co., Sect. "L-2" and "K" Nidgeport-Cadiz Rd., 5.165 mi., bituminous macadam, asphalt or tar, $157,633.

Jefferson Co., Sect. "A" Mingo-Smithfield Rd., 3.714 mi., bituminous macadam asphalt or tar, $109,861.

Jefferson Co., Sect. "New Alexandria" Mngo-Smithfield Rd., 0.227 mi., bituminous macadam, asphalt or tar, $8,180.

Knox-Licking Counties, Sect. "K" Columbus-Millersburg Rd., 1.42 mi., rein.-con., $44,736.

Mercer Co., Sect. "Celina" Celina-Wabash Rd., 0.261 mi., rein.-con., $13,061; brick, $17,525.

Morgan Co., Sect. "C" McConnelsville Rd., 1.8 mi., rein.-con., $52,666.

Morgan Co., Sect. "C" McConnelsville-Zanesville Rd., 2.1 mi., bituminous macadam, asphalt or tar, $58,697.

Muskingum Co., Sect. "F-2" Zanesville-New Lexington Rd., 1.648 mi., brick, $82,458; Kentucky rock asphalt, $74,624.

Streets and Roads (Continued)

Putnam Co., Sect. "N" Lima-Ottawa Rd., 2.718 mi., Kentucky rock asphalt, $72,019; rein.-con., $72,920.

Putnam Co., Cect. "A" Ottawa-Defiance Rd., 2.602 mi., Kentucky rock asphalt, $76,515; rein.-con., $71,190.

Putnam Co., Sect. "H" Ottawa-Defiance Rd., 0.556 mi., Kentucky rock asphalt, $14,864; rein.-con., $14,388.

Seneca Co., Sect. "Attica" Columbus-Sandusky Rd., 0.35 mi., brick, $30,350.

Shelby Co., Sect. "Anna" Sidney-Wapakoneta Rd., 0.516 mi., rein.-con., $18,615.

Shelby Co., Sect. "Botkins" Sidney-Wapakoneta Rd., 0.507 mi., rein.-con., $15,479.

Tuscarawas Co., Sect. "P-2" Newcomerstown-Uhrichsville Rd., 1.238 mi., monolithic brick, $53,585; rein.-con., $44,965; Kentucky rock asphalt, $45,219.

Wayne Co., Sect. "O" Wooster-Mansfield Rd., 3.555 mi., brick, $140,097.

Wood Co., Sect. "B" Perrysburg-Fostoria Rd., 1.549 mi., bituminous macadam, asphalt or tar, $33,700.

Wyandot Co., Sect. "I-1" Bucyrus-Upper Sandusky Rd., 0.954 mi., brick, $40,431; bituminous concrete, $34,988.

Williams Co., Sect. "G" Stryker-Evansport Rd., 1.187 mi., grading and constructing bridges and culverts, $16,190.

Williams Co., Sect. "D" Stryker-Evansport Rd., 2.58 mi., grading and constructing bridges and culverts, $6.601. L. C. Herrick, dir. highways.

O., Akron—Aug. 2, by M. P. Tucker, dir. Pub. Serv., grading and paving 5,255 ft. Rosyln Ave., 24 ft., 9,050 lin.ft. stone curb, 47,650 sq.ft. cement sidewalk, 4,700 cu.yd. earth excav., 14,600 sq.yd. vitr. brick, concrete or asphalt on concrete, $82,000; 3,043 ft. Orlando Ave., 24 ft., 5,700 lin.ft. stone curb, 28,600 sq.ft. cement sidewalk, 2,700 cu.yd. earth excav., 8,400 sq.yd. vitr. brick concrete or asphalt on concrete, $49,000, 800 ft. Carroll St., 24 ft., 1,750 lin.ft. stone curb, 10,500 lin.ft. cement sidewalk, 3,000 cu.yd. earth excav., 2,800 sq.yd. vitr. brick or asphalt on concrete, $17,000, 900 ft. Commins St., 24 ft., 1,900 lin.ft. stone curb, 1,300 cu.yd. earth excav., 3,510 sq. yd. vitr. brick, concrete or asphalt on concrete, $18,000; grading, cindering and laying sidewalks on 3,800 ft. Dayton St., 6 ft. walk, 45,500 sq.ft. cement sidewalk, 6,500 cu.yd. earth excav. and 2,250 cu.yd. cinders, $16,000, 11,300 ft. Crestview, Greenwood, Orrin, Bye, Peckham and Stadelman Sts., 5 ft. walks, 99,000 sq.ft. cement sidewalk, 10,000 cu.yd. earth excav., 4,900 cu. yd. cinders, 3,870 ft. 12-18 in. vitr. sewers, $47,000. E. A. Kemmler, Delaware Bldg., engr.

O., Centerburg—Aug. 1, grading, curbing and paving Preston, Church, Landrum and Valley Sts., 9,500 sq.yd. brick. $50,000. Jennings-Lawrence Co., Hartman Bldg., Columbus, engrs.

O., Cleveland—July 26, by Cuyahoga Co., paving Bean Rd. 2 from Ridge to State Rds., concrete, $54,024; Bassett Rd. from Lake Rd. to tracks of New York, Chicago & St. Louis R.R., 8,450 lin.ft. 4 in. gutter, 4,000 cu.yd. earth excav. and 10,534 sq.yd. concrete, $43,777. F. J. Lander, Court House, engr.

O., Columbus—July 25, by W. H. Duffy, dir. Pub. Serv., grading, curbing and paving Clinton St. from 4th St., to Cleveland, Cincinnati, Chicago & St. Louis R. R. tracks, 332 ft. long, 24 ft. wide, brick, $5,695, asphalt, $5,212, 8th Ave. from Summit St. to alley east of Summit St., 145 ft. long, 20 ft. wide, brick, $2,268, asphalt, $2,175, Frebis Ave. from the west line of Schmitt's addition to Parsons Ave., 384 ft. long, 24 ft. wide, brick, $5,979, asphalt, $5,421, Tompkins St. from 4th St. to Cleveland, Cincinnati, Chicago & St. Louis R. R. tracks, 303 ft. long, 20 ft. wide, brick, $4,439, asphalt $4,090, Capital St. from West Park St. to Princeton Ave., 300 ft. long, 20 ft. wide, brick, $2,525, asphalt, $1,780; grading and paving Alley west of 4th St., from Oakland to Wyandotte Ave., 366 ft. long, 16 ft. wide, brick, $1,838, concrete, $1,466, Alley north of 5th Ave., from alley west of Neil Ave. to Pennsylvania Ave., 306 ft. long, 16 ft. wide, brick, $1,884, concrete, $1,487, Alley west of 4th St. from New Indianola Sub-division to 9th Ave., 340 ft. long, 16 ft. wide, brick, $2,939, concrete, $2,024, Alley west of Lexington Ave., from Buckingham St. to Hoover Ave., 450 ft. long, 16 ft. wide, brick, $3,120, concrete, $2,505, Alley north of Madison Ave. from alley wst of Auburn St. to Auburn St., 208 ft. long, 20 ft. wide, brick, $929, concrete, $779, 11th Ave. from High to 4th Sts., 2,155 ft. long, 36 ft. wide, resurfacing present surface, asphalt, $23,335; Fair Ave. from Champion Ave. to Franklin Park West, 2.529 ft. long, 30 ft. wide, resurfacing the present roadway, asphalt, $27,737; Champion Ave. from Main St. to Livingstton Ave., 2590 ftt. long, 28 ft. wide, making necessary water and sewer connections and paving with asphalt over brick surface, $29,201. R. H. Simpson, city engr.

O., Dayton—July 24, by G. M. Baker, dir. Pub. Serv., paving 1,500 ft. Garland Ave. from 3rd to Woodley Sts., 30 ft. wide, 5,000 sq.yd. rein.-con., $13,991; 1,800 ft. Louie St. from Norwood to Washington Sts., 30 ft. wide, 6,000 sq.yd. brick, $31,466. I. E. Houk, city engr.

O., Fredericktown—Aug. 10, grading, curbing and paving Main, Mansfield and Railroad Sts., 1,100 sq.yd. brick. $26,000. Jennings-Lawrence Co., Hartman Bldg., Columbus, engrs.

O., Upper Arlington—July 26, grading, curbing, laying water mains, sewers and asphalt paving 3,000 ft. Tremont Rd. from Tewksbury Rd. to Lane Ave., 26 and 36 ft., $43,000; 2,100 ft. Yorkshire Rd. from North Union to Tremont Rds., 20 ft., $24,000; 800 ft. Fairfax Rd. from Tewksbury Rd. to Arlington Ave., 20 ft., $5,000; 1,700 ft. Andover Rd. from 5th Ave. to Tremont Rd., 20 ft., $13,000. Jennings-Lawrence Co., Hartmann Bldg., Columbus, engrs.

O. Wadsworth—Aug. 15, by Village Council, improving North Lyman St. to Akron-Wadsworth Rd., bituminous macadam; Highland Ave. from Prospect St. northerly 1 block incl. intersection, vitr. brick. R. W. Simester, village clk.; adv. this issue.

Ind., Crown Point—July 31, by Comrs. Lake Co., grading, draining and graveling 4.5 mi. G. M. Foland Rd., 18 ft., $53,800; 7 mi. J. E. Fidler Rd., 24 ft., $120,125. County Surv., Crown Point, engr.

Ind., Goshen—July 31, by Comrs. Elkhart Co., grading, draining and graveling 15,883 ft. Co. Unit Rd. 11, 18 ft., $30,650; 22,200 ft. Co. Unit Rd. 18, 16 ft., $98,492; 31,700 ft. Co. Unit Rd. 37, 16 ft., $35,805; 15,790 ft. Twp. "Q," 32 ft., $71,456; grading and concrete paving 16,397 ft. Co. Unit Rd. 13, 16 ft., 24,715 sq.yd. concrete, $76,126; 13,000 ft. Co. Unit Rd. 14, 16 ft., 23,111 sq. yd. concrete, $59,005; 25,110 ft. Co. Unit Rd. 31, 18 ft., 44,640 sq.yd. concrete, $118,120.

Michigan—July 27, by State Hy. Dept., Lansing, grading and surfacing 6.46 mi. Assessment Dist. Rd. 209, 16 ft., 14,455 cu. yd. earth excav., 60,567 sq.yd. waterbound macadam or stone-gravel. State Hy. Dept., Lansing, engrs.

Michigan—July 27, by State Hy. Dept., Lansing, grading and surfacing 2.064 mi. Assessment Dist. Rd. 235, Saginaw Co., 6,901 cu.yd. excav., 19,370 sq.yd. waterbound macadam or stone gravel.

Michigan—July 28, by State Hy. Dept., Lansing, grading and surfacing 2.564 mi. State Trunk Line Rd. 13-16, Kent Co., 15,491 cu.yd. excav., 27,071 sq.yd. asphalt, concrete or bituminous concrete. L. H. Belknap, ch. engr.

Ill., Blue Island—July 25, by Bd. Local Impvts. paving various streets. P. T. Klenk, pres.; adv. this issue.

Wis., Walworth—July 28, by J. G. Blaine, village clk., 8,700 sq.yd. rein.-con., 3,300 lin.ft. combined concrete curb and gutter, 4,400 cu.yd. earth excav. $25,000.

Ia., Waukon—July 24 by J. D. Cowan, city clk., paving 40,350 sq.yd. various streets, 28,350 lin.ft. curb and gutter. $140,000. M. Tschirgi & Sons, 712 Amer. Trust Bldg., Cedar Rapids, engrs.

Minn., Winona—July 31, by F. S. Bell, secy. Bd. Park Comrs., 8,533 sq.yd. vitr. brick block and 7,365 lin.ft. 6 in. concrete curb, $25,000. E. E. Chadwick, city engr.

N. D., Fargo—July 28, by W. R. Tucker, aud. Cass Co., grading and graveling 18 mi road east and west through Casselton, Federal Aid Project 14,493,696 cu.yd. excav., 34,053 cu.yd. gravel. $55,000.

Missouri—July 26, by State Hy. Dept. at div. office Bloomfield, 4.256 mi. road from Cairo to Poplar Bluff, 24 ft., Federal Aid Project 179, Stoddard Co., 22.349 lin.ft. grading, 39,732 sq.yd. of 16 ft. gravel surfacing. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—July 26, by State Hy. Dept. at div. office Bloomfield, 9.943 mi. road from Gray Ridge westward, Federal Aid Project 118, Sect. B, 24 ft., Stoddard Co., 24,670 cu.yd. earth excav., 4,798 cu.yd. borrow, 174.4 cu.yd. concrete masonry, 22,546 sq.yd. of 16 ft. gravel surfacing, etc. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—July 26, by State Hy. Dept. at div. office Bloomfield, 4.256 mi. road from Jackson Co. line to Blackburn, 24 ft. State Aid Project 20.164, Lafayette Co., 38,042 cu.yd. earth excav., 3,108 cu.yd. borrow, 288.7 cu.yd. concrete masonry, etc. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—July 27, by State Hy. Dept. at div. office Shelbyville, 4,529 mi. road from Shelbyville northward and southward, State Aid Project 20.129, Shelby Co., 24,108 cu.yd. earth excav., 14,730 cu.yd. borrow, 282.3 cu.yd. concrete masonry, 18,202 lb. reinforcing steel, etc. B. H. Piepmeier, Jefferson City, state highway engr.

Tex., Austin—July 28, by G. S. Matthews, judge Travis Co., surfacing 9.15 mi. State Highway 20 from Manor to Bastrop Co. line, 16 ft., 81,110 sq.ft. 1½ in. bituminous topping. $65,000 incl. 10% for engineering and contingencies. O. Leonard, co. engr.

Tex., Eldorado—July 26, by C. A. Womack, judge Schleicher Co., surfacing 11.43 mi. State Highway 4, Federal Aid Project 135, 16 ft., 86,890 gal. asphalt, 3,934 cu.yd. cover material. $48,000. G. Gilchrest, San Angelo, engr. in charge. Noted June 22.

Tex., Georgetown—Aug. 1, by F. D. Love, judge Williamson Co., grading, surfacing, etc., 15.57 mi. State Highway 2-C from here to north line of Precinct 1, 16 ft., 4,868 cu.yd. borrow, 55,557 cu.yd. roadway excav., 137,026 sq.yd. ⅜ in. bituminous macadam, 995.5 cu.yd. concrete, 95,055 lb. reinforcing, 4,805 cu.yd. shale and 20,462 cu.yd. gravel, $125,555; 11.35 mi. State Highway 43-A, 18 ft., 28,301 cu.yd. borrow, 71,557 cu.yd. roadway excav., 985 sq. yd. concrete, 92,172 lb. reinforcing, 40,550 cu.yd. gravel, $104,880. R. A. Nichols, co. engr.

Tex., Lufkin—July 25, by J. F. Robinson, judge Angelina Co., grading gravel surfacing, etc., 5.47 mi. State Highway 35 from point 5.1 mi. south of here toward Polk Co line, 18.2 acres clearing, 9,283 cu.yd. borrow, 21,947 cu.yd. roadway excav., 353 cu.yd. concrete, 29,717 lb. reinforcing, (14,278 cu.yd. gravel furnished by county) $77,079. G. R. Abney, co. engr.

Tex., Lufkin—July 26, by J. F. Robinson, judge Angelina Co., grading, gravel surfacing, etc., 5.09 mi. State Highway 35 from Lufkin south, Sect. B, Federal Aid Project 271, 16 ft., 26,285 cu.yd. borrow, 23,699 cu. yd. roadway excav., 913.7 cu.yd. concrete, 47,748 sq.yd. 1¼ in. bituminous macadam, 83,001 lb. reinforcing, (13,252 cu.yd. gravel furnished by county), $133,498; 4.19 mi. State Highway 35 from Polk Co. north, 16 ft., 20,285 cu.yd. borrow, 19,209 cu.yd. roadway excav., 475 cu.yd. concrete (10,920 cu. yd. gravel furnished by county), $68,872. G. R. Abney, co. engr.

Tex., Sonoro—July 27, by L. W. Elliott, judge Sutton Co., grading, gravel surfacing and bridging 9.66 mi. State Highway 4, Federal Aid Project 272, 18 ft., 1,111.5 cu. yd. concrete, 22,129 cu.yd. earth and 3,520 cu.yd. rock excav., 71,338 lb. reinforcing, (30,774 cu.yd. gravel furnished by county). $114,009. J. W. Alger, co. engr. Noted Feb. 2.

Nevada—State Hy. Dept., Carson City, receiving bids grading and gravel surfacing 7.5 mi. road between 6.9 mi. Southeast Canon and 3.6 mi. Southeast Rose Well, Nye Co. G. W. Borden, state highway engr.

California—August 7, by State Hy. Comn., paving between Quail Lake and north boundary, Los Angeles Co., 3.4 mi., to be paved with Portland cement concrete, 6.8 mi. asphaltic concrete surface, Portland cement shoulders, 0.2 mi. widened with Portland cement shoulder; grading and paving with Portland cement 2 mi. road through Banning, Riverside Co. A. B. Fletcher, Forum Bldg., Sacramento, engr.

Cal., San Rafael—August 8, by supervs. Marin Co., paving portion San Rafael and Olema Rd. through Fairfax, and portion Fairfax and Bolinas Rd. in Dist 2, 1,512 cu.yd. grading, 89,968 sq.ft. 4 in. and 111,258 sq.ft. 3 in. asphalt pavement,, 190,326 sq.ft. 5 in. hydraulic concrete pavement, etc. G. Dodge, co. surv. Noted March 23.

Cal., Woodland—August 2, by supervs. Yolo Co., Prefix 8, Sect. A. (extension of Main St.) 1,650 cu.yd. earthwork, 25 cu.yd. portland cement, Class B (headwalls), 84,900 sq.ft. Class A, portland cement concrete pavement. Noted June 15.

Quebec — Aug. 1, by I. L. Boulanger, deputy minister of highways, Quebec, graveling 16 mi. Montreal-Sherbrooke Highway, Granby Twp., St. Paul Parish, also 38,252 ft. Montreal-Toronto Highway, St. Zotique and St. Claire D'Arrise Parishes, both 16 ft. wide. M. Necktar, c/o Dept. Rds., Quebec, engr.

BIDS RECEIVED

New York—H. S. Sisson, comr. State. Hy. Dept., Albany, opened bids July 11, improving (1) 4.15 mi. Highway 8115 Arcade-Farmersville, Part 2, Cattaraugus Co., (2) 8.82 mi. Highway 8116 Greene-Coventry, Chenango Co., (3) 7.150 mi. Highway 8117 Deposit-Rock Rift, Part 2, Delaware Co., (4) 7.7 mi. Highways 1621 and 8118 Bloomville-Hobart, Parts 1 and 2, Delaware Co., (5) 1.6 mi. Highways 5675 and 8119 Cazenovia Village, Parts 1 and 2,

Streets and Roads **(Continued)**

Madison Co., (6) 10.14 mi. Highway 8120 Edwards-Fine, St. Lawrence Co., (7) 0.62 mi. Highway 8123 Greenwich Village: Washington Pl. and Salem St., Washington Co., (8) 4.68 mi. Highway 8121 Pike-Gainesville, Wyoming Co., (9) 2.92 mi. Highway 8122 Penn Yan-Potter, Part 2, Yates Co., repairing (10) 1.27 mi. Repair Contr. 1346 Highway 5121-North Norwich-Sherburne, Chenango Co., from Hendrickson-McCabe Constr. Co., Inc., Syracuse, (1) $134,896 (8) $148,615; F. J. Foote, Nunda, (1) $135,841 (8) $150,143; S. Rosoff, Jr., Warsaw, (1) $138,068; J. F. Paddelford, North Main St., Sherburne, (2) $347,865 (10) $31,450; Peconco Eng. & Contg. Corp., 1170 Bway., New York, (2) $349,995 (5) $362,813; N. E. Young, Union, (3) $263,990; F. G. Fowler Constr. Co., 77 Carpenter Ave., Mt. Kisco, (3) $269,737; Hogeboom & Campfield, Inc., Kingston, (4) $187,585; Schunnemunk Constr. Co., Highland Mills, (4) $189,595; O. P. Williams, Delhi, (4) $194,897; G. W. Chambers, 40 Tremont St., Rochester, (5) $52,989; Mondo Constr. Co., Inc., C. B. Bldg., Syracuse, (5) $56,598; Smith Bros. Constr. Co., Cleveland Bldg., Watertown, (6) $353,405; W. G. Fox, Saratoga Springs, (7) $35,918; E. D. Fote, Olean, (8) $155,664; Greenfield Constr. Co., 89 Main St., Hornell, (9) $85,422; Gould & Kranz, Brooklyn, (9) $93,346; B. Shay, Dundee, (9) $93,354; V. Vrooman, Gloversville, (10) $31,951. Noted June 29.

N. Y., Long Island City—M. E. Connolly. pres, Queens Boro, Queens Subway Bldg., opened bids July 10, grading and paving Bell Ave., also setting curb on easterly side of Wainscott (Warburton) Ave., etc., from R. A. Hess, Inc., Corona, $45,701; Kennedy & Smith, Inc., 93 Amity St., Flushing, $50,880; Peace Bros., Inc., 20 Main St., Flushing, $53,005. Noted July 6.

Pa., Bradford—E. C. Charlton. city clk., opened bids July 3, paving (1) Mill St., (2) York St., (3) Hobson Pl., (4) Pearl St., (5) sewers in Holly and Willis Aves., from Applegate & Son, 3 East Ave., (1) $22,855, (2) $7,538, (3) $8,811, (5) $3,152; F. D. Ross, 74 High St., (1) $20,133, (2) $6,765, (3) $7,694, (4) $4,501, (5) $3,511. Noted June 29.

Pa., Clairton—Opened bids July 10, paving (1) 6th Ave. concrete (2) State St., brick or concrete (a) sewers in same (b) paving and sewers combined (3) grading 4th Ave. (4) Chambers St. (5) Sycamore St. from J. W. Butler, McKeesport (1) $14,695 (35 days) (2) $24,333 (35 days) (a) $1,726 (b) $26,059 (3) $2,560 (4) $1,600 (5) $1,280; Bucannelly Constr. Co., West Elizabeth, (1) $14,064 (2) $27,220 (a) $1,544 (b) $28,763; Bowman Bros., McKeesport, (1) $15,733 (3) $2,400 (4) $2,000 (5) $1,600; A. Ancarana, Port Vue, (2) $28,938 (2b) $30,883 (3) $2,880 (4) $1,800 (5) $1,440. F. H. Crosier, McKeesport, (2a) $1,712. Noted July 6.

Pa., Phila.—F. H. Caven, dir. pub. wks. opened bids July 11, paving (1) 51st St. from Viola St. to Leidy Ave., Tower St. from Roxborough Ave. to Jamestown St., Marshall St. from Brown to Polar Sts., asphalt, (2) Chester Ave. from 65th to 66th Sts., Percy St. from Emily to Snyder Sts., Madison St. from Cedar to Aramingo Sts., asphalt, (3) Hutchinson St. from Ruscomb St. to Lundley Ave., Indian St. from Broad to 15th Sts., Franklin St. from Wyoming Ave. to Louden St., asphalt, (4) Snyder Ave. from 23rd to 24th Sts. and Brewster Ave. from 83rd to 86th Sts., bituminous, (5) Delaware Ave. from Columbia Ave. to Dyott St., (6) 58th St. Woodland Ave. to Baltimore & Ohio R.R., redressed granite block, from Barber Asphalt Paving Co., Land Title Bldg., (1) $25,897, (2) $25,112, (3) $26,973, (4) $29,474; Eastern Paving Co., Colonial Trust Bldg., (1) $27,653, (2) $27,534, (3) $26,168, (4) $29,563; Union Paving Co., 34th and Spruce Sts., (2) $27,470, (3) $27,174, (4) $27,484, (5) $492,435; Fish-Rutherford Co., Real Estate Trust Bldg., (5) $503,653, (6) $3,652; J. Lombardi, Lincoln Bldg., (5) $499,672; A. A. Pastori, 5903 Woodland Ave., (6) $3,530. Noted July 6.

D. C., Wash.—Dist. Comrs., 509 Dist Bldg., opened bids July 12 paving various streets and avenues, sheet asphalt from Cranford Paving Co., 2620 E St., N. W., Item 1 (a) sheet asphalt $3.21, (b) $3.11; Item 2 $3.21; Corson & Gruman, Wash., Item 1 (b) $3.23, Item 2 $3.28. Noted July 6.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids July 14, grading, bridging and paving roads with (a) brick, (b) asphaltic macadam, oil, (c) tar macadam, (d) asphaltic macadam, lake, (e) bituminous concrete, (f) Kentucky rock asphalt, (g) rein.-con., (h) bituminous concrete, oil, (i) bituminous concrete, lake, (j) bituminous macadam, asphalt, (k) bituminous macadam, tar, (l) bituminous macadam, (a-1-b) (m) state to furnish brick, (n) plain concrete, (o) asphaltic concrete, oil, (p) asphaltic concrete, lake, (q) asphaltic macadam, oil or lake, (r) asphaltic macadam, (s) monolithic brick, (t) tar macadam, oil or lake in following counties: Clinton Co., Sect. "R" Cincinnati-Zanesville Rd., 7,545 mi., from H. N. Snyder, Columbus, (a) $309,221; Brewer & Brewer Sons, Chillicothe, (a) $310,953. Columbiana Co., Sect. "A-1" Lisbon-Canton Southern Rd., 3.922 mi., from E. J. Kane, 461 West Indianola Ave., Youngstown, (a) $156,843, (b) $118,731, (c) $118,731; Allison-Harris Co., East Liverpool, (a) $159,336; Jones Constr. Co., Salem, (a) $164,025, (b) $125,594, (c) $125,594; Ready Bros., Warren, (c) $122,713. Hardin Co., Sect. "L" Lima-Kenton Rd., 2.966 mi., from Losey Rd. Constr. Co., Kenton, (b) $54,632, (c) $55,572, (d) $58,704, (e) $74,801, (f) $69,809; Walker Sousley, Ada, (b) $60,980, (c) $60,955; Thompson-Oroark, Toledo, (b) $60,376, (c) $60,376; C. V. Rector, Lima, (e) $73,755, (f) $71,515; J. W. Carey, Ada, (f) $71,705. Henry Co., Sect. "Napoleon" Wauseon-Napoleon Rd., 0.5295 mi., from Zeller Bros. & McDonald, Maumee, (g) $13,059. Henry Co., Sect. "B" Ottawa-Napoleon Rd., 4.04 mi., from Creager Bros., Liberty Center, (b) $73,960, (c) $74,958, (f) $88,922; C. L. Straw, Paulding, (b) $76,078, (c) $76,078, (f) $95,503; R. Stone Constr. Co., Lima, (b) $70,535, (d) $70,535, (f) $92,456; A. Langenderfer, Toledo, (c) $77,301. Huron Co., Sect. "E" Barberton-Greenwich Rd., 3.124 mi., from Rice & Rice, Shelby, (g) $99,616. Huron Co., Sect. "Greenwich" Barberton-Greenwich Rd., 0.161 mi., from Rice & Rice, Shelby, (g) $3,961. Huron Co., Sect. "S" Norwalk-Mansfield Rd., 2,504 mi., from Rice & Rice, Shelby, (g) $58,668. Lorain Co., Sect. "D and E" Cleveland-Elyria Rd., 6.23 mi., from Ohio Eng. Co., Lorain, (a) $191,283, (h) $142,615, (i) $157,254; M. A. Ryan, 870 Eddy Rd., Cleveland, (a) $187,852; Elyria Constr. Co., 220 Elyria Block, Elyria, (a) $193,256; Highway Constr. Co., 903 Lorain Co. Blk. Bldg, Elyria, (h) $145,798, (i) $151,654; Smith Constr. Co., Youngstown, (h) $153,514. Marion Co., Sect. "H" Marion-Galion Rd., 3.077 mi., from Malloy & Seckel, Marion, (j) $97,624, (k) $93,947; F. F. Walton Co., Upper Sandusky, (j) $101,741, (k) $97,756; Marifield & Uncapher, Marion, (j) $103,601, (k) $97,599. Marion Co., Sect. "K" Marion-Galion Rd., 3.481 mi., from F. F. Walton Co., Upper Sandusky, (j) $91,007, (l) $94,973; Marifield & Uncapher, Marion, (j) $91,390, (l) $98,143; Brady & O'Connell, Marion, (j) $94,612; P. Drake & Sons, Marion, (l) $97,357. Morrow Co., Sect. "L" Mt. Gilead-Mansfield Rd., 6.322 mi., from J. McNamara, Jr., Delaware, (f) $195,753, (g) $185,585; P. Drake & Sons, Marion, (f) $196,695; Smith Constr. Co., Youngstown, (e) $194,511, (g) $198,243; C. W. Conley, Columbus, (g) $194,255. Noble Co., Sect. "O" Cambridge-Caldwell Rd., 4.716 mi., from Wilson-Miller Co., Barnesville, (a) $170,402, (m) $134,950; S. A. Palmer, Marietta, (a) $171,043; J. P. Mumaw, Cambridge, (m) $133,199; G. W. McElfresh, Caldwell, (m) $133,898. Noble Co., Sect. "J" Caldwell-Marietta Rd., 3.257 mi., from Gaty Constr. Co., Central Natl. Bank Bldg., Columbus, (n) $146,948; Cavanaugh-De-Niro Co., Youngstown, (n) $149,361; G. W. McElfresh, Caldwell, (n) $151,824. Ottawa Co., Sect. "L" Toledo-Elmore Rd. 0.992 mi., from J. H. Murphy Constr. Co., Burgoon, (a) $38,860, (g) $32,179, (i) $36,841, (o) $36,841; H. G. Witte & Son, Elmore, (a) $39,700, (g) $33,697, (i) $38,870. Thompson-O'Roark Co., Toledo, (a) $40,380, (o) $36,813; Smith Constr. Co., Youngstown, (o) $37,922; Modern Constr. Co., Fremont, (i) $39,389; LaBoiteaux & Hayes, Toledo, (g) $33,926. Sandusky Co., Sect. "A" Toledo-Elmore Rd., 2.278 mi., from J. H. Murphy Sons, Burgoon, (a) $91,563, (g) $78,355, (o) $87,854, (p) $87,854; H. G. Witte & Son, Elmore, (a) $96,558, (g) $76,904, (p) $92,161; F. F. Walton, Upper Sandusky, (a) $98,298; Thompson-O'Roark, Toledo, (o) $88,018; Modern Constr. Co., Fremont, (p) $91,086; LaBoiteaux & Hayes, Toledo, (g) $76,787. Pickaway Co., Sect. "New Holland" Cincinnati-Zanesville Rd., 0.923 mi., from Reichelfelder Co., Circleville, (a) $30,297; M. M. Girton, Washington C. H., (a) $32,183, (g) $25,298, (q) $21,049; Anderson & Brown, Chillicothe, (a) $32,435. Pickaway Co., Sect. 'F-2" Columbus-Washington Rd., 0.8 mi., from Curry & Hayes, Eaton, (a) $34,585, (b) $$22,432, (c) $22,432; Reichelfelder Co., Circleville, (a) $32,990; H. N. Snyder, Columbus, (a) $34,410. Pickaway Co., Sect. "F-2" Columbus-Washington Rd., 0.19 mi., from Curry & Hayes, Eaton, (a) $45,431, (c) $41,277, (r) $41,277; Reichelfelder Co., Circleville, (a) $42,325; H. N. Snyder, Columbus, (a) $46,331. Portage Co., Sect. "D" Aurora-Warren Rd., 3.593 mi., from A. W. Morette, 23 East Exchange St., Akron, (g) $105,793; Seiple Wolfe Co., Youngstown, (g) $106,798; Ready Bros., Warren, (a) $107,572; Mango & Colluci, Youngstown, (a) $107,922, (m) $83,698. Scioto Co., Sect. "R-2-A" Ohio River Rd., 3.139 mi., from Harper-Ruel Co., Portsmouth, (s) $125,083; G. Miller, Brooksville, Ky., (t) $99,210. Scioto Co., Sect. "R-2-B" Ohio River Rd., 2.815 mi., from Harper-Ruel Co., Portsmouth, (s) $99,211; Mills & Conley, Visalia, (t) $81,864. Trumbull Co., Sect. "C" Painesville-Warren Rd., 2.62 mi., from Mahoning Constr. Co., Warren, (c) $79,005, (g) $85,534, (r) $79,005; T. Vesy, Youngstown, (r) $82,423; Taylor & Bauer, Farmdale, (c) $80,549. Trumbull Co., Sect. "Newton Falls" Ravenna-Warren Rd., 0.756 mi., from J. De Jute, 218 Williams St., Niles, (a) $30,975. Mahoning Co., Sect. "V" Canfield-Poland Rd., 2.21 mi., from Brown & Allen, Ellsworth, (j) $23,342; E. J. Kane, Youngstown, (j) $23,598; P. H. Manly 59 Warren Ave., Youngstown, (j) $23,598, (k) $23,213; Smith Constr. Co., Youngstown, (k) $22,304; Gray Bros., Youngstown, (k) $22,957. Wayne Co., Sect. "O" Wooster-Mansfield Rd., grading and building culverts, 3,355 mi., from Stein & Geisel, Niles, $46,892; J. C. McCann, 191 Belvidere Ave., Columbus, $47,994; Henderson Bros., Chagrin Falls, $49,120. Noted July 6.

O., Cleveland—Cuyahoga Co. paving Kinsman Rd., 20,600 lin.ft. 5 x 20 in. stone curb, 21,000 cu.yd. earth excav., 38,700 sq.yd. vitr. brick or asphalt, 9,050 sq.yd. concrete base, from A. M. Pejsa Paving Co., Euclid Blvd., Cleveland Heights, $220,117; H. G. Herring, Pavers' Exch., Society for Savings Bldg., $221,431.

O., Euclid—Opened bids July 3, (a) concrete, (b) bluestone or (c) sandstone sidewalks on (1) East 107th St., Arbor and Bliss Rds., (2) Cut Rd., Pond, Erieview and Brewer Aves., (3) Donald Ave., (4) Fuller Ave., (5) Goller Rd., East 209th, 210th, 212th and North Vine Sts., from V. Q. Galier, Builders Exch., Cleveland, (1a) $46,661; Ohio Quarries Co., Citizens Bldg., Cleveland, (1c) $56,463, (2c) $47,283; F. B. Stein, Euclid, (2a) $44,852, (3a) $2,770, (4a) $7,875, (5a) $20,939; Green Rd. Stone & Supply Co., Euclid, (4b) $8,125, (5b) $20,692. Noted June 22.

Ind., Indianapolis—Comrs Marion Co. opened bids paving 2.55 mi. Lloyd Durbin Rd., 26,928 sq.yd. concrete, from Phitzenmayer Constr. Co., Walnut St., Terre Haute, $70,102; W. J. Nees, Indianapolis, $76,651; L. C. McNamara Constr. Co., 946 West New York St., $81,877. Noted June 15.

Wis., Juneau—Dodge Co. State Road and Bridge Com., cement concrete paving 1.51 mi. Beaver-Dam-South Beaver Dam Rd., (a) if county furnishes cement, (b) if contractor furnishes cement, from Schreiber & Waterworth, Randolph, 10 acres clearing and grubbing $25, 7,178 cu.yd. earth excav. $0.47, 8,511 sq.yd. concrete surfacing $1.30, etc., total (a) $19,224, (b) $24,821; 4.54 mi. Juneau-Watertown Rd., from M. Martin, Berlin, 15,000 cu.yd. unclassified excav. $0.75, 900 cu.yd. borrow $0.75, 48,200 sq.yd. concrete surfacing $1.35, etc., totals (a) $83,462, (b) $121,694.

Minn., Fairmont—Opened bids July 6, concrete paving about 10,600 sq.yd. various streets, from F. D. Gould, Fairmont, $23,383, Wessel Bros., 721 Guardian Life Bldg., St. Paul, $26,662.

Wash., Seattle—Opened bids July 1, paving Yale Ave., et al., from R. G. Stevenson, 1327 34th St., $62,191; V. Ramaglia, 4415 Corliss Ave., $63,345; Jahn & Bressi, Thompson Bldg., $63,594.

CONTRACTS AWARDED

Maine—State Hy. Dept., Augusta, 3.443 mi. State Highway "O," Project 35, in Canton, to W. H. Doran, Mercer, $32,065; 0.32 mi. State Highway "K," Project 47, in Island Falls, and 3.14 mi. State Highway "K," Project 51, in Easton, to M. Hughes, 105 3rd St., Bangor, $8,237 and $47,229 respectively; 4.023 mi. State Highway "O," Project 32, in Canton, and 0.85 mi. State Highway "F," in Wilton, to J. H. Kerr, Rumford, $46,101, and $17,539 respectively; 2.188 mi. State Highway "K," Project 43, in Orono, to Portland Constr. Co., 21 Portland St., Portland, $55,992; 1.76 mi. State Highway "K," Project 53, in Orono, to Hassam Paving Co., 17 Federal St., Worcester, Mass., $50,717; 4.66 mi. State Highway "E," Project 12, in New Gloucester, to J. McCormick, 319 Taunton Ave., East Providence, R. I., $191,120. Noted July 13.

New Hampshire—State Hy. Dept., Concord, paving 0.8 mi. highway in Sunapee, 18 ft., bituminous macadam on stone, also two 24 ft. span bridges, to Colburn Constr. Co., Concord, $32,679.

Streets and Roads (Continued)

Massachusetts—State Hy. Dept., Boston, 16,038 ft. State Rd., 18 ft., in Great Barrington, about 32,000 sq.yd. bituminous macadam, to Lane Constr. Co., 37 Colony St., Meriden, Conn., $117,418; 1,225 ft. in Wrentham, about 2,450 sq.yd. bituminous macadam, to L. Luchini & Sons, Milford, $7,716; 10,200 ft. in Lexington, 20,000 sq.yd. bituminous macadam, to J. W. O'Connell, Boston, $43,904; 2,200 ft. in Framingham, 4,400 sq.yd. bituminous macadam, to C. Bianchi & Co., Inc., 200 West Central St., Framingham, $10,037.

Rhode Island—State Bd. Pub. Wks., 3.9 mi. Post Rd. in Charlestown, bituminous concrete, to A. D. Bridges Sons Co., Hazardville, Conn., $114,095.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., recurbing, reflagging and paving, etc., 5th Ave., also repaving Cooper Ave., to Cleveland Trinidad Paving Co., Flushing, $12,045 and $66,414 respectively; paving Liberty Ave., to W. P. McDonal Constr. Co., 17 West 42nd St., New York, $41,610. Noted July 13.

N. Y., New York—Dept. Parks, Municipal Bldg., paving centre roadway of Bronx and Pelham Parkways, etc., to C. D. Beckwith, Inc., 2875 Bway, $27,515. Noted July 13.

N. Y., New York—W. J. Flynn, acting pres. Bronx Boro, grading, setting curbs and laying sidewalks on Harrison Ave., etc., to C. D. Beckwith, 2875 Bway., $26,424. Noted July 6.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., widening and repaving Madison Ave., to J. E. Gaffney, 143rd St. and Harlem River, $52,731; 34th St. (curb to rail), to W. J. Fitzgerald, 547 West 45th St., $19,509. Noted July 13.

N. Y., Niagara Falls—To Read-Coddington Eng. Co., 238 Portage Rd., paving alleys, Contr. 248, $12,404, Contr. 241 $4,993; Contr. 247, $6,140 all foregoing concrete; Contr. 235, $6,627, 3 in. vertical fibre brick. Noted June 29.

N. Y., Rochester—Bd. Contr. & Supply, asphalt paving Navarre Rd. and Rutledge Dr., both bitulithic, to O. Costich Co., 131 Rosewood Terrace, $25,000 and $23,286 respectively, Ave. E, Carthage and Hooker Sts., to J. Petrossi Co., Rochester, $18,453, $9,271 and $8,892 respectively, Raymond St. and sewer in Oneida St., to W. E. Kinney, Rochester, $4,403, and $8,032 respectively, Arnold Park, wood block, to Rochester Foundation Co., Rochester, $25,272; grading, laying sidewalks and sewers in Presque St., to W. Bailey Co., Rochester, $9,400.

New Jersey—State Hy. Dept., Trenton, constructing Route 1, Sect. 14 from Stelton Rd. to Metuchen, 49,855 sq.yd concrete, and Route 1, Sect. 13 from Highland Park to Stelton Rd., 32,811 sq.yd. cement, both Middlesex Co., to S. S. Thompson, Inc., Red Bank, 102.7% of engineers estimate ($335,720) and 104.6% ($291,969) respectively. Noted June 29.

N. J., Belvidere—Warren Co. constructing State Highway Route 9, Sect. 9A, Still Valley to Bloomsburg, to B. E. Tighe Constr. Co., Easton, Pa., 89% of engineer estimate or $127,786. Noted June 22.

N. J., Somerville—Constructing State Highway Route 9, Sect. 0.7 Main St., to J. L. Bachman, Inc., Linden, $76,095. Noted June 29.

Pennsylvania—State Hy. Dept., Harrisburg, Route 338, Winslow Twp. and Sykesville Boro., Jefferson Co., to Mason & Hanger Co., Inc., DuBois, $164,623; Route 262, Green, Grant and Montgomery Twps., Indiana Co., to Booth & Flinn, Ltd., 1942 Forbes St., Pittsburgh, $205,238; Applications 1867 and 1868, Rockdale and Cambridge Twps., Crawford Co., to Penn-Erie Constr. Co., Erie, $46,099; Route 20, Troy and Columbia Twps., Bradford Co., to Juniata Co., 410 Empire Bldg., Phila., $89,950; Route 251, Parker City Boro., Armstrong Co., to Jones Constr. Co., Lisbon Rd., Salem, O., $65,399; Route 221, Elder and East Carroll Twps., Cambria Co. and Route 62, Cambria Twp., Cambria Co., to Lord Constr. Co., Hastings, $224,600 and $74,819 respectively; Route 79, Shenango and Slippery Rock Twps., Lawrence Co., to Woods & Golder Constr. Co., 212 Mechanic St., New Castle, $207,626; Route 365, North Abington and Benton Twps., Lackawanna Co., to W. C. Evans, Ambler, $181,687; Route 234, Irvona Boro., Clearfield Co., to W. B. Hughes, 595 8th St., Clearfield, $54,346; Route 54, Blacklick Twp., Cambria Co., to Booth & Flinn, Ltd., 1942 Forbes St., Pittsburgh, $162,043; Route 20, South Creek Twp., Bradford Co., to H. W. Horst & Co., Horst Bldg., Rock Island, $197,759; Route 228, Young Twp., Indiana Co., and Route 228, White, Center, Blacklick and Young Twps., Jacksonville Boro., Indiana Co., to Torquato Bros. Co., 1317 Midway Ave., Windber, $233,021 and $296,376; Applications 1872 and 1874, Washington Twp., Edinboro Boro., Erie Co., and Applications 1880 and 1875, Leboeuf Twp., Mill Village Boro., Erie Co., to Penn-Erie Constr. Co., Erie, $122,342 and $58,919 respectively. Noted July 6.

GRADE SEPARATION—MILWAUKEE, WIS.

Following are lowest bids were opened by Comr. Pub. Wks., June 21, for grade separation work (A) R. H. Gumz, 831 13th Ave., (awarded contract); (B) Kroening Constr. Co., 39th Ave. and Mitchell St.; (C) M. E. White Co., 133 West Washington St., Chicago. The unit bids were as follows:

	A	B	C
39,888 cu.yd. excavation above subgrade of pavement	$0.65	$0.83	$0.66
4,200 cu.yd. excavation below subgrade	1.75	1.50	2.00
1,618 cu.yd. reinforced-concrete retaining wall	14.00	17.80	19.25
3,728 cu.yd. backfill around retaining wall and above reinforced-concrete arch	.30	1.00	.30
1,554 lin.ft. removing and relaying 16 in. c.i. water main	5.00	3.50	9.25
325 lin.ft. removing and relaying 4, 6, 8 in. c.i. mains	3.50	2.50	5.00
1,100 cu.yd. reinforced concrete arch above 84 in. sewer	18.00	13.06	20.00
5,423 sq.yd. sandstone block pavement on 8 in. concrete base	5.70	5.46	6.95
2,666 lin.ft. concrete curb and gutter	.90	.80	1.10
14,520 sq.ft. concrete sidewalks	.17	.19½	.20
1,075 lin.ft. concrete gutter	.70	.60	1.10
240 lin.ft. reinforced concrete steps	1.80	2.00	1.50
Extended totals	$122,479	$128,252	$150,059

Pa., Etna — Repaving and recurbing Bridge St., 5,000 sq.yd. vitr. brick, to M. O'Herron Co., 1st and McKean Sts., Pittsburgh. Engrs. est. $25,000.

Fla., Jasper—Comrs. Hamilton Co. will clear, grade and pave with 6 in. sand clay, 5 mi. Rd. 2 from Genoa to Peoles Corner, by day labor. Former bids rejected. Noted May 25.

Fla., St. Augustine—Bd. Comrs. St. Johns Co., to J. Y. Wilson, Clark Bldg., Jacksonville, paving 16 mi. Tocoi-New Augustine Rd., 8.4 mi. Elkton-Tocoi Rd., 2.4 mi. road from Mill Creek to Julington Creek, 4.5 mi. road connecting Mill Creek and Picolata Rds., 4 mi. Hastings Blvd. extension and road from Hastings to Putnam Co. line towards Federal Point, 6¼ mi. from Hastings to Putnam Co. line extending south, 7.7 mi. Spuds Rd. and Horn Rd. north from St. Augustine to Golf Links, 10.4 mi. Anastasia Island Rd., involving 100,167 cu.yd. waterbound macadam at $4.57 per cu.yd. Noted April 20.

Tenn., Cleveland—Paving 25,000 sq.yd. various streets, 20-30 ft., asphalt, to Murry Constr. Co., Halston Bldg., Knoxville, $80,000.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties: Auglaize Co., Sect. "H" Lima-Wapakoneta Rd., 6.558 mi., brick, to Lewis & Copeland, Lima, $233,257; Auglaize Co., Sect. "G" Sidney-Wapakoneta Rd., 5.305 mi., rein.-con., to Lewis & Copeland, Lima, $155,410; Clark Co., Sect. "O" Springfield-Washington C. H. Rd., 1.857 mi., bituminous macadam, asphalt, to Central Paving Co., Hamilton, $42,044; Columbiana Co., Sect. "A-1" Lisbon-Canton Southern Rd., 3.922 mi., bituminous macadam, to W. H. Ringwald & Co., Chillicothe, $40,411; Crawford Co., Sect. "M" and "N" Marion-Bucyrus Rd., 6.705 mi., brick, to E. A. Freshwater & Son, Bucyrus, $37,750; Fayette Co., Sect. "G" Washington C. H.-London Rd., 4.268 mi., bituminous macadam, tar, to Craig & Jordan, Blanchester, $86,927; Hamilton Co., Sect. "Z" Glendale-Milford Rd., 1.798 mi., plain concrete, to Cleary, Coley & Berry, Cincinnati, $96,073; Holmes Co., Sect. "B" Navarre-Berlin Rd., 3.987 mi., plain concrete, to Griggs-Anderson Constr. Co., Millersburg, $78,426; Lawrence Co., Sect. "O" Ohio River Rd., 1.468 mi., bituminous macadam, tar, to Jenkins Bros., Kittsville, $35,505; Pike Co., Sect. "C-1" Columbus-Portsmouth Rd., 0.393 mi., rein.-con., to Anderson & Brown, Chillicothe, $21,617; Tuscarawas Co., Sect., "Mineral City" Canton-Canal Dover Rd., 1.03 mi., brick, to Daley Bros., Bolivar, $34,611; Athens Co., Sect. "L-1" New Lexington-Athens Rd., 2.659 mi., grading and constructing bridges, to Sterling Contractors, Akron, $31,544; Lawrence Co., Sect. "M-2" Ohio River Rd., constructing rein.-con. bridge, 742 ft. long, to Mahl Bros., Akron, $14,798; Hamilton Co., Sect. "Z" Glendale-Milford Rd., constructing drainage structures, Cleary, Coley & Berry, Cincinnati, $60,663; Lawrence Co., Sect. "M-3" Ohio River Rd., constructing culvert, to G. C. Harden, Ironton, $3,721. Noted July 13.

O., Akron—M. P. Tucker, dir. Pub. Serv., grading and paving, etc., East Tallmadge Ave. from Columbia Ave. to east corporation line, to McAlonan Bros., 506 Woodland Ave., $124,331; Victory St. from Ira Ave. to Kenmore Blvd., to M. Kalain and M. Guran, $2,752; Theodore St. from Kenmore Blvd. to Lakeside Ave., to Crano & Lombardi, $5,503; Bluff St. from point 155 ft. northeast of North College St., incl. North Prospect St. from Perkins to Bluff Sts. also Weber Ave., etc., to H. Gilbert, 19 South Martha Ave., $32,296 and $15,927 respectively; Cole Ave. from High to Grant Sts., to V. Olson Contg. Co., Herberich Bldg., $61,257; Spicer St. from point 200 ft. south of Beacon to South Sts., to T. E. McShaffrey Constr. Co., 171 South Forge St., $34,274. Noted July 13.

O., Bellaire—Bd. Control paving 1 mi. West 23rd St., concrete and gravel, to Rosser & Maloney, Bellaire, $48,000. Engrs. est. $80,000.

O., Dayton—G. F. Baker, dir. Pub. Serv., paving North Main St., brick, to C. Hoolihan, 1406 Riverview Ave., $60,000, Kenwood Ave. E and Bellmonte Park, both rein.-con., to E. A. Smith, 702 Commercial Bldg., $6,510 and $8,827 respectively; grading and graveling Yuncker Ave., to C. F. Wilmore, Dayton, $5,488. Noted July 6.

O., Maple Heights (Bedford P. O.)—Paving Clement Dr., Mapleboro Rd., Greenlawn and Raymond Aves., brick, to A. M. Pejsa Paving Co., Euclid Heights Blvd., Cleveland Heights, $43,404. Noted June 22.

O., St. Clairsville—Belmont Co. paving 2.11 mi. Martins Ferry-Colerain Rd., brick, to Stringer & Springer, 201 Wheeling Steel Corp., Bldg., Wheeling, W. Va., $67,047; Flushing-Uniontown Pike Rd., to Miller & Fletcher, St. Clairsville, $25,049. Noted June 22.

O., Warren—Trumbull Co. grading and paving 1½ mi. Palmyra Rd., bituminous macadam, to Evans Bros., Hubbard, $31,955. Engrs. est. $42,000; 4 mi. Everitt-Cortland-Hull Rd., concrete, to Turner Contg. Co., Park Theatre Bldg., Youngstown, $98,150. Engrs. est. $104,000.

Indiana—State Hy. Dept., Indianapolis, paving, etc., 1.333 mi. Lincoln Highway, in Lake Co., 40 ft., 281,480 sq.yd. concrete, to Stone & Webster, Inc., 147 Milk St., Boston, Mass., $100,000.

Michigan—State Hy. Dept., Lansing, grading and surfacing 3.136 mi. State Trunk Line Rd. 37-5 Sect. C, Barry Co., 16 ft., 20,177 cu.yd. earth excav., 20,397 sq.yd. gravel, 3.14 mi. State Trunk Line Rd. 89-1, Barry Co., 16 ft., 34,578 cu.yd. earth excav., 31,922 sq.yd. gravel, to P. W. O'Connor Co., Grand Rapids, $26,990 and $38,524 respectively; 4.945 mi. State Trunk Line Rd. 12-36, Dickinson Co., 16 ft., 38,577 cu.yd. earth and 150 cu.yd. rock excav., 46,857 sq.yd. gravel, to M. Blomquist, Metropolitan, $44,969; 1.134 mi. State Trunk Rd. 18-20 Sect. A and 61-2 Sect. A, Gladwin Co., 20 ft., 5,289 cu.yd. earth excav., 13,288 sq.yd. concrete, to H. Campbell & Son, Bay City, $18,674, cement furnished by State cost $11,798; 2.034 mi. State Trunk Line Rd. 25-14 Sect. A, Alger Co., 16 ft., 8,789 cu.yd. earth excav., 19,012 sq.yd. bituminous macadam, to Alger Co., Road Comr., Munising, $30,000. Noted July 13.

Michigan—State Hy. Dept., Lansing, grading and surfacing Federal Aid Project 71, Charlevoix Co., 4.146 mi. Sect. A, to Pierson & Alswede, Husey, incl. 37,145 cu. yd. excav. $0.38, 109.4 cu.yd. 1:2:4 and 61 cu.yd. 1:3:6 concrete $12.50, total $17,389. 2.642 mi. Sect. B, to Charlevoix Abstract & Eng. Co., Charlevoix, incl. 12,704 cu.yd. excav. $0.55, 27,903 sq.yd. concrete $1.30, 48.8 sq.yd. 1:2:4 and 32.8 cu.yd. 1:3:6 concrete $12.50, total $47,161; 4.56 mi. State Trunk Line Rd. 16-5, Ottawa Co., to H. A. Hoxie, Grand Rapids, incl. 240.7 sta. grading $15, 48,144 sq.yd. rein.-con. pavement $1.48, total $76,823; 1.269 mi. State Trunk Line Rd. 11-12 Sect. B, Grand Traverse Co., to H. A. Hoxie, Grand Rapids, $20,569. Noted June 15 and July 13.

Mich., Menominee—Paving various streets, 30,000 sq.yd. rein.-con., 16,400 lin-ft. concrete curb and gutter, 16,000 sq.ft. concrete sidewalk, 30 catchbasins, to G. Lundin, 1130 Stephenson Ave. $94,000. Noted June 22.

Mich., Saulte Ste. Marie—Paving 10,000 sq.yd. various streets, bitulithic, to General Contg. Co., 1228 Plymouth Bldg., Minneapolis, Minn., $43,576.

Streets and Roads (Continued)

Wis., Elkhorn—Walworth Co. gravel surfacing Whitewater-East Troy Rd., to F. C. Wiswell, Elkhorn, $1.49 per cu.yd., total $14,828; concrete street surfacing in city Whitewater, to Fess & Fess, 123 East Doty St., Madison, $1.34 per sq.yd., total $42,825. Noted June 22.

Wis., Juneau—Dodge Co. concrete surfacing, etc., Beaver Dam-Columbus Rd., to P. C. Kroeck, 1000 Humboldt Ave., Milwaukee, $127,128. Contractor wants quotations on all materials, exclusive of cement.

Wis., Kenosha—Paving Exchange and Eagle Sts., West Park, Deming, Chicago and Durkel Aves., Mexican asphalt, to Western Impvt. Co., 840 9th St., Racine, $31,394.

Wis., Kenosha—Paving various streets, 49,000 sq.yd. Mexican asphalt, to White Constr. Co., 68 Wisconsin St., Milwaukee, $2.70 per sq.yd. Noted July 6.

Wis., La Crosse—Paving various streets with Trinidad bituminous concrete, to White Constr. Co., 68 Wisconsin St., Milwaukee, $229,000.

Wis., Ladysmith—Paving 1 mi. various streets, 25 ft., with one course concrete and sidewalks with curb and gutter, to R. A. Ohlfs. Ladysmith, $35,900. Engrs. est. $35,000.

Wis., Medford—Paving 16,000 sq.yd. Main, State, Division and Wisconsin Sts., 7 in. vibrolithic concrete, to A. Larson & Co., 419 South Barstow, Eau Claire, $52,114. Noted March 16.

Wis., North Fond du Lac—Paving 2.1 mi. Wisconsin and Lincoln Sts., 20 ft., 20,000 sq.yd. 2 course rein.-con., 12,200 lin.ft. combined concrete curb and gutter, to Fess & Fess, 605 Willard Ave., Madison, $69,837. Engrs. est. $60,000.

Wis., Racine—Paving 14,000 sq.yd. Asylum Ave., rein.-con., and 8,000 sq.yd. 12th St., asphaltic concrete, to Western Impvt. Co., 840 9th St., $38,360 and $22,880 respectively.

Ia., Clinton—Grading, curbing and paving (1) Dist. 2, 9th St., Lyons from Main St. to north city limits, 13,050 sq.yd. 7 in. rein.-con., 2,200 lin.ft. 6 in. curbing, 438 ft. 18 in. sewer, etc., (2) Sect. P, 14,078 lin.ft. combined curb and gutter, (3) Sect. Q, 2,718 ft. combined curb and gutter, to South West Coal & Materials Co., Inc., 2038 West 59th St., Chicago, (1) $37,845 (2) $12,347 (3) $2,480; Sect. K, 11,561 sq.yd. 2 in. bituminous concrete bitulithic on 5 in. concrete, 5,582 lin.ft. combined curb and gutter, Sect. F, 7th St. Lyons, and Ringwood Pl. from Commercial to Munson Sts., 16,353 sq.yd. 2 in. bitulithic on 5 in. concrete, 4,835 lin.ft. combined curb and gutter, to McCarthy Impvt. Co., 220½ Main St., Davenport, $43,789 and $57,887 respectively; Sect. J, 8th St. from 8th Ave. to 11th Ave., 2,880 sq.yd. bitulithic on 5 in. concrete, 1,534 lin.ft. combined curb and gutter, Sect. N, Peck Ave. from Camanche to Iowa Aves., 2,369 sq.yd. 2 in. bitulithic on 5 in. asphalt, 1,920 lin.ft. combined curb and gutter, to T. Carey & Sons, 308 Weston Bldg., $12,069 and $8,804 respectively. Noted June 29.

Ia., Des Moines—Polk Co. grading and concrete paving 7.715 mi. road from Polk City northwest to county line, 12,221 cu.yd. excav., 90,625 sq.yd. Class A concrete, to Bryant Asphalt Co., Waterloo, $2.44 per sq.yd. for pavement Noted June 29.

Minnesota—State Hy. Dept., St. Paul 1.22 mi. State Project 1-37, Federal Aid Project 286, Ramsey Co., 4,900 cu.yd. excav., 17,478 sq.yd. concrete base, 16,761 sq.yd. asphaltic concrete surface, to Fielding & Shepley, 216 University Ave., St. Paul, $58,500; 13 mi. State Project 2-24, Federal Aid Project 291, Clay Co., 185,573 cu.yd. excav., culverts, two bridges, to Larkin Constr. Co., Berry, $27,587 for Div. A and $37,195 for Div. B. Noted July 6.

Minn., Le Sueur Co.—Le Sueur Co., to Barrett & Quinn, St. Cloud, grading State Rd. 9, Job 224, 153,041 cu.yd. excav. at $0.19 per cu.yd., State Rd. 23, Job 221, 23,596 cu.yd. excav. $0.20, State Rd. 28, Job 222, 35,918 cu.yd. excav. $0.20, State Rd. 17, Job 223, 10,198 cu.yd. excav. Noted May 25.

Minn., Little Falls—Morrison Co., State Rd. 4, Job 2204, grading to A. Peterson, Little Falls, $10,297, graveling to M. Barrett, St. Cloud, $6,419; Job 2206 to M. Barrett, St Cloud, $14,887. Noted June 1.

Kan., Hutchinson—Reno Co. paving 0.564 mi. Federal Aid Project 122, 18 ft., brick incl. 1,681 cu.yd. earth excav., 47.8 cu.yd rein.-con., etc., to J. H. Shears & Sons, Hoke Bldg., $19,731 Noted June 22.

Kan., Troy—Doniphan Co. grading and paving 7 mi. Pikes Peak Ocean to Ocean Highway, 18 ft. concrete roadway, to Giegler & Dalton Constr. Co., Junction City, $232,756; bridge on above, to R. P. Harper, Troy, $25,166. Noted June 22.

Neb., Fall City—To M. R. Ammerman, Wichita, Kan., paving Dist. 20 and 23, 20,980 lin.ft. combined curb and gutter $0.75 per lin.ft., 28,496 sq.yd. asphaltic concrete pavement $2.30, 3,500 cu.yd. grading $0.01.

South Dakota—State Hy. Dept., Pierre, gravel surfacing 16 mi. Federal Aid Project 38, Jerauld Co., to D. D. Bidwell, Wessington Springs, $29,777. Noted June 1.

S. D., Sioux Falls—Paving 17 blocks 26th St. from Cliff to Summit Aves., 22.212 sq.yd. concrete, to C. H. Atkinson Paving Co., Watertown, $50,000. Noted June 15.

N. D., Grand Forks—Paving 37,020 sq.yd. various streets, rein.-con., to Northern Constr. Co., 9 North 8th St., $130,227. Noted Feb. 23.

Montana—State Hy. Dept., Helena, grading and gravel surfacing 12.17 mi. Federal Aid Project 176 from Sun River to Simms, Lewis and Clark Co., to B. P. Melchert, 203 Montana Bldg., Lewistown, $84,948.

Tex., Groveton, Trinity Co.—Grading, surfacing, etc., 16.3 mi. State Highway 19, Federal Aid Project 225, 87,024 cu.yd. borrow, 790 cu.yd. concrete, 1,955 sq.yd. concrete pavement, 35,560 cu.yd. gravel surfacing, 69,068 lb. reinforcing, etc., to Smith Bros., Crockett, $172,665. Engrs. est. $205,545.

Missouri—State Hy. Dept. at div. office Alexandria, concrete paving 1.67 mi. Federal Aid Project 172, Clark Co., to Cameron-Joyce & Co., Keokuk, Ia., $50,792. Noted July 13.

Missouri—State Hy. Dept. at div. office Springfield, 9.043 mi. Federal Aid Project 190, Greene Co., gravel, to Oliver Constr. Co., 322 West Markham St., Little Rock, Ark., $43,714.

Tex., Dallas—Dallas Co. grading, reshaping, scarifying and surfacing 2.9 mi. Maple Ave. Rd., 18 ft. and 8.6 mi. Midway Church Rd., 18 ft., to Hill. Wilson & Watson, 502 Slaughter Bldg., $23.971 and $63.377 respectively. Engrs. est. $38.000 and $107,000 respectively, including material, engineering and contingencies. Noted July 13.

Tex., Danyon—Paving 0.3 mi. various streets, to Panhandle Constr. Co.. Lubbock. $33,896. Noted May 25.

Tex., Wichita Falls—Wichita Co. improving 7 mi. Iowa Park-Jonesdale Denny Rd., 18 ft., grading, to B. O. Gilstrap, Iowa Park, $9,518; gravel surfacing, to L. E. Whitham & Co., Wichita Falls, $29,904; constructing concrete culverts, to R. B. Stroup, Wichita Falls, $4,490. Engrs. est. $48,305, including 10% for engineering contingencies.

Oklahoma—State Hy. Dept., Oklahoma City, paving 2 mi. road, Project 55, Muskogee Co., bituminous macadam, to Hinson Bros., Muskogee, $27,531; 4.87 mi. Project 12 E, Tulsa Co., plain cement, to D. A. Burton, Tulsa, $125,687.

Colorado—State Hy. Dept., Denver, gravel surfacing 5.797 mi. Delta-Grand Junction Rd., Federal Aid Project 171, Delta Co., 16 ft. wide, also one 12 x 14 ft. box culvert, to Reeves & Cook, 2202 Adams Ave., Ogden, Utah, $49,693; concrete paving 4.405 mi. Lincoln Highway State Rd. 9, Federal Aid Project 228, Logan Co., 18 ft. wide, to La Nier, Selander & White, Ft. Morgan, $134,986. Noted July 6.

Wash., Seattle—Paving Wilson Ave., 4,380 sq.yd. 6 in. and 34,450 sq.yd. 7 in. concrete, 7,125 lin.ft. concrete curbing, 12,000 cu.yd. excav., to Independent Asphalt Paving Co., Seaboard Bldg., $133,467. Engrs. est. $140,598. Noted July 15.

Wash., Spokane—Spokane Co., gravel surfacing 9 mi. Garfield-Palouse State Rd., to Triangle Constr. Co., Spokane, $36,562. Engrs. est. $37,000.

Cal., Oroville—To Collins & Seppi, Clement, excavating and placing in storage pile 14,000 cu.yd. bank gravel on Gridley Colusa Rd., $0.38 per cu.yd., spreading and hauling same $0.35; to D. Bayles, Gridley, grading Riceton Rd., 16.000 cu.yd., at $0.42. Noted June 29.

Ontario—Provincial Hy. Dept., Toronto, concrete paving 2 mi. Talbot Rd., 20 ft., Elgin Co., to Lumsden Eng. Co., 1002 Lumsden Bldg., Toronto. Engrs. est. $130,000.

Ont., Dresden—Paving St. George St., 18,500 sq.yd. concrete, to Cadwell Sand & Gravel Co., 228 Sandwich St. W., Windsor. Engrs. est. $27,000. Noted March 23.

Ont., Essex—Paving Victoria, Arthur, Wilson and Cameron Aves., concrete, to Cadwell Sand and Gravel Co., 228 Sandwich St., W., Windsor. Engrs. est. $38,000. Noted May 11.

Ont., Welland—Welland Co., paving 2½ mi. highway, 9 ft., waterbound macadam, to Canadian Eng. Co., 72 James St. N., Hamilton, and 5 mi. to Law Constr. Co., Ltd., 107 Hillsdale Ave., Toronto. Engrs. est. $100,000. Noted May 18.

Industrial Works

PROPOSED WORK

N. J., Camden—Cadillac Auto Co., 525 Market St., having plans prepared by Lackey & Hettel, archts., 509 Federal St., 4 story, 48 x 126 ft., auto show room and service station, 11th and Market Sts. $100,000.

Pa., Berwyn—Hester Price Canning Co., Berwyn, plans to rebuild factory and power plant. $40,000. Architect not selected.

Pa., Reading — Central Abattoir Co., Chestnut St., soon receives bids 3 story brick, steel and concrete addition to packing plant. $175,000. Himmelsbach & Schlich, 136 Liberty St., New York, archts. and engrs. Noted June 8.

Pa., Sharon—Standard Tank Car Co. will build 50 x 100 ft. addition to factory. $75,000. Architect not announced.

Pa., Sunbury—Sunbury Water Co. plans 1 story, 50 x 50 ft. brick boiler house. Engineer not announced.

N. C., Lincolnton—Lincolnton Creamery & Ice Co. plans to rebuild ice plant recently destroyed by fire. $100,000. Architect not announced.

O., Akron—International Lead Refining Co., 151st St. and McCook Ave., East Chicago, Ind., soon takes bids refinery, incl. 4 structural steel and galvanized iron buildings, plain foundation, Tallmadge Ave., here. $500,000.

O., Cleveland—Cleveland Sanitary Wipers Co., 5815 Bway., plans 2 story, brick and steel factory, plain foundation. $50,000. S. I. Fineman, mgr. Architect not selected.

O., Cleveland—I. Fergenbaum, Ulmer Bldg., having plans prepared by Best & Hoefler, archts., 6523 Euclid Ave., 1 story, 40 x 120 ft., brick and steel garage, 3643 Carnegie Ave. $50,000.

O., Cleveland—Standard Equipment Co., Lorain Ave. and West 106th St., having plans prepared by I. F. Domizi, archt. and engr., Lorain Ave. and West 106th St., 1 story, 60 x 200 ft., brick and steel forge shop. $40,000.

Ind., Indianapolis—Enquirer Printing Co., 309-11 East Ohio St., plans 3 story, 58 x 85 ft. rein.-con. printing plant, East Ohio St. $60,000. Architect not selected.

Ind., Indianapolis—R. H. Hassler, Inc., 1535 Naomi St., having plans prepared by Fitton & Mothershead, archts., 540 North Meridian St., 3 story, 37 x 120 ft. service station and sales building, tapestry brick, Meridian and St. Joseph Sts. $75,000.

Ind., South Bend—Studebaker Corp., Main and Bronson St., plans 1 story power plant addition. $100,000. A. Kahn, 1000 Marquette Bldg., Detroit, Mich., engr.

Mich., Detroit—Ford Motor Co., Highland Park, had plans prepared by A. Kahn, archt., 1000 Marquette Bldg., 1 story, 245 x 1570 ft. brick and steel factory, plain foundation, Livernois Ave.

Mich., Detroit—Packard Motor Car. Co., Blvd. and Belt Line Ry., having plans prepared by A. Kahn, engr. and archt., 1000 Marquette Bldg.,1 story, 20 x 850 ftt wood and steel shipping sheds. $45,000.

Wis., Appleton—G. R. & S. Motor Co., 738 Washington Ave., having plans prepared by E A Wettengel, archt, 578 Pierce Ave., 1 story, 32 x 100 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation, Washington St. $40,000. Noted July 6.

Wis., Cazenovia—Cazenovia Creamery Co., c/o F. J. Moyes, mgr., plans 1 story, 60 x 150 ft. dairy, brick, rein.-con. and steel, plain foundation. $40,000. Architect not selected.

Wis., Neenah—Jaeger-Wheeler Co., 417 2nd St., Menasha, having plans prepared 2 story, 50 x 95 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation, Main and Commercial Sts. $40.000. Private plans.

Wis., Waukesha—Harvey Paper Specialty Co., Main St., plans 1 story, 80 x 122 ft., concrete and steel plant, plain foundation. $40,000. Architect not selected.

Minn., St. Paul—State Bd. of Control, Capitol, soon takes bids 3 story, rein.-con., brick and tile dairy with 1 story wing, at College of Agriculture, University of Minnesota. $210,000. C. H. Johnston, 715 Capitol Bank Bldg., engr. J. M. Forsyth, 946 15th Ave. S. E., Minneapolis, archt.

Mont., Laurel—Northwest Refining Co., Billings, plans refinery, 2,000 bbl. daily capacity, here. R. M. Hodgins, mgr. H. O. Simmons, c/o owner, engr.

Mo., Sikeston—Preparing plans municipal electric light and power plant. Fuller & Beard, Chemical Bldg., St. Louis, engrs.

Ark., Arkansas City—Moore Oil & Refining Co. plans additions, to increase daily capacity of refinery from 6,000 to 10,000 bbl. Architect not announced.

Industrial Works (Continued)

Col., Taft—See "Buildings."

Ont., Ford—Ford Motor Co. of Canada having plans prepared for new plants. $6,000,000. Private plans. W. R. Campbell, vice pres.

Ont., London—Shell Oil Co., 3608 Notre Dame St., Montreal, Que., purchased site here and is securing sites in district points, and plans to build receiving and distributing stations. $250,000. Private plans.

Ont., Welland—Welland Cotton Mills, Ltd., having plans prepared by W. J. Westaway Co., archts., 38 Main St. W., Hamilton, concrete, brick and steel mill, Queen and Duncan Sts. $200,000. Noted June 22.

B. C., Kimberley—Consolidated Mining & Smelting Co., Ltd., Kimberley, plans 500 ton concentrator plant. Private plans.

BIDS DESIRED

Conn., Hamden—Safety Car Heating and Lighting Co., Dixwell Ave., taking bids 1 story, 100 x 195 ft. brick and steel factory, also 1 story, 110 x 115 ft. brick addition to present plant. Stovel & Brinkerhoff, 136 Liberty St., New York, archts. and engrs.

Conn., Stamford—Frankel & Warshaw, 262 Atlantic St., taking bids 2 story, 85 x 90 ft. brick and steel garage, plain foundation, State St. $40,000. S. Z. Levine, Gurley Bldg., archt.

N. Y., Wende—See "Buildings."

Pa., Phila.—R. R. Muly, archt., 2126 Pine St., receiving bids 3 story, 30 x 110 ft. factory, rein.-con., brick and steel, 4712 Market St. for Harrison Brush Co., 4th and Arch Sts. $45,000.

O., Cleveland—Cleveland Kraut & Pickle Co., 1191 East 22nd St., taking bids and opens same about Aug. 1, 2 story, 60 x 80 ft., brick and steel factory, 3333 Lakeside Ave. $50,000. D. S. Duncan, secy. and mgr. Private plans. Noted June 22.

Wis., Milwaukee—Federal Eng. Co., engrs., 444 Milwaukee St., taking bids on (structural steel) for 1 story, 76 x 128 ft. addition to warehouse, brick and steel, Chestnut St., for Harley-Davidson Motor Co., 3732 Chestnut St. $40,000.

Wis., Milwaukee—Federal Eng. Co., engrs., 444 Milwaukee St., taking bids 6 story, 64 x 64 ft. addition to textile mill, brick and concrete, plain foundation, 5th St., for Holeproof Hosiery Co., 404 Fowler St. $50,000.

Cal., Sacramento — Wollett & Lamb, archts., Hagelstein Bldg., receiving bids 4 story, rein.-con. plumbing house, Front and M Sts., for Crane Co., Front and M Sts. Noted April 13.

Mexico, Coahuila—Amer. Smelting & Refining Co., 120 Bway., New York, will build several rein.-con., brick and steel buildings, plain foundations. $7,000,000. Work will be done by separate contracts under supervision of owner.

BIDS RECEIVED

N. Y., Central Islip—State Hospital Comn., Albany, opened bids June 28, addition to storehouse for cold storage plant and equipment at Central Islip State Hospital, here, general contract, from B. S. Raynor, Islip, $46,740, M. Kantrowitz, Market St., Albany, $53,800; refrigeration work, from Shipley Constr. & Supply Co., 42nd St. and 2nd Ave., Brooklyn, $29,900, Mayer Ice Machine & Eng. Co., 315 Grant Ave., Jersey City, N. J., $31,600, Amer. Carbonic Machine Co., 30 Church St., New York, $32,835. Noted June 15.

N. Y., New York—G. A. Whalen, comr. Plant & Structures, Municipal Bldg., opened bids July 14, housing station, 132nd St. west of Willow Ave., Bronx, for Dept. Street Cleaning, from Lustig & Weil, 103 Park Ave., $70,947; Rosenthal Eng. Contg. Co., 228 Jackson St., Brooklyn, $72,146; J. Young, Jr., 103 Park Ave., $72,347. Noted July 6.

CONTRACTS AWARDED

Mass., Fall River—Fall River Bleachery, foot Lawton St., 5 story, 110 x 115 ft. storage plant, brick and concrete, plain foundation, to Beattie & Wilcox ,840 Bedford St. Archts. est. $150,000.

Conn., Essex—E. E. Dickenson & Co., 3 story, 40 x 100 ft. brick and timber factory addition, to Pierretti Bros., Centerbrook. Archts. est. $40,000. Noted June 22.

N. Y., Batavia—C. Mancuso & Son, 322 Ellicott St., 2 story, 81 x 100 ft., brick garage and salesroom, Main St., to A. T. McCowan, Batavia. Archts. est. $40,000. Noted June 29.

N. J., Camden—N. B. T. Rooney, 2 story, 52 x 100 ft. garage and service station, brick and steel, plain foundation, Haddon and Sycamore Aves., to Emile-Schulke, 1183 Jackson St. Archts. est. $50,000.

N. Y., Green Island (Troy P. O.)—Ford Motor Co., Highland Park, Mich., 1 story steel and concrete plant with concrete dock, double craneway and traveling cranes, here, to F. T. Ley Co., 495 Main St., Springfield, Mass.

Pa., Phila.—Hellwig Dyeing Co., 9th and Buttonwood Sts., 1 story, 40 x 240 ft. and 40 x 100 ft. rein.-con., brick and steel machine shop, plain foundation, Wissinoming Dist., to F. W. Van Loon, Perry Bldg.

Pa., Phila.—Hulton Dyeing Co., 3819 Frankford Ave., 2 story, 62 x 203 ft. rein.-con., brick and steel factory, plain foundation, Coral St. and Wheatsheaf Lane, to P. F. Crompton & Co., 4614 Oakland St., $60,000.

Pa., Phila.—J. Pinheiro, 1007 Race St., 2 story, 94 x 100 ft. rein.-con. and brick garage, plain foundation, 910 Spring St., to Coneen Constr. Co., 10 South 18th St. Archts. est. $80,000.

Pa., Phila.—B. S. Pincus, 21st and Market Sts., 3 story, 48 x 100 ft. rein.-con. and brick packing plant, 454 North American St., to T. A. Sloutenberry, 1509 Chestnut St. Archts. est. $90,000.

Pa., Phila.—Proctor & Swartz Co., 6th St. and Tabor Rd., will build 1 story, 125 x 450 ft. rein.-con., brick and steel factory, by day labor. $100,000. Private plans.

Pa., Phila.—Universal Service Motor Co., 1407 Locust St., 6 story, 70 x 116 ft. rein.-con., brick and steel garage, Broad and Manning Sts., to P. M. Sax, Penfield Bldg. Archts. est. $250,000.

Pa., Starbrick (Warren P. O.)—Warren Tank Car Co. will rebuild factory, here, by day labor under supervision of M. Mathis, genl. mgr. $75,000. Noted June 22.

N. C., Lexington—Erlanger Cotton Mills, 1 story, 69 x 229 ft. (daylight construction), cloth room and cloth storage building, to Fiske-Carter Constr. Co., Greenville, S. C.

La., New Orleans—Ford Motor Co., Highland Park (Detroit P. O.)—1 and 2 story, rein.-con. and brick factory, plain foundation, North Peters St., here, to Reiss & Moody, 503 Carondelet Bldg., New Orleans.

O., Alliance—H. W. Wagner, 1 story, 50 x 100 ft., brick and steel garage, to Boldt Constr. Co., 5902 Euclid Ave., Cleveland. Archts. est. $50,000.

O., Cleveland—W. S. Ferguson Co., archts., 1900 Euclid Ave., 3 story, 140 x 148 ft., rein.-con. and brick service station, East 25th St. near Payne Ave., to S. W. Emerson, 1836 Euclid Ave. for Studebaker Corp. of America, 2020 Euclid Ave. Archts. est. $250,000. Noted June 29.

O., Cleveland—W. Koehl, archt., Park Bldg., taking bids 2 story, 50 x 130 ft., brick and steel garage and commercial building, West 30th St. and Lorain Ave., for West Center Sales Co., c/o architect. $50,000.

O., Dayton—Dayton Daily News, 4 story, rein.-con., brick and tile factory, plain foundation, 4th and Ludlow Sts., to Industrial Bldg. Co., 757 Reibold Bldg., $168,000. Noted June 22.

Ind., Indianapolis—Zenith Metal Co., 201 North West St., 1 story, 100 x 200 ft. brick, steel and concrete factory, North West St., to Service Constr. Co., P. O. Box 444. Archts. est. $100,000.

Ind., Michigan City—Sullivan Mchy. Co., 122 South Michigan St., Chicago, 1 and 2 story, 400 x 550 ft. factory, 50 x 400 ft. power house, etc., brick and steel, here, to Witherspoon Englar Co., 53 West Jackson Blk., Chicago; cost plus percentage basis. Archts. est $1,000,000. Noted June 29.

Ill., Chicago—McAdam Mfg. Co., general contract for 2 story, factory, rein.-con. and brick, 27th and Troy Sts., to Bowie, Lydon & Co., Inc., 340 West Harrison St., $100,000.

Ill., Chicago—O. V. Palmquist & Co., 4884 North Clark St., 1 story, 60 x 163 ft. brick factory, 5915-23 East Ravenswood Ave., to O. Soderlund, 4354 North Leavitt St. Archts. est. $40,000.

Ill., Chicago—U. S. Sample Co., 901 South Wells St., 6 story, 125 x 125 ft. printing plant, rein.-con., brick and steel, Jackson Blvd. and Laflin St., to R. F. Wilson & Co., 1851 Elston Ave. Archts. est. $350,000. Noted April 6.

Ill., North Chicago — Davis-Watkins Dairymens Mfg. Co., 130 North Wells St., Chicago, 1 story, 100 x 140 ft. factory addition, rein.-con. and brick, plain foundation, here, to Raulf Co., 428 Grand Ave., Milwaukee, Wis. Archts. est. $70,000.

Wis., Beloit—J. H. Saris, 412 Broad St., 1 and 2 story, 100 x 130 ft., brick and concrete garage, plain foundation, to W. J. Fitzgerald, 726 Central Ave. Engrs. est. $55,000.

Wis., Delavan—State Bd. Control, Madison, 1 story, 75 x 90 ft., brick, rein.-con., and steel laundry, plain foundation, to Immel Constr. Co., 200 North Main St., Fond du Lac. Engrs. est. $50,000. Noted July 6.

Wis., Eau Claire—Chippewa Valley Products Co., 220 South Water St., 2 story 70 x 125 ft., cold storage warehouse, brick, rein.-con. and steel, plain foundation, to A. Larson Co., 418½ South Barstow St. $60,000.

Wis., New London—Amer. Plywood Co., 2 story, 90 x 144 ft., brick and rein.-con. factory, plain foundation, to W. E. Polley, Main St. $70,000.

Wis., Madison—Kennedy Dairy Co., 618 University Ave., 2 story, 85 x 132 ft. factory, brick, rein.-con. and steel, plain foundation, to C. B. Fritz, 440 West Dayton St. Engrs. est. $80,000. Noted May 25.

Me., Lewiston—Lewiston Bleachery & Dye Wks., Lisbon St., 3 story, 40 x 110 ft. addition to sheeting department, brick and concrete, plain foundation, to D. Lemieux, 15 Russell St. Archts. est. $40,000. Noted June 8.

Cal., Pittsburg—California Bean Growers' Assn., 120 Battery St., San Francisco, 1 story, 80 x 350 ft., corrugated iron and frame warehouse and 5 story, 20 x 40 ft. mill, here, to Cahill Bros., 110 Sutter St., San Francisco, $80,000. Noted July 13.

Cal., San Francisco — Petri Italian-American Cigar Co., Inc., 419 Jackson St., 4 story, 137 x 137 ft., concrete factory, Battery and Vallejo Sts., to Del Favero & Sasori, 2042 Taylor St., $200,000. Noted June 1.

Buildings

PROPOSED WORK

N. H., Nashua—Bank and Office—Second Natl. Bank, 185 Main St., soon takes bids brick, steel and stone, plain foundation. $200,000. Mowbray & Uffinger, 56 Liberty St., New York, archts. and engrs.

Conn., Norwalk—Hotel—J. A. Legate, 4 River St., having plans prepared by F. Urso, archt., 453 West Main St., Stamford, remodeling Norwalk Hotel, and constructing 2 story, 105 x 135 ft. brick and steel addition, Wall St. $150,000.

N. Y., New York—Apartment—Twenty Sixty Nine Bway. Corp., c/o G. F. Pelham, archt. and engr., 200 West 72nd St., having plans prepared 9 story, 50 x 102 ft., brick, steel and stone, plain foundation, 17-19 East 84th St. $300,000.

N. Y., New York—Hospital—Womens Hospital of Bronx, c/o Bloch & Hesse, archts. and engrs., 18 East 41st St., having plans prepared brick, steel and stone, plain foundation, Lafayette and Manida Aves. $200,000.

N. Y., Olean—Temple—Masonic Club Co. plans temple, Laurens St. To exceed $200,000. Architect not selected.

Pa., Lewisburg—Stadium, etc.—Bushnell University having plans prepared by Carrere & Hastings, archts., 52 Vanderbilt Ave., New York, brick, steel and stone stadium and gymnasium, plain foundation. $500,000.

Pa., Phila.—Bank and Office—Mutual Trust Co., Bourse Bldg., having plans prepared by Heacock & Hoakenson, archts., Bailey Bldg., and soon takes bids 12 story, 4th and Market Sts. $2,000,000.

Pa., Phila.—Office—Phila. Realty Bd., 39 South 17th St., having plans prepared by Ballinger Co., archts., 12th and Chestnut Sts., 3 story, 36 x 103 ft. brick and steel, plain foundation, 13th and Locust Sts. $200,000.

Pa., Swarthmore—High School—Simon & Simon, archts., 249 South Juniper St., Phila., soon receive bids 3 story brick, steel and cut stone, here, for Bd. Educ. $200,000.

W. Va., Huntington — Fair — Tri. State Agricultural Fair, c/o J. F. Peck, 1407 Keenan Bldg., Pittsburgh, Pa., having plans prepared by Joseph & Joseph, archts., Atherton Bldg., Louisville, Ky., 1 story, 100x200 ft., brick and steel, manufacturers exhibit building, grandstand, race track, other frame buildings, stables, etc. $650,000, J. N. Doyle, 320 9th St., Huntington, W. Va., engr.

N. C., Concord—School—Voted $150,000 bonds for high school, $25,000 for negroes school and $50,000 for enlarging and repairing existing buildings.

Ky., Owensboro—High School—A. F. Hussander, archt., 25 North Dearborn St., Chicago, soon takes bids 3 story, rein.-con., brick and steel. $250,000. Noted March 9.

O., Akron—Court House—Summit Co., Court House, opened bids July 12, 3 story annex, stone or terra cotta and brick, plain foundation, South Bway., from Carmichael Constr. Co., 524 Hamilton Bldg., $374,880;

Buildings (Continued)

Clemmer & Johnson, 406-7 Metropolitan Bldg., $386,200; T. E. McShaffrey, 171 South Forge St., $398,000. Above bids rejected. Archts. est. $350,000. Noted April 6.

O., Chagrin Falls—Clubhouse, etc.—See "Dams."

O., Cleveland—Court—City, c/o A. Dempsey, ch. justice, City Hall, plans 3 or 4 story, brick, steel and concrete. $500,000. Architect not selected.

O., Columbus—Administration, etc.—Bd. Trustees Ohio State University, had plans prepared by J. N. Bradford, archt., Ohio State University, 4 story administration building $300,000, 4 story medical science building $250,000, 4 story commerce and journalism building $300,000, all brick, concreteand stone.

O., Orient—Cottages—Dept. Welfare, Oak and 9th Sts., Columbus, had plans prepared by R. S. Harst, state archt., Ohio-Hartman Bldg., Columbus, and soon takes bids four 1 story, and two 2 story, 65 x 135 ft., rein.-con. and brick, at Institution for Feeble Minded, here. $200,000.

O., South Euclid—School and Convent—Sisters of Good Shepherd, East 30th St. and Carnegie Ave., Cleveland, having plans prepared by W. Koehl, archt., 906 Park Bldg., Cleveland, 3 story, brick, steel and concrete, Stop 103, here. $250,000.

O., Washington C. H.—Lodge—B. P. O. E. having plans prepared by T. D. McLaughlin, archts., Savings Bldg., Lima, 2 story, 80 x 165 ft., brick, stone and concrete. $175,000. M. S. Dougherty, chn. building com.

O., Willoughby—Educational—Andrews Institute for Girls having plans prepared by F. C. Warner, archt., 767 Hippodrome Annex, Cleveland, 2 story, brick, steel and concrete. $300,000. S. B. Shankland, secy.

Ind., Indianapolis—Bank — Meyer-Kiser Bank, 136 East Washington St., plans 7 story, 87 x 197 ft. brick, steel and terra cotta, 136 East Washington St. $350,000. Vonnegut, Bohn & Mueller, Indiana Trust Bldg., archts.

Ind., Indianapolis—Home—City plans 4 story, 40 x 196 ft. and 40 x 45 ft. nurses home, brick, Locke and Margaret Sts. $300,000. A. Scherrer & Son, Indiana Trust Bldg., archts.

Ind., Indianapolis — Office — Guarantee Realty Co., c/o Meyer-Kiser Bank, plans 2 story, 72 x 114 ft. brick addition, Monument Circle and Meridian St. $200,000. Vonnegut, Bohn & Mueller, Ind. Trust Bldg., archts.

Ind., Marion—High School—Bd. Educ. plans 2 story, brick. $300,000. Architect not selected.

Mich., Detroit—Mercantile—J. L. Hudson Co., 1201 Farmer St., having plans prepared by Smith, Hinchman & Grylls, archts., 710 Washington Arcade, 10 story, 40 x 120 ft., brick, steel and stone addition, plain foundation, Woodward Ave.

Mich., Evart—School—Bd. Educ. having plans prepared by J. N. Churchill, archt., Lansing, 3 story, 75 x 220 ft. rein.-con., brick and steel, plain foundation. $150,000.

Mich., Lincoln Park (Detroit P. O.)—Municipal—Village plans 2 story, probably rein.-con., brick and steel. $150,000. Architect not selected.

Mich., Port Huron—School—Bd. Educ. having plans prepared by Van Leyen, Schilling, Keough & Reynolds, archts., 3440 Cass Ave., Detroit, rein.-con., brick, steel and stone, plain foundation, Erie St. $250,000.

Mich., Traverse City—Hospital—Traverse City Hospital having plans prepared by Malsomson, Higginbotham & Palmer, archts., 405 Moffat Bldg., Detroit, 3 story, brick and steel, plain foundation. $150,000.

Ill., Chicago — Apartment — Dubin & Eisenberg, archts., 14 West Washington St., preparing plans and soon takes bids 6 story, 120 x 150 ft., rein.-con., brick and steel, Sheridan Rd. and Lunt Ave., for B. H. Rosenthal, c/o architects. $500,000.

Ill., Chicago—Athletic Club—W. W. Ahlschlager, archt., 60 East Huron St., preparing preliminary plans 12 story, 125 x 180 ft., rein.-con., brick and steel, Lake Shore Dr. near Pearson Ave., $2,000,000. Owners name withheld.

Ill., Chicago—Hotel—Juddson Hotel Co., c/o H. L. Stevens & Co., archts., 30 North Michigan Blvd., having plans prepared 10 story, 100 x 143 ft., rein.-con., brick and steel, Sheridan Rd. near Argyle Ave., $1,250,000.

Ill., Chicago—School—National Kindergarten & Elementary College, 2944 South Michigan Ave., having plans prepared by W. S. Holmes Co., archts., Tussing Bldg., Lansing, Mich., for school, opposite Northwestern University, here. $1,000,000.

Ill., Chicago—Store, Office, etc.—F. D. Chase, Inc., archts., 645 North Michigan Blvd., preparing plans rein.-con., brick and steel, 79th St. near Stony Island Ave. $200,000. Owner's name withheld,

Ill., Chicago—Store, Office and Theatre—Kramer & Schnadig, c/o Newhouse & Bernham, archts., 4630 Prairie Ave., plans 2 story, 125 x 125 ft., rein.-con., brick and steel, 63rd St. and Kedzie Ave. $400,000.

Ill., Oak Park—Church—First Methodist Episcopal Church having plans prepared by Talmadge & Watson, archts., 189 West Madison St., Chicago, 2 story, 200 x 200 ft., rein.-con., brick and steel, Oak Ave. and Superior St. $250,00.

Wis., Green Bay—Club House—Green Bay Columbus Club, (Knights of Columbus), c/o C. K. Bong, chn. building com., Sheridan Bldg., having plans prepared by Foeller, Schober & Stephenson, Nicollet Bldg. and H. W. Carr, Minahan Bldg., associated archts., 3 story, 80 x 140 ft. brick and concrete, plain foundation. $150,000.

Wis., Madison—Church and Auditorium—Dominican Fathers having plans prepared by F. L. Kronenberg, archt., Carroll Blk., 2 story 64 x 100 ft., brick rein-con. and stone, plain foundation. Hollister St. $150,000. J. R. Clark, pastor.

Wis., Madison — Church — St. James Catholic Congregation, St. James Court, having plans prepared by F. L. Kronenberg, archt., Carroll Blk., 2 story, 75 x 180 ft., brick, rein.-con. and steel, plain foundation. $150,000.

Wis., Madison — School — St. Joseph Italian Congregation, c/o A. Simeoni, pastor, 22 South Park St., having plans prepared by F. L. Kronenberg ,archt., Carroll Blk., 2 story, 67 x 168 ft., brick, rein.-con. and stone, plain foundation. $150,000.

Wis., Milton—Dormitories, etc.—Milton College, c/o A. E. Whitford, pres., plans 4 story, rein.-con., steel and brick, plain foundation. $275,000. Architect not selected.

Wis., South Madison (Madison P. O.)—High and Grade School—Bd. Educ. plans 2 story, brick, rein.-con. and tile, plain foundation. $150,000. Architect not selected.

Kan., Coffeyville—Memorial Auditorium—City, c/o C. Potteck, clk., having plans prepared by T. W. Williamson & Co., archts., 312 Central Natl. Bank Bldg., Topeka, 2 story, rein.-con., and brick. $175,000.

S. D., Rapid City—School—Bd. Educ. having plans prepared by Perkins & McWayne, archts., 324 Paulton Blk., Sioux Falls, 2 story, rein.-con., brick, stone and tile. $150,000.

N. D., Fargo—Store, etc.—G. Carufel, Fargo, having plans prepared by J. E. Rosatti, archt., 107½ Bway., 3 story, 100 x 100 ft. rein.-con. and brick store and storage building. $150,000.

Okla., Oklahoma City—Depot—Atchison, Topeka & Santa Fe R. R., Ry. Exch. Bldg., Chicago, plans depot, here. $2,100,000. C. F. W. Felt, ch. engr.

Cal., Palo Alto—Dormitory—University of California having plans prepared by Bakewell & Brown, archts., 251 Kearny St., San Francisco, 2 and 3 story, rein.-con., University Grounds. $450,000. A. E. Roth, comptroller.

Cal., San Mateo—Hotel—F. E. Webb and assocaites, 16 East 41st St., New York City, having sketches made by W. Polk & Co., archts., Hobart Bldg., San Francisco, for hotel, private beach, golf links, yacht harbor, club quarters, etc., will exceed $500,000.

Cal., Taft—School—Taft Union High School Dist., having plans prepared by W. H. Weeks, archt., 369 Pine St., San Francisco, additions to high school. Immediate building plans include new locker rooms, girls' rest room and garage. By first of year it is proposed to complete machine and auto shop and $198,000 gymnasium, for which largest part of funds will be used.

Ont., London—Office—London Life Insurance Co., 463 Richmond St., receiving competitive plans for 4 story, brick and stone, Dufferin Ave. $500,000. E. E. Reid, Mgr.

Ont., Whitby—Hospital—Provincial Government, Parliament Bldgs., Toronto, having plans prepared by Educ. Dept., Toronto, for hospital, here. $300,000.

H. I., Honolulu—Memorial—Territory of Hawaii having plans prepared by L. P. Hobart, archt., Crocker Bldg., San Francisco, Cal., rein.-con. and terra cotta building, comprising plaza, coliseum, natatorium and temple of music, on Waikiki Beach. $250,000.

BIDS DESIRED

N. Y., New York—Drill Shed—July 27, at office of Mayor, City Hall, drill shed of armory, 142nd and 143rd Sts., between Lenox and 5th Aves., for 15th Infantry. Former bids rejected. Noted June 29.

N. Y., Perry—High School—Aug. 2 by Bd. Educ., Dist. 6, towns of Perry and Castile, at office of T. H. Donnelly, secy., altering and building 2 story, 146 x 150 ft. brick. Gordon & Kaelber, 125 Sibley Bldg., Rochester, archts.; adv. this issue.

N. Y., Wende—Administration, etc.—July 25, by Bd. Supervs. Erie Co., 29 County Hall, Buffalo, administration building, bakery, laundry and other buildings, here. $225,000.

Pa., Phila.—Hotel—July 26 by H. Trumbauer, archt., Land Title Bldg., 16 story, 196 x 230 ft., rein.-con., brick and steel, caisson foundation, 9th and Chestnut Sts., for Benjamin Franklin Hotel Co., c/o architect. $7,000,000.

Pa., Phila.—Office—Thomas, Martin & Kilpatrick, archts., Otis Bldg., receiving bids 8 story, 22 x 153 ft., rein.-con., brick and steel, 21st and Chestnut Sts., for E. Hummel, c/o architects. $200,000.

N. C., Siler City—School—July 26, by School Comrs., brick, $150,000. R. F. Paschal, secy. C. C. Wilson, Palmetto Blk. Bldg., Columbia, archt.

N. C., Southern Pines—School—July 29, by School Com., for school. $150,000. P. P. Pelton, secy. A. Embury, 2nd, 132 Madison Ave., New York City, archt.

N. C., Troy—School—J. S. Edwards, supt. of schools of Montgomery Co., receiving bids brick schools, incl. one 10 room, one 8 room and three 6 room schools.

Tenn., Knoxville—Church—Sept. 1, by J. P. Grant, chn. building com. First Baptist Church, 620 South Gay St., 4 story, 140 x 200 ft., Main St. $300,000. Dougherty & Gardner, Nashville, archts.

O., Cleveland—Commercial and Market—De Lorenzo & Bontempo, archts., Finance Bldg., taking bids and opens same about Aug. 1, 1 story, 80 x 150 ft., brick, steel and concrete, Miles Ave. near East 113th St., for Miles Ave. Market House, c/o Conley-De Graw Co., 1900 Euclid Ave. $150,000. Noted June 29.

O., Grandview Heights (Columbus P. O.)—High School—Aug. 15, by D. S. Freed, clk. Bd. Educ., 2 story, 145 x 173 ft., brick and concrete. $200,000. Former contract declared illegal. Noted July 13.

O., Mt. Sterling—High School—Aug. 10, by E. R. Julian, clk. Bd. Educ., 2 story, 66 x 133 ft. and 120 x 133 ft., brick and concrete. $150,000. J. Q. Adams, Southern Hotel, Columbus, archt.

Ill., Chicago—Field House—South Park Comrs., 57th St. and Cottage Grove Ave., receiving bids 1 and 2 story, 185 x 255 ft., rein.-con. brick and steel, field house, gymnasium and recreation building, in Calumet Park. $150,000. L. White engr., c/o owner. Noted Feb. 16.

Wis., Milwaukee—Convent—See "Miscellaneous."

Wis., Plymouth—Hotel—E. A. Juul, archt., Imig Bldg., Sheboygan, taking bids 3 story, 80 x 140 ft., brick, rein.-con. and steel, plain foundation, for J. E. Curtis, Plymouth. $150,000.

Cal., Oakland—High School—Aug. 14, by Bd. Educ., 2 story, brick, on block bounded by 26th, 28th, Myrtle and Linden Sts. $385,000. C. W. Dickey, 2149 Bway., archt. Noted May 4.

Cal., Taft—School—Aug. 1, by Trustees Conley School Dist., 2 story, brick. $250,00. Trewhitt-Shields, Rowell Bldg., Fresno, archts. Noted April 20.

BIDS RECEIVED

O., Dayton—High School—Bd. Educ. opened bids July 13, Roosevelt High School, 3 story, rein.-con. and brick, plain foundation, West Side, general contract from Danis-Hunt Constr. Co., 907 Schwind Bldg., $1,140,000, J. E. Lowes Co., 509 West 2nd St., $1,155,000, Drummond-Miller Co., 4500 Euclid Ave., Cleveland, $1,202,000; heating and ventilating apparatus, from Van Dyke Heating & Plumbing Co., 1111 Walnut St., Des Moines, Ia., $249,000. Noted June 29.

CONTRACTS AWARDED

Conn., Bridgeport—Restaurant—Waldorf Lunch Co., 169 High St., Boston, remodeling 4 story, brick and steel, Main and Middle Sts., here, to T. J. Pardy Constr. Co., 1387 Seaview Ave. Archts. est. $150,000. Noted May 4.

N. Y., Brooklyn—Apartment and Store—P. Ritzheimer, 122 Amity St., 5 story, brick, steel and stone, plain foundation, Livingston St., to W. L. and G. H. O'Shea, 29 Bway., New York. Archts. est. $250,000.

N. Y., Brooklyn—High School—Bd. Educ., 500 Park Ave., New York, New Utrecht High School, 79th and 80th Sts., here, to Werner-Disken Co., 50 Court St., $1,336,897. Noted July 6.

N. Y., Cornwall-on-Hudson—School—Bd. Educ., brick and stone, plain foundation, to

Buildings (Continued)

Cornwall Industrial Corp., Cornwall. Archts. est. $150,000. Noted June 8.

N. Y., Elmira—Hospital—St. Josephs Hospital, 555 East Market St, general contract 5 story, 80 x 140 ft., brick annex, to P. A. Zimmerman Co., 18 East 41st St., New York, $211,000. Noted July 13.

N. Y., New York—Bank and Office—L. A. Abramson, archt. and engr., 46 West 46th St., 5 story, 50 x 85 ft., brick, steel and stone, plain foundation, 1765 Madison Ave., to Fleischmann Constr. Co., 531 7th Ave., for Bank of United States, 5th and 32nd St. Archts. est. $250,000. Noted June 29

N. Y., New York—Schools—Bd. Educ., 500 Park Ave., additions to and altering P. S. 57, East 114th St. near 3rd Ave., to Frymier & Hanna, 25 West 45th St., $264,539; P. S. 130, 2nd portion, Hester and Baxter Sts., to Concord Constr. Co., 476 Seneca St., Brooklyn, $218,800. Noted July 13.

N. Y., Riverhead—High School—Bd. Educ., brick, steel and stone, plain foundation, to Johnson & Miller, Yonkers. Archts. est. $250,000. Noted May 25.

N. J., Bridgeton—High School—Bd. Educ., 2 story, 61 x 194 ft., to J. S. Rogers & Co., Drexel Bldg., Phila.

N. J., Jersey City—Apartment—D. Woldstein, c/o G. and E. Blum, archt. and engr., 505 5th Ave., New York, 5 story, brick, steel and stone, plain foundation, Fairmount St., here, by day labor. $200,000.

N. J., Montclair—School—Bd. Educ., brick, steel and stone addition, plain foundation, to J. F. and L. Carlson, Walnut St. Archts. est. $150,000. Noted June 22.

Pa., Bryn Mawr—School—Bd. Educ., 2 story, 107 x 162 ft., school, to J. S. Rogers & Co., Drexel Bldg., Phila., $168,600.

Pa., Phila.—Office—S. Lavenson, 237 North 6th St., 8 story, 80 x 102 ft., rein.-con., brick and steel, 8th and Appletree Sts., to Kober Constr. Co., 34 South 17th St. Archts. est. $500,000.

S. C., Honea Path—Housing—Chiquola Mfg. Co., 132 houses, to Harper Lumber Co., Honea Path.

Tenn., Nashville—Bank and Office—Caldwell & Co., 205 Union St., 8 story, brick, steel and concrete, to Foster & Creighton Co., 4th and 1st Natl. Bank Bldg., $350,000. Noted March 30.

O., Cleveland—Bank and Office—Pearl St. Savings & Trust Co., 3094 West 35th St., masonry contract 2 story, 55 x 120 ft., brick, steel and concrete, Pearl and Broadview Rds., to J. Grant & Son, 4500 Euclid Ave. Archts. est. $200,000. Noted May 18.

O., Cleveland—Church—W. C. Jansen, archt., Electric Bldg., 1 story, 100 x 200 ft., brick, steel, concrete and stone, plain foundation, East 109th St. and St. Clair Ave., to Bolton Pratt Constr. Co., Columbia Bldg., for St. Aloysius Roman Catholic Church, 10932 St. Clair Ave. Archts. est. $300,000. Noted July 6.

O., Cleveland—High School—Bd. of Educ., East 6th St., and Rockwell Ave., general contract 3 story, brick and steel addition, plain foundation, West 93rd St. and Willard Ave., to Drumond-Miller Co., 4500 Euclid Ave., $652,000; heating and ventilating apparatus, to Warden & Leese, Prospect Ave., $130,697. Noted July 13.

Ind., Indianapolis — Hospital — James Whitcomb Riley Memorial Hospital Assn., 904 Hume-Mansur Bldg., 3 story, 103 x 321 ft. brick, West Michigan St., to State Constr. Co., Pythian Bldg., $311,000. Archts. est. $350,000. Noted March 17.

Ind., Richmond—High School—School Bd. Trustees, 2 story, 103 x 180 ft. brick and hollow tile, to Yeager & Sons Constr. Co., Richmond, $162,827.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., 2 story, rein.-con. and brick, plain foundation, Brooklyn Ave., to F. H. Goddard, 2130 Franklin St., $295,500. Noted July 13.

Mich., Detroit—Theatre and Office—Northwestern Building Corp., 7380 Grand River Ave., 2 story rein.-con., steel and brick, plain foundation, Grand River Ave., to J. Finn & Sons Co., 708 Amsterdam Ave. Archts. est. $2,000,000.

Wis., Madison—Arcade Store—Madison Realty Co., 1 East Main St., 2 story, 88 x 101 ft., brick, rein.-con. and steel, plain foundation, Mifflin St., to J. H. Findorff Son Co., 601 West Wilson St. Engrs. est. $150,000.

Wis., Madison—Store—The University Co-operative, 506 State St., general contract 3 story, 30 x 180 ft., brick, rein.-con. and stone, plain foundation, State St., to Newell Bros. Co., 1315 Chandler St. Engrs. est. $150,000.

Wis., Phelps—High and Grade School—Bd. Educ., general contract 2 story, 75 x 150 ft., brick, rein.-con. and steel, plain foundation, to Krasin Bros. Co., Marshfield. Engrs. est. $150,000. Noted June 8.

Wis., Pulaski—School—Bd. Educ. general contract 2 story, 70 x 120 ft., high and grade school, brick, rein.-con. and stone, plain foundation, to F. Nemitz, Main St., Denmark. Engrs. est. $150,000. Noted June 22.

Wis., Schofield—High School—Bd. Educ. general contract, 2 story, 70 x 95 ft., brick, rein.-con. and steel, plain foundation, to Otrich-Shropshire, Stevens Point. Engrs. est. $150,000.

Minn., Grand Rapids—High School—Bd. Educ., general contract 3 story, 67 x 183 ft. rein.-con., brick and tile, to Pfeffer Constr. Co., Torrey Bldg., Duluth, $154,990. Noted June 22.

S. D., Sioux Falls—School—Bd. Educ., general contract 3 story, rein.-con., brick, stone and tile, to Sioux Falls Constr. Co., Boyce Greeley Bldg., $100,535. Noted June 15.

N. D., Grafton—Dormitory—State Bd. Administration, Bismarck, general contract 4 story, rein.-con., brick, tile and stone, at State Institution for Feeble Minded, here, to Redlinger & Hansen, Wahpeton, $88,000. Noted June 15.

Col., Denver—Office—T. M. Patterson Estate, Patterson Bldg., general contract 10 story, 100 x 125 ft., 17th and Welton Sts., to A. Olson, Bank Blk., $334,000. Engrs. est. $650,000. Noted April 6.

DAM—CINCINNATI, OHIO

Bids were opened by U. S. Engr. Office, Cincinnati, June 19, for constructing Dam No. 32, Ohio River, near Vanceburg, Ky., from (1) National Contg. Co., Citizens Bank Bldg., Evansville, Ind., and (2) Dravo Constr. Co., Diamond Bldg., Pittsburgh (awarded contract) (this contractor furnished own plans and quantities). The unit bids were as follows:

(1)

NAVIGABLE PASS

700 lin.ft. cofferdam	$300.00
25,900 cu.yd. common excavation	.75
2,050 cu.yd. fill	1.00
500 cu.yd. bedding gravel or broken stone.	2.00
1,406 cu.yd. riprap	8.00
7,980 lin.ft. round piles, timber	1.00
371,000 lb. sheet piles, steel	.08
450,320 ft. b.m. common timber	125.00
129,230 ft. b.m. deck timber	125.00
11,050 ft. b.m. oak timber	200.00
5,095 cu.yd. concrete	15.00
44,771 lb. structural steel	.12
61,350 lb. reinforcing rods	.08
5,720 lb. forgings (including wrought iron)	.20
52,648 lb. bolts, etc.	.10
148,858 lb. iron castings	.10
63,572 lb. steel castings	.25
700 lin.ft. 4 in. pipe	4.00
175 placing movable parts—wickets, including horses and props	10.00
Extended total	$484,480

WEIRS

660 lin.ft. cofferdam	$300.00
38,234 cu.yd. common excavation	.75
1,000 cu.yd. fill	1.00
3,850 cu.yd. riprap	8.00
5,440 lin.ft. round piles, timber	1.00
258,400 lb. sheet piles, steel	.08
144,260 ft. b.m. common timber	125.00
62,770 ft. b.m. deck timber	125.00
50,867 ft. b.m. oak timber	200.00
19,188 cu.yd. concrete	15.00
638,522 lb. structural steel	.12
24,901 lb. forgings (including wrought iron)	.20
39,104 lb. bolts, etc.	.10
60,700 lb. iron castings	.10
104,968 lb. steel castings	.25
1,418 lb. bronze	1.50
464 lin.ft. 4 in. pipe	4.00
622 lin.ft. 3 in. pipe	5.00
25 placing movable parts — wickets, including horses and props	10.00
Extended total	$733,560
Extended grand total	$1,218,040

(2)

1,360 ft. caisson	$300.00
40,000 cu.yd excavation	3.00
61,917 ft. b.m. oak timber	400.00
39,258 cu.yd. concrete	12.80
683,293 lb. structural steel	.13
6,000 lb. reinforcing steel	.05
30,621 lb. forgings	.15
30,000 lb. bolts	.11
209,302 lb. iron castings	.13
168,270 lb. steel castings	.20
1,418 lb. bronze	.80
1,164 lin.ft. 4 in. pipe	5.50
622 lin.ft. 3 in. pipe	3.50
200 wickets	10.00
Extended total	$1,224,867

Ont., London—Monastery—Sisters of the **Precious Blood, 4 story, 125 x** 200 **ft.** brick, **by day labor under direction** of B. Blonde **14 Cornhill St., Chatham.** $150,000. **Pennington & Boyd, LaSelle Bldg.,** Windsor, **archts.**

Cuba, Havana — Yacht Club — Havana Yacht Club let contract to Purdy & Henderson, 45 East 17th St., New York City. Archts. est. $500,000.

Federal Government Work

PROPOSED WORK

Me., Bar Harbor—Stone—U. S. Engineer, Custom House, Boston, Mass., rejected bids opened June 22, furnishing and placing stone, in breakwater, near here. Noted May 25.

Tex., Gilmer—Post Office—Treas. Dept., Wash., D. C., received no bids July 11, construction, complete incl. mechanical equipment, U. S. Post Office, here. Noted June 15.

BIDS DESIRED

R. I., Providence—Rock Removal—Aug. 15 at Office U. S. Engineer, Providence, rock removal in Stamford Harbor, Conn.; adv. this issue.

N. Y., New York—Dredging—Aug. 19, by U. S. Engineer, 616 Army Bldg., dredging in Passaic River, New Jersey; adv. this issue.

Del., Wilmington—Excavation—Aug. 15, at Office U. S. Engineer, Wilmington, excavating Inland Waterway; adv. this issue.

Md., Perryville—Refrigerating Plants—Sept. 1, at Office Director, U. S. Veterans Bureau, Wash., D. C., 2 complete York 100-ton refrigerating plants in U. S. Veterans Hospital 42, here; adv. this issue.

Va., Hampton Roads—Equipment—Spec. 4667—July 26, By Bureau Yards & Docks, Navy Dept., Wash., D. C., coal and ash handling equipment, here. Noted July 13.

Va., Hampton Roads—Heating Plant—Spec. 4629—July 26, by Bureau Yards & Docks, Navy Dept., Wash., D. C., heating plant building here. Noted July 13.

Va., Norfolk — Mechanical Equipment — July 31, by Treas. Dept., Wash., D. C., mechanical equipment for east wing of U. S. Veterans' Hospital, here.

La., New Orleans—Stone—Aug. 15, by U. S. Engineer, 329 Customhouse, furnishing and delivering stone for Southwest Pass, Head of Passes and South Pass, Mississippi River; adv. this issue.

Minn., Duluth—Scow—Aug. 14 at Office U. S. Engineer, Duluth, steel derrick scow; adv. this issue.

Neb., North Platte—Piping—Aug. 11 by Treas. Dept., Wash., D. C., water piping, here.

Tex., Eagle Pass—Sewer—July 24 by Treas. Dept., Wash., D. C., sanitary sewer for U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

Tex., Galveston—Dredging—Aug. 15 at Office U. S. Engineer, Galveston, dredging Houston Ship Channel; adv. this issue.

Wyo., Ft. MacKenzie—Tank—Aug. 10, by Treas. Dept., Wash., D. C., for tank, here.

Ore., Portland—Catamarans—Aug. 21, at Office U. S. Engineer, 2nd Dist., for 80 steel pontoon catamarans; adv. this issue.

H. T. Pearl Harbor—Quaywalls, etc.—Spec. 4591—Aug 23 by Bureau Yards & Docks, Navy Dept., Wash., D. C., 68 x 400 ft. and 68 x 178 ft., rein.-con. quaywalls, 80 x 364 ft. pier, 37 x 45 ft. bulkhead, etc. Noted June 22.

BIDS RECEIVED

Fla., Apalachicola—Post Office, etc.—Treas. Dept., Wash., D. C., opened bids July 10, for U. S. Post Office and Custom House, here, from Devault & Deitrick, Canton, O., $59,817; Hodgson & Jones, 1st Natl. Bank Bldg., Montgomery, Ala., $61,980; O. P. Woodcock, 403 Main St., Jacksonville, Fla., $65,995. Noted June 15.

Mich., Detroit—Gate Engines—U. S. Engineer, 337 Federal Bldg., furnishing and installing 6 operating engines for gates of Poe Lock, at Saulte Ste. Marie, incl. motors, controllers, resistances, etc., from Green Bay Drydock Co., Green Bay, Wis., $20,410; Ellicott Machine Corp., Bush and Severn Sts., Baltimore, Md., $23,469; J. & J. B. Millholland Co., 714 5th Ave., Pittsburgh, $23,600. Noted June 8.

Minn., Albert Lea—Extension to Work**room etc.—Treas. Dept., Wash., D. C.,** ex**tension to workroom and mailing** vesti**bule, at U. S. Post Office, here, from** W. D. **Lovell, 1415 8th St., S. E., Minneapolis, $11,400; Pearce Bros, 220 West** 42nd St., **New York, $11,500; Tatager Constr.** Co., **Albert Lea, $12,468. Noted June** 29.

Federal Government Work (Continued)

CONTRACTS AWARDED

N. Y., Jamestown—Extension to Workroom, etc.—Treas. Dept., Wash., D. C., extension to workroom and mailing vestibule, U. S. Post Office, here, to G. E. Wright, Inc., 1454 Monadnock Blk., Chicago, $19,840 (4 months). Noted June 1.

Pa., Phila.—Fuel Oil—U. S. Engineer, 815 Witherspoon 1Bdg., fuel oil for floating plant, here, to Gulf Refining Co., Widener Bldg., $41,350.

Md., Edgewood—Remodeling—Constructing Quartermaster, Aberdeen Proving Ground, converting buildings 438, A. B., and C into officers quarters, here, to Newport Contg. and Eng. Co., Law Bldg., Newport News, Va., $81,250. Noted June 22.

D. C., Wash.—Guard House—Constructing Quartermaster, Munitions Bldg., guard house at Walter Reed General Hospital, here, to Boyle-Robertson Constr. Co., Evans Bldg., $19,950. Noted July 6.

Ia., Vinton—Post Office—Treas. Dept., Wash., D. C., for U. S. Post Office, here, to W. D. Lovell, 1415 8th St., S. E., Minneapolis, Minn., $56,380 (12 months). Noted June 8.

Mo., Jefferson Barracks — Mechanical Equipment—Treas. Dept., Wash., D. C., mechanical equipment for U. S. Veterans' Hospital, here, to S. Faith & Co., 2427-33 Pennsylvania Ave., Phila., $311,000 (8 months).

Cal., Los Angeles—Aerodrome—Constructing Quartermaster, aerodrome to Union Constr. Co., Oakland, $23,000.

DAM—CINCINNATI, OHIO

Bids were opened by U. S. Engr. Office, Cincinnati, June 19, for constructing Dam No. 34, Ohio River, near Chilo, from (A) National Contg. Co., Citizens Bank Bldg., Evansville, Ind. (awarded contract); (B) Dravo Constr. Co., Diamond Bldg., Pittsburgh. The unit bids were as follows:

	A	B
1,555.5 lin.ft. cofferdam	$250.00	$310.00
62,006 cu.yd. common excavation	.75	1.35
4,301 cu.yd. fill	1.00	1.00
28,604 cu.yd. riprap	7.00	9.00
71,082 lin.ft. round piles, timber	.80	1.00
41,080 ft. b.m. sheet piles, timber	125.00	200.00
1,014,135 lb. sheet piles, steel	.07	.055
956,145 lb. sheet piles, steel, for driving only	.05	.01
712,800 ft. b.m. common timber	100.00	150.00
310,500 ft. b.m. deck timber	100.00	160.00
59,030 ft. b.m. oak timber	200.00	450.00
18,617 cu.yd. concrete	15.00	15.00
683,294 lb. structural steel	.12	.14
90,454 lb. reinforcing rods	08	.06
30,621 lb. forgings (including wrought iron)	.20	.16
127,189 lb. bolts, etc.	.10	.10
209,721 lb. iron castings	.10	.14
186,270 lb. steel castings	.25	.20
1,418 lb. bronze	1.50	.80
1,134 lin.ft. 4 in. pipe	4.00	6.00
622 lin.ft. 3 in. pipe	5.00	4.00
200 placing wickets (including horses and props)	10.00	10.00
Extended totals	$1,385,147	$1,627,464
Alternate bid for flexible concrete apron below dam:		
2,830 cu.yd. apron, flexible concrete	$20.00	$21.00
86,500 lb. steel for flexible concrete apron	.10	.09
Extended totals	$65,250	$67,215

Miscellaneous

PROPOSED WORK

Mar'ne Tower, Buffalo, N. Y. — Amer. Elevator & Warehouse Co., Buffalo River, plans large marine tower. $40,000. Private plans.

Comfort Station—Ellwood City, Pa.—See "Sewers."

Bathing Beach, etc.—Chagrin Falls, O.—See "Dams."

Retaining Walls, etc.—Cleveland, O.—Bd. Educ., East 6th St. and Rockwell Ave., having plans prepared by W. R. McCornack, archt., East 6th St. and Rockwell Ave., retaining walls and iron fences at Dawning, Hough and Marion Schools. $40,000.

Generating Unit and Transmission Line—Menominee, Mich.—Wisconsin Pub. Serv. Corp., 559 Marshall St., Milwaukee, having plans prepared generating unit and transmission line, here, Mead & Seastone, State St., Madison, Wis., engrs.

Cement Mixing Machine—Madison, Wis.—Making plans for cement mixing machine to be used by city street department. C. E. Parker, city engr.

Pipe Line—Casper, Wyo.—Mammoth Oil Co., Casper, making preliminary surveys for 800 mi. 6 or 8 in. pipe line from Teapot Dome to Missouri River.

Pipe—Eureka, Cal.—J. Griffith, supt. Pub. Wks., 524 D St., soon receives bids furnishing 12,000 ft. 2 in. standard black pipe, random lengths.

BIDS DESIRED

Drainage Pumps, Etc.—New York, N. Y.—August 1, by Transit Comn., 49 Lafayette St., installing drainage pumps in subway under 14th St., Boro of Manhattan; also Metropolitan and Bushwich Aves., Boro of Brooklyn; installing frogs, switches, tracks and pumping posts in yard near Jerome Ave. and Moshlolu Parkway, Boro of Bronx, Jerome Ave. line. Route 16; additional approach track to Lenox Ave. and 148th St. yard; making changes in steel work at easterly approach to Queensboro Plaza Station, Routes 36 and 37, Sect. 1, Boro of Queens, Agreement "BZ." G. McAneny, chn.

Lumber—Niagara Falls, N. Y.—E. J. Fort, city mgr., receiving bids 111,000 ft. white oak lumber to replank Pierce Ave. bridge. $8,120. W. B. Bennett, Convention Hall, city engr.

Dumping Platform and Ramp — New York, N. Y.—July 27, by J. H. Delaney, comr. Docks, Pier "A," foot of Battery Pl., North River, building superstructure on pier at East 35th St. consisting of rein.-con. dumping platform and ramp; contr. 1773. Former bids rejected. Noted June 15.

Paving Blocks—Farrell, Pa.—Aug. 1, by J. W. Kozar, boro. secy., 125,000 vitr. brick paving blocks.

Pipe, etc.—Phila., Pa.—See "Waterworks."

Transmission Line, etc.—Black Creek, N. C.—July 27 by G. G. Smith, town clk., 4 mi. 6,600 volt, three phase transmission line, two sub-stations and local distribution system, incl. street lights. H. L. Allen, Black Creek, engr.

Gravel Pit Equipment—Delafield, Wis.—Consolidated Materials Co., 301 Caswell Blk., Milwaukee, taking bids for washing plant, 25-30 hp. crusher, pump, screen, bucket conveyor, belt conveyor, steam engine or electric motor power. Private plans. Noted May 4, under Slinger.

Basement—Milwaukee, Wis.—July 24, by Brust & Philipp, archts., 405 Bway. (basement), for 4 story, 150 x 150 ft., brick and concrete addition, plain foundation, to St. Josephs Convent, 575 Layton Blvd. $200,000.

Structural Steel—Milwaukee, Wis.—See "Industrial Works."

Paving Materials—St. Paul, Minn.—July 24, (change of date) by H. W. Austin, city purch. agt., materials for paving Hudson Rd. from Point Douglas Rd. to east city limits, 8,792 bbl. portland cement, 5,126 cu.yd. crushed stone or gravel, 3,888 cu.yd. concrete sand, 32,745 lb. ¾ in. round reinforcing steel bars, 15,295 lb. ⅝ in. round reinforcing steel bars etc.; Grand Ave. from Milton St. to Cretin Ave., 41,134 sq.yd. 3½ in. Southern pine creosoted wood blocks, 7,814 bbl. portland cement, 3,429 cu.yd. concrete sand, 6,218 cu.yd. crushed stone or gravel, 1,932 cu.yd. screened sand, 386 cu.yd. crushed stone for curb, 493,620 lb. pitch filler, etc.; Grand Ave. from Oakland Ave. to west line of Milton St., 13,570 sq.yd. Southern pine creosoted wood blocks, 2,422 bbl. portland cement, 1,136 cu.yd. concrete sand, 1,885 cu.yd. crushed stone or gravel, 162,840 lb. pitch filler, etc. O. Claussen, city engr. Noted July 13.

Scarifier Attachment—St. Paul, Minn.—Aug. 7, by G. Reis, aud. Ramsey Co., 1 scarifier attachment for 10-ton A. W. road roller. $1,500.

Structural Steel, etc.—St. Paul, Minn.—July 24, by H. W. Austin, city purch. agt., 12,688 lb. structural steel, 5,020 lb. miscellaneous steel and iron castings, 1,035 ton c.i. pipe, also for cut stone, dowel pins, expansion bolts and sheet lead flashings, for Water Dept. O. Claussen, city engr.

Transformers, etc.—San Francisco, Cal.—Aug. 9, by Bd. Pub. Wks., transformers, switchboards and accessory equipment for Moccassin Creek Power Plant, Hetch Hetchy Project, Contr. 81. M. M. O'Shaughnessy, city engr.

Transmission Line—Turlock, Cal.—Aug. 3, by Turlock Irrigation Dist., 28 mi. of 66,000 volt transmission line, bids to be received as follows: (1) lump sum bids for completed line—contractor to furnish towers and materials (2) contractor to furnish labor only—district to furnish materials (3) for materials—about 200 steel towers, 170 mi. copper or steel reinforced aluminum wire, about 6,000 suspension type insulators with fittings, switchboard panel lightning arresters and oil circuit breaker. R. V. Meikle, ch. engr.

BIDS RECEIVED

Turbines, etc.—Cohoes, N. Y.—C. L. Cadle, supt. Pub. Wks., Albany, opened bids July 10, furnishing and delivering 2 hydraulic turbines with governor equipment and extra parts for proposed power house at Crescent Dam, here, Contr A-1, from S. Morgan Smith Co., York, Pa., $92,957, W. Cramp & Sons Ship & Engine Building Co., Beach and Ball Sts., Phila., Pa., $124,000, Wellman-Seaver-Morgan Co., 7000 Central Ave., S. E., Cleveland, O., $126,000; water wheel driven generators and other electric equipment, Contr. A-2, from General Electric Co., River Rd., Schenectady, 90 r.p.m.—1,800,000 W. R. 2, $100,694, 2,666,666 W. R. 2, $105,824, 2,000,000 W. R. 2, $102,420; 105.9 R.P.M.—1,800,000 W. R. 2, $100,200. Noted June 29.

Asphalt, Gravel, etc.—Phila., Pa.—F. H. Caven, dir. pub. wks. opened bids July 11, furnishing (1) 13,000 ton asphalt surface and binder course, (2) 7,500 ton gravel (3) 3,000 bbl. portland cement (4) 8,500 ton crushed stone, from Barber Asphalt Paving Co., Land Ttile Bldg., (1) $47,653; Union Paving Co., 34th and Spruce Sts., (1) $44,740; Eastern Paving Co., Colonial Trust Bldg., (1) $47,960; De Frain Sand Co., Finance Bldg., (2) $12,208; West Jersey Sand and Supply Co., Beach and Marlboro Sts., (2) $12,208 (3) $8,250; Birdsboro Stone Co., Birdsboro, (4) $25,743; E. T. Bennis, South and 5th Sts., (4) $22,649. Noted July 6.

CONTRACTS AWARDED

Ramp, etc.—Brooklyn, N. Y.—J. H. Delaney, comr. Docks. Pier "A" North River, New York, building ramp and dumping board at foot of West 23rd St., Coney Island Creek and completing dredging, here, to Riverside Contg. Co., 164 Montague St., $27,667. Noted July 6.

Miscellaneous Construction, etc.—New York, N. Y.—Transit Comn., 49 Lafayette St., miscellaneous construction and station finish for Rapid Transit Railroads in Boros. of Manhattan, Bronx, Brooklyn and Queens, Agreement "BV," to E. Balaban, 51 East 42nd St., $10,835. Noted July 6.

Structural Steel—New York, N. Y.—Bd. Purch., Municipal Bldg., furnishing and delivering structural steel to Dept. Plant & Structures, to Amer. Bridge Co., 30 Church St., $32,982. Noted July 6.

Pier Building—Phila., Pa.—F. H. Caven, dir. pub. wks., 1 story, pier building, Allegheny Ave. and Delaware River, also improving and enlarging Allegheny Wharf 127, to Simpson, Brown & Co., 90 West St., New York, $67,779. Engrs. est. $100,000. Noted July 6.

Dump Truck, etc.—Akron, O.—B. J. Hill, city purch. agt. one 5 ton dump truck, to White Motor Sales Co., 75 North Union St., $5,843 minus $1,000 for old truck; 1 car of pig lead, to W. M. Pattison Supply Co., 777 Rockwell Ave., Cleveland, $5.78 per cwt. Noted June 29.

Gas Lines—Youngstown, O.—East Ohio Gas Co., Boardman and Champion Sts., will lay 15 mi. new gas lines throughout various parts of city, by day labor. L. P. Voelkle, mgr.

Gas Line—Thermopolis, Wyo.—Thermopolis Gas Co., 22 mi. 6 in. gas line, plain end joints, dresser couplings, also various gathering lines 3-6 in., from Golden Eagle Dome to Thermopolis, to Hope Eng. Co., Mt. Vernon, O. Noted April 13.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Aug. 4.

Bridge Superstructure, Machinery and Electrical Equipment

Seattle, Wash.

Sealed proposals will be received by the Board of Public Works of the City of Seattle, up to 10 o'clock a.m., Friday, August 4th, 1922, in room 234, County-City Building, for the fabrication and erection of the Super-structure, Machinery and Electrical Equipment of a Steel Bascule Bridge and two Side Spans over the West Waterway at West Spokane Street, under authority of Ordinance No. 43397.

The structure will comprise a double-leaf bascule span 288 feet center to center of trunnions, 2 approach spans each about 140 feet long and a steel girder span about 136 feet long. The width of the bascule span will be 45 feet center to center of trusses and of the side spans 52 feet center to center of trusses, and of the girder span about 40 feet.

No proposal will be considered except as same is made strictly in conformity with the advertisement therefor and upon the forms of proposals furnished by the Board of Public Works, bound together with the specifications, general clauses and form of contract which must be submitted unbroken and unaltered in every particular.

This improvement shall be made in accordance with the respective plans and specifications now on file in the offices of the Secretary of the Board of Public Works and the City Engineer, respectively.

The successful bidder will be required to file with the City Comptroller a bond in the sum specified in the specifications.

Each bid must be accompanied by money, a satisfactory surety company bid bond approved by the Mayor and City Comptroller as to sufficiency and the Corporation Counsel as to form, or a certified check payable to the order of the City Comptroller of the City of Seattle for a sum not less than five (5) per cent of the total amount of bid, and no bid will be considered unless so accompanied.

A deposit of Ten Dollars ($10.00) will be required for each set of plans and specifications, which will be returned upon return of the plans in good order.

Special attention of bidders is called to the State Law and City Charter regarding the number of hours constituting a day's work, minimum wage scale, American citizenship and heads of families.

The Board of Public Works reserves the right to reject any or all bids.

By order of the Board of Public Works.
C. B. BAGLEY,
Secretary.

First publication June 20, 1922.

Bids: Aug. 12.

Drainage Work

Kokomo, Ind.

Bids will be received by me for the construction of an improvement of Kokomo Creek by dredging upon petition of George W. Charles and others at my office in Kokomo, Indiana, on August 12, 1922, work to be completed by January 1, 1924.

ELLSWORTH HUNT,
County Surveyor.
Howard County, Indiana.
B. C. MOON, Kokomo, Indiana,
Attorney for Petitioners.

OFFICIAL PROPOSALS

Bids: Aug. 14.

Drainage Work

Benton, Mo.

Sealed proposals for the construction of about two hundred sixty-nine thousand three hundred cubic yards of earth excavation from the existing ditch and the new ditches to be dug in Drainage District No. 15 of Scott County, Missouri, will be received by the County Court of Scott County, Missouri, at the Court House of said County at Benton, Missouri, until one o'clock (1:00) P.M., August 14, 1922. This work consists of new work and clean-out work with very little clearing, and through an improved community, with bottom width of ditch ranging from fourteen to twenty feet. Bidders will be required to state specifically:

(1) Type and manufacture of equipment to be installed.
(2) Whether new or old equipment will be installed.
(3) Capacity of dipper, bucket and cram.
(4) Length of boom.

This work is suitable for drag line or floating dredge.

The right is reserved to reject any and all bids and to waive informalities in the notices and bids when the bids are received.

No proposals will be considered unless accompanied by certified check for $1,000.00 or a proposal bond. The bidder, or bidders, to whom awards are made will be required to enter into written contracts with the District in the form approved by the District, with good and approved security for the full amount of the contract, using the form of bond approved by the District, within fifteen days after notified of his or its proposal.

Payment for the work will be made in cash.

All requests for information should be addressed to C. E. Swank, Engineer, Charleston, Missouri. Plans and specifications of the work may be seen in the office of the County Clerk at Benton, Missouri, and copies of same may be obtained from the District Engineer for a deposit of $10.00.

(Signed)
GEO. W. PEARMAN,
County Clerk of Scott County,
Missouri, Benton, Missouri.
RAY B. LUCAS, Attorney,
Benton, Mo.
C. E. SWANK, Engineer,
Charleston, Mo.

Bids: July 24.

Grading, Curbing, etc.

Columbia, Mo.

SEALED PROPOSALS will be received by the undersigned City Clerk of the City of Columbia, Boone County, Missouri, until four o'clock p.m., the 24th day of July, 1922, for the grading, curbing and guttering and paving with Kentucky Rock Asphalt of five streets in said city, according to the plans and specifications on file with the undersigned. Approximately 5,700 lin.ft. curb and gutter, 10,500 sq.yd. of paving. For further information address

JOHN S. BICKNELL, City Clerk.

OFFICIAL PROPOSALS

Bids: Aug. 15.

Hydro-Electric Project

Dotham, Ala.

Sealed proposals will be received by the Mayor and City Council of the City of Dothan, Alabama, until 2 o'clock p.m., Tuesday, August 15th, 1922, for constructing a Hydro-Electric Project with appurtenances, and furnishing materials and equipment, at High Bluff on the Choctawhatchee River about eight (8) miles from Hartford, Ala., in sections 9 and 4 of township 2N, Range 23E, Geneva County, Alabama. The work consists of the construction of an earth dam, a concrete spillway, abutments and power house, and the furnishing and placing of machinery.

The principal approximate quantities involved are the following:

51,000	cu.yds. of excavation.
380,000	cu.yds. of embankment.
18,500	cu.yds. of concrete of different classes.
1,900,000	pounds of reinforcing steel.
354,000	pounds of structural steel work.

Turbines, generators, transformers and auxiliary power house equipment for a present installation of approximately 3,000 bhp. capacity in two units.

A transmission line twenty-one and one-half (21½) miles long at 44,000 volts pressure.

Plans and specifications are on file at the office of the City Clerk at Dothan, Alabama, and at the office of The Ludlow Engineers at Winston-Salem, N. C., where they may be examined by prospective bidders.

Copies of the plans covering the construction details of this project and two copies of the specifications attached to the form of proposal and contract will be furnished by The Ludlow Engineers, Winston-Salem, N. C., upon application by prospective bidders accompanied by a check for twenty-five ($25.00) dollars to cover the cost, or, separate prints, and extra copies of specifications and form of proposal, etc., at one ($1.00) dollar each.

Each bid must be accompanied by a certified check for approximately five (5%) per cent of the bid.

Proposals will be received at the City Hall, Dothan, Alabama, and opened publicly wih the right reserved to accept any bid or to reject any or all bids as the best interests of the City may appear.

Plans and supervision by THE LUDLOW ENGINEERS, INC. Winston-Salem, N. C.

E. O. JONES, Mayor.
R. W. LISENBY, City Clerk.

Bids: July 31.

Paving Brick

Washington, Pa.

Sealed proposals will be received by the Town Council of the Borough of Washington, Penna., at the Council Chamber until 7:30 p.m., July 31st, 1922, for the furnishing of about seven hundred thousand (700,000) paving brick f.o.b. Washington, Pa.

Each bid must be accompanied by a certified check in the amount of five per cent (5 per cent) of the contract price.

Plans and specifications may be obtained at the office of the Borough Engineer, and the right is reserved to reject any or all bids.

J. F. CURRAN,
President of Council.
JOHN GRIFFITHS,
Secretary of Council.

OFFICIAL PROPOSALS

Bids: Aug. 10.

Highway Route No. 6, Section No. 14

Woodbury, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the County of Gloucester for the construction of State Highway Route No. 6, Section No. 14, in the city of Woodbury, estimated amount of reinforced cement concrete pavement is 19,373 square yards and furnishing materials necessary and laying 3,575 lineal feet of double street railway track.

Work is to be performed under County Reimbursement Act, Chapter 183, laws of 1918, and amended by Chapter 317, laws of 1920 and Chapter 61, laws of 1922.

Bids will be received at the Court House at Woodbury, N. J., on Thursday, August 10th, 1922, at 10.00 A. M., Eastern Standard Time, and immediately opened and publicly read thereafter.

Drawings, specifications and form of contract and bond for the proposed work are on file in the office of William C. Cattell, County Engineer, at Woodbury, N. J., and in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of ten ($10.00) dollars upon application to William C. Cattell, County Engineer. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, enclosed in sealed envelopes, addresses to the Board of Chosen Freeholders of the County of Gloucester and bearing the name and address of the bidder and the name and section of the route on the outside. Bid must be accompanied by a certified check drawn to the order of Charles N. Bell, County Treasurer, for not less than ten per cent (10 per cent) of amount of the bid, provided that said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form will be furnished on application to William C. Cattell, County Engineer.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a statement of equipment properly filled out.

By order of a resolution of the Board of Chosen Freeholders of the County of Gloucester passed at a meeting held on May 24th, 1922.

CHESTER N. STEELMAN,
Clerk.

Bids: Aug. 4.

Concrete Highway and Appurtenances

Hallstead, Pa.

Sealed proposals will be received by the Council of the Borough of Hallstead, County of Susquehanna, State of Pennsylvania, on August 4th, 1922, until 8 o'clock p.m., at their office at Municipal Building, at which time and place proposals will be opened and read for the construction of concrete highway and appurtenances on Franklin Street, Pine Street, Susquehanna Avenue, and Main Street.

Proposals must be on forms provided and must be accompanied by a certified check for 5 per cent of the total amount bid.

Proposal forms, specifications, maps and other information may be obtained at the office of the Secretary of the Borough of Hallstead, Pa., or at the office of Hoadley & Giles, Civil Engineers, 415 Phelps Bldg., Binghamton, N. Y.

A deposit of ten dollars will be required for each set of plans and specifications, which will be refunded upon return of plans and specifications.

The Borough Council reserves the right to reject any or all bids.

F. C. BROWN,
President, Hallstead
Borough Council.

W. J. KIRBY,
Secretary.

OFFICIAL PROPOSALS

Bids: Aug. 15.

Road Work

Wadsworth, Ohio.

Notice is hereby given by direction of the Council of the Village of Wadsworth, Ohio, that sealed proposals will be received by the Council of said village at the office of the Village Clerk until 12 o'clock noon on Aug. 15, 1922, for the improvement of North Lyman Street to Akron-Wadsworth road by construction of bituminous macadam pavement, curbs and storm sewers; also construction of water and sewer mains northerly from North Street.

The following items relating to work and material for said improvement are from engineer's estimate:

7,300 cubic yards excavation; 11,000 square yards paving; 6,000 lineal feet curbing; 8,000 lineal feet drain; 5,000 lineal feet storm sewer.

The plans, profiles, estimates and specifications are on file in the office of the Village Clerk.

Each bid must be accompanied by a certified check for $500.00 conditioned for the proper entering into contract for construction of said improvement.

The council reserves the right to reject any and all bids.

Dated: July 7, 1922.

R. W. SIMESTER,
Village Clerk.

Bids: Aug. 1.

Waterworks Extension No. 1

Ogden City, Utah.

Notice is hereby given that Ogden City proposes to make the following public improvement, to wit: To lay either Cast Iron, or Matheson Joint pipe in Waterworks Extension No. 1, together with all other work incidental thereto, according to plans and specifications now on file in the office of the city engineer. And sealed bids are invited for said work, including the furnishing of all material, and will be received at the office of the city recorder in the City Hall at Ogden, Utah, until ten o'clock a.m., on the 1st day of August, 1922. Instructions to bidders and plans and specifications for said improvement can be seen and examined at the office of the city engineer in the City Hall of said city and may be obtained upon a deposit of $5.00, which will be refunded upon their return in good condition.

The total estimated cost of said improvement is $150,000.00.

The right is reserved to reject any and all bids and to waive all defects.

By order of the Board of Commissioners of Ogden City, Utah, this the 19th day of June, 1922.

C. O. DeWOLF,
City Recorder.

Bids: Aug. 7.

Lighting Facilities

Rome, N. Y.

Sealed proposals for Engines and D. C. Generators (Lighting Facilities) at the State School for Mental Defectives, Rome, N. Y., will be received by Mr. Cyrus J. Severance, President of Board of Managers, State School for Mental Defectives, Rome, N. Y., until 11 o'clock A.M. (Standard Time) on Monday, August 7, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3918. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the State School for Mental Defectives, Rome, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: July 5, 1922.

CHAS. BERNSTEIN,
Superintendent.

OFFICIAL PROPOSALS

Bids: Aug. 7.

Watermain Extension

Mitchell, S. D.

Sealed bids will be received at the Office of the City Auditor, Mitchell, South Dakota, up to eight (8:00)o'clock p.m. of Monday, the 7th day of August, 1922, for furnishing material and labor and constructing complete the watermain extensions proposed, in accordance with the plans and specifications on file at the Office of the City Auditor. Separate bids will be entertained as follows:

SECTION NO. 1. For furnishing all material, labor, equipment, etc., and constructing complete the proposed watermain extensions together with all accessories.

SECTION NO. 2. For furnishing the cast iron pipe and special castings listed on proposal blank No. 2. All prices to be f.o.b. Mitchell, South Dakota, freight and any tax included.

SECTION NO. 3. For furnishing all labor and materials, (except cast iron pipe and special castings) tools, equipment, etc. necessary for the construction complete of all watermain extensions and accessories.

"SECTIONS 2" and "3" are optional with "SECTION 1."

All the above material and work must be in accordance with the plans and specification on file at the Office of the City Auditor, Mitchell, South Dakota.

The above material and work is to be paid for in cash.

Any prospective bidder desiring a copy of the specifications may obtain the same from the City Auditor by making a deposit of $5.00, which amount will be refunded on the return of said specifications within five days following the date of receiving bids.

Each bid must be accompanied by a certified check (or draft) in the sum of not less than five per cent (5%) of the total amount of the bids. This check (or draft) must be drawn upon an incorporated Trust Company or Bank and made payable to the City Treasurer, Mitchell, South Dakota, and shall be forfeited and become the property of the City in cae the bidder neglects or refuses to enter into a contract and to furnish bond (of full amount of contract) within ten (10) days after the date when his proposal shall have been accepted by the City. All other checks will be returned upon demand after the contract has been awarded.

The City reserves the right to reject any and all bids.

E. V. BOBB, Mayor.
FRANK McGOVERN,
City Auditor.

FRED J. HENSON,
City Engineer.

Bids: July 25.

Sewers

Wheeling, W. Va.

Sealed proposals will be received by the city of Wheeling, W. Va., until 5 p.m. of the 25th day of July, 1922, for the furnishing of all material including manholes, catch basins and labor required in the construction of new sewers on the following streets:

MARKET STREET (14TH TO CREEK)—1,200 lin.ft. 42-in. reinforced concrete culvert pipe. Average cut 17 ft.

MARKET STREET (ALLEY 9 TO 14TH ST.)—275 lin.ft. 15-in. D. S. vitrified pipe. Average cut 12 ft.

MAIN STREET—1,200 lin.ft. 42-in. reinforced concrete culvert pipe. Average cut 18 ft.

12TH STREET (MAIN ST. TO RIVER)—475 lin.ft. 24-in. vitrified sewer. Average cut 12 ft.

SOUTH MARKET STREET (SOUTH OF 27TH ST.)—225 lin.ft. 36-in. reinforced concrete culvert pipe. Laid in open drain.

Contract is to be let for total amount of work and not by separate streets.

Plans and specifications and proposal forms on file in office of the City Engineer, City Building.

Individual copies of the plans and specifications will be prepared by request, for a nominal fee of $5.00.

All bids must be accompanied by a certified check of 5 per cent of the amount bid, and addressed to the City Council, care of W. M. Evans, City Clerk.

The city reserves the right to reject any or all bids.

C. H. DOWLER,
City Manager.
H. A. CONRAD,
City Engineer.

Bids: Aug. 1.

State Highway Work

Baltimore, Md.

Sealed proposals for building eight sections of State Highway, as follows:

Frederick County, Cont. F-52. One section of State highway along the Buckeystown Pike from end of Cont. F-31 Extd. to Furnace Branch Bridge, a distance of 1.35 miles. (Concrete.)

Howard County, Cont. Ho-23. One section of State highway from the end of Cont. 453 at Benson Branch to the Triadelphia Pike, a distance of 1.5 miles. (Concrete.)

Hartford County, Cont. H-29. One section of State highway from Whiteford toward Dublin, a distance of 1.0 miles. (Concrete.)

Charles County, Cont. Ch-23. One section of State highway from Mason Springs to Marbury, a distance of 2.6 miles. (Gravel.)

Cecil County, Cont. Ce-41. One section of State highway from Calvert toward Fair Hill, for a distance of 2.0 miles. (Concrete.)

Queen Anne's County, Cont. Q-22. One section of State highway from Sudlersville toward Millington, for a distance of 2.0 miles. (Concrete.)

Dorchester County, Cont. D-25. One section of State highway from Eldorado toward Federalsburg, for a distance of 1.0 miles. (Concrete.)

Wicomico County, Cont. Wi-21. One section of State highway from Salisbury toward Snow Hill, for a distance of 2.0 miles. (Concrcete.)

Will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., standard time, on the 1st day of August, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans, will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 13th day of July, 1922.

JOHN N. MACKALL,
Chairman.
L. H. STEUART, Secretary.

Bids: July 25.

Barge Canal Terminals

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, July 25, 1922, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and amendatory laws, and Chapter 402 of the Laws of 1920, as follows:

—1—

TERMINAL CONTRACT NO. 89

For paving a portion of the terminal site, constructing railroad and crane tracks, electrical work and details incidental thereto, at Syracuse.

Contract plans, sheets 1 to 4 inclusive.

—2—

TERMINAL CONTRACT NO. 90

For dredging a portion of the Henry Street slip at Gowanus Bay, Borough of Brooklyn, New York City.

Contract plans, sheet No. 1.

Plans may be seen and detailed specifications, engineer's estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate at fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE,
Superintendent of Public Works.
June 22, 1922.

Bids: **Aug. 2.**

Electric Elevators

Marcy, N. Y.

NOTICE TO CONTRACTORS: Sealed proposals for Three Electric Elevators—Buildings for Chronic Patients, Store House and Cold Storage Building, at the Utica State Hospital, Marcy Division, Marcy, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 2 o'clock p.m. (Standard Time) on Wednesday, August 2, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3809. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Utica State Hospital, Utica, N. Y., at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Depatrment of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

L. M. FARRINGTON, Secretary,
State Hospital Commission.
Dated: July 13, 1922.

Bids: **July 25.**

Eight Sections of Road Work

Baltimore, Md.

SEALED PROPOSALS for building eight sections of State Highway, as follows:

ANNE ARUNDEL CO., Contract AA-24—One section of State Highway along the New Cut Road from end of Contract 293 to Pumphrey, a distance of 1.3 miles (concrete).

ALLEGANY CO., Contract A-23—One section of State Highway along the Old National Pike from Cumberland toward Allegany Grove for a distance of 1.2 miles (macadam resurfacing).

ALLEGANY CO., Contract A-24—One section of State Highway from Frostburg to the Swimming Pool, a distance of 9.26 mile (concrete).

HOWARD CO., Contract HO-16—One section of State Highway from Clarksville toward Dayton, a distance of 1.5 miles (concrete).

MONTGOMERY CO., Contract M-33—One section of State Highway from Lelands Corner to Campbells Corner, a distance of 1.5 miles (concrete).

BALTIMORE CITY, Contract BC-40—One section of State Highway along 25th Street, between the York Road and the Harford Road, a distance of 0.75 mile (sheet asphalt).

BALTIMORE CO., Contract B-46—One section of State Highway along the Philadelphia Road from Golden Ring, toward the Harford Co. Line for a distance of 3.7 miles (alternate bids—sheet asphalt and concrete).

QUEEN ANNES CO., Contract Q-24—One section of State Highway from and of Contract Q-16 at Winchester to Kings' Store, a distance of 1.8 miles (concrete).

Will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 m. on the 25th day of July, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five hundred ($500.00) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 6th day of July, 1922.

JOHN N. MACKALL.
L. H. STEUART, Chairman.
Secretary.

Bids: July 24.

Concrete Box Sewer

Annville, Penna.

Sealed bids will be received by the Board **of** Commissioners of Annville Township, Lebanon County, Penna., until 8:00 o'clock p.m., July 24th, 1922, at which time they will be publicly opened at the Town Hall, for the construction of a reinforced concrete Box Sewer, approximately six hundred and seventy-five feet in length, and three and one-half feet, by three and three-fourths feet, inside dimensions.

Plans and specifications may be obtained from the Township Clerk.

Each proposal must be accompanied by a certified check, in the amount of Two Hundred Dollars ($200.00) made payable to the Township Treasurer.

All bids must be made upon blanks furnished by the undersigned.

The right is reserved to reject any or all bids.

By order of the Board of Commissioners.

D. M. RANK,
President.
JOHN G. NYE,
Township Clerk.

OFFICIAL PROPOSALS

Bids: July 25.

Paving

Blue Island, Ill.

Sealed proposals will be received by the Board of Local Improvements of the City of Blue Island, Ill., at the hour of 8:00 o'clock P. M., (Daylight Saving Time), on Tuesday, July 25th, 1922, at the City Hall, in said City, for furnishing all labor, tools, machinery and materials and the construction of the following items, in accordance with Ordinance, Plans and Specifications for the same, now on file in the office of the City Clerk of said City, under Special Assessment No. 263.

44,021.20 sq. yds. of reinforced concrete pavement (7½) in. in thickness.
29,757.55 lin. ft. of 5 in. x 6 in. integral concrete curb.
16,100.00 cu. yds. of earth excavation.
(65) manholes and covers adjusted.
(117) catch basins and covers adjusted.
(9) existing valve vaults and covers adjusted.
(12) new brick valve vaults and cast iron covers.
(117) concrete storm water inlets, with 350 lb. cast iron inlet covers and (6) ft. of 9 in. vitrified tile pipe connecting to catch basin.
13,000 lin. ft. of asphaltic fibre matrix expansion joint.
600 lin. ft. of steel protection plates.

Plans, Specifications and Proposed Blanks may be obtained from the City Clerk of said City.

All proposals must be accompanied by a certified check in proper form, in an amount equal to 10 per cent of the total proposal, payable to Paul T. Klenk, President of the Board of Local Improvements; and shall be made on forms furnished by the Engineer.

The person or persons whose proposal shall be accepted will be required to execute a contract and furnish a bond for faithful performance, acceptable to the Board, in an amount equal to (⅓) of the proposai, within (15) days from the date of the award.

The Board of Local Improvements reserves the right to reject any or all proposals.

Board of Local Improvements, Blue Island, Ill.

PAUL T. KLENK, Pres.,
A. G. KERN.
V. B. ROBERTS, Sec'y.

Bids: Aug. 15.

Inlet Construction

Ft. Lauderdale, Fla.

Notice is hereby given that the Board of County Commissioners, Broward County, Florida, will receive bids until 11.00 A.M., on Tuesday, August 15, 1922, for the construction of an inlet from New River Sound to the Atlantic Ocean, near Ft. Lauderdale, as per plans and specifications on file in the Clerk's Office, Courthouse Bldg., Ft. Lauderdale, Fla.

Such work shall be let in two contracts, being as follows:

(a) The dredging of 81,000 cubic yards more or less of earth; and the dredging of 5,000 cubic yards more or less of rock;

(b) The furnishing and placing of 6,200 cubic yards more or less of riprap and jetty hearting and of 2,500 tons more or less of jetty capping, all in riprap and jetty construction.

Separate bids will be received and separate contracts let for each of the two classes of work mentioned. Copy of plans and specifications may be secured from the Clerk upon payment of $1.00 to cover cost of printing the same.

Each bid shall be accompanied by a certified check in the amount of 3% of the bid, guaranteeing that the bidder will make contract and bond within ten days of notice of award.

Bond on each contract will be required in the sum of 50% of the amount bid.

Address all bids to the Board of County Commissioners, in care of Frank A. Bryan, Clerk, Ft. Lauderdale, Fla.

The Board reserves the right to reject any and all bids.

By order of the Board.

H. G. WHEELER,
Chairman.

Attest:—
Frank A. Bryan, Clerk.
Geo. B. Hills Company, Engineers,
Jacksonville, Florida.
Dated July 10. 1922.

OFFICIAL PROPOSALS

Bids: July 31.

Paving

Washington, Pa.

Sealed proposals will be received by the Town Council of the Borough of Washington, Penna., at the Council Chamber until 7:30 p.m., July 31st, 1922, for the construction of about eighteen thousand (18,000 square yards of brick pavement (brick furnished by the borough) and for the resurfacing of about five thousand (5,000) square yards with bituminous pavement.

Each bid must be accompanied by a certified check in the amount of five per cent (5 per cent) of the contract price.

Plans and specifications may be obtained at the office of the Borough Engineer, and the right is reserved to reject any or all bids.

J. F. CURRAN,
President of Council.
JOHN GRIFFITHS,
Secretary of Council.

THIS ADVERTISING COSTS LITTLE

The cost of giving contracts NATIONAL publicity through the Official Proposal Columns of *Engineering News-Record* is only 40 cents a line an insertion. Figured on a circulation basis, the cost per line per thousand readers (1 1/3 cents) is extremely small, compared with the cost of other forms of publicity and the possibility of large waste distribution through publications of limited or general circulations. A single lower bid may save the cost of the advertising many times over.

Bids: July 25.

Highway Work

Raleigh, N. C.

Sealed bids for the construction of the following projects will be received by the North Carolina State Highway Commission at Raleigh, N. C., until 10 A.M., on the 25th day of July, 1922, when they will be opened and read:

Hard surface (Concrete or Asphaltic Paving projects), including grading, reinforced concrete or cast iron pipe, structures, etc.

Project No.	County.	Length (miles)
173	Pasquotank	7.22
183-A	Pitt	13.54
236	Johnston	14.83
342	Cumberland	5.91
484	Wake	8.79
494	Warren	6.21
535	Guilford	7.78
713	Ashe	3.53
764	Surry	1.63

Topsoil, Sand Clay, or Gravel projects, including grading, drainage pipe, structures, etc.

Project No.	County.	Length (miles)
131	Gates	13.50
132	Gates	9.73
569	Moore	18.97
814	Burke	8.69
952	Jackson	
963	Macon	8.68

MACADAM PROJECTS

Penetration or waterbound Macadam Projects, including drainage pipe, structures, etc.

Project No.	County.	Length (miles)
602	Alexander	9.28
640	Iredell	8.17
702-A	Alleghany	7.75
888	Yancey	15.22

BRIDGE PROJECT

Project No.	County.	Length (miles)
694	Union -	5.40 ft.

rein.-con. through girders.

Specifications, proposals, forms, etc., may be obtained from the State Highway Commission at Raleigh, N. C.

Plans may be seen in the Raleigh office, or in the offices of the District Engineer.

Bridge plans may be obtained from the State Highway Commission at Raleigh, N. C., upon payment of five ($5.00) dollars per set.

The right is reserved to reject any or all bids.

By order of the North Carolina State Highway Commission.

OFFICIAL PROPOSALS

Bids: July 26.

Concrete Wharf and Transit Shed Foundation

Tampa, Fla.

Sealed bids will be received by the City Commission of the City of Tampa until twelve o'clock noon on the 26th day of July, 1922, for furnishing all materials, labor and equipment necessary to construct a reinforced concrete wharf and transit shed foundation at the municipal slip on the Estuary in the City of Tampa, according to the plans and specifications on file in the office of the City Manager, copies of which may be obtained upon application, for the sum of Ten Dollars ($10.00), payable in advance.

Each bid must be accompanied with a certified check for five percent (5%) of the amount of the bid, payable to the City Clerk of the City of Tampa, to be retained by the City Commission until the contract is awarded and acceptable bonds filed, at which time checks will be returned to the unsuccessful bidders.

The right to reject any or all bids within forty-five (45) days from the date herein specified is reserved by the Commission.

Bidders are requested to examine the location before submitting bids.

Following are the estimated approximate quantities:

(a) Wood sheet pile bulkhead, length 2,288 lineal feet.
(b) Wood piles for retaining wall and pedestal foundation. Number of piles 879.
(c) Lumber for bulkhead caps, wales and flooring. Number of feet B. M. 102,614.
(d) Concrete for bulkhead, retaining wall and foundation pedestals. Number of cubic yards 2,186.
(e) Concrete platform piles. Lineal feet 19,526.
(f) Straight concrete plaform, thirty (30) feet wide, with railroad track. Number of lineal feet 1,476.
(g) Straight concrete platform, thirty (30) feet wide, without railroad tracks. Number of lineal feet 695.
(h) All concrete platform other than straight work. Number of square feet of platform 3,848.
(i) Rock fill. Number of cubic yards 15,000.
(j) Earth fill. Number of cubic yards 40,000.
(k) Sewer outlet 36 in. cast iron pipe. Number of lineal feet 84.

R. D. MARTIN, City Engineer.
A. W. D. HALL, City Manager.
SIGNED: C. H. BROWN,
Mayor-Commissioner.
ATTEST: WM. E. DUNCAN,
City Clerk.

Bids: July 26.

Cast-Iron Main Sewer

Rye, N. Y.

Sealed proposals will be publicly opened by the Trustees of the Village of Rye, N. Y., at the Village Municipal Hall, at 8.15 P.M., July 26, 1922.

Said proposals to cover the construction (both materials and labor) of a cast-iron main sewer according to plans and specifications filed with the Village Clerk.

Copies of the plans and specifications may be obtained from him, or from the engineer, G. Everett Hill, 45 Seventh Avenue, New York City, upon payment of $15, of which amount $10 will be refunded upon return of all papers, in good condition, on or before July 31st, 1922.

Approximately the work consists of:

About 2,000 feet of 16-inch and about 1,540 feet of 18-inch cast-iron pipe (with manholes and fittings) laid partly on piles and partly on concrete piers.

Each bid must be accompanied by a certified check for $5,000, as a guarantee that the bidder, if his bid be accepted, will enter into contract and execute the required bond.

Each bid must be made on blank forms to be obtained from the Village Clerk or the Engineer.

The Village reserves the right to reject any or all bids.

The Board of Village Trustees,
WILLIAM H. SELZER,
Village Clerk.

G. EVERETT HILL, Engineer,
45 Seventh Ave., New York.

OFFICIAL PROPOSALS

Bids: July 31.

Sewage Disposal Plant

Indianapolis, Ind.

Sealed proposals will be received by the Board of Sanitary Commissioners, Sanitary District of Indianapolis, at its office in the City Hall, Indianapolis, Indiana, until 10 **a.m.** July 31st, 1922, at which time bids will be publicly opened and scheduled, and awards made as soon thereafter as practicable, for construction of Section 2, Division III, and furnishing and erecting mechanical equipment for the Sewage Disposal Plant of the Sanitary District of Indianapolis, in accordance with plans and specifications on file at the office of the Board. This construction and equipment to consist of the following general items:

(1) One (1) Power Plant Building of Brick, Concrete and Steel, approximately 130 ft. x 82 ft. in plan and 65 ft. from bottom of foundation to top of coping wall.
(2) Two (2) Reinforced Concrete Pump Pits including Brick Pump Houses, as specified.
(3) One (1) Radial Brick Chimney, 200 ft. high, 9 ft. internal diameter.
(4) Railway grading, approximately 2,800 ft. in length.
(5) Water, Steam and Air Piping and Erection of Sludge Equipment and other machinery.
(6) One (1) Electric Power Plant Crane.
(7) Five (5) Electric Centrifugal Pumping Units.

Each bidder shall be required to deposit with his bid a certified check in the amount as provided in said specifications and information to bidders, to insure the execution of the contract for which bid is made.

Copies of plans and specifications and general information may be obtained at the office of Charles H. Hurd, Consulting Engineer, 1405 Merchants Bank Building, Indianapolis, Indiana.

The board reserves the right to reject any and all bids.

BOARD OF SANITARY
COMMISSIONERS
Jay A. Craven, President,
John L. Elliott, Vice-Pres.
Lucius B. Swift.

Bids: July 26.

State Road Work

Hartford, Conn.

SEALED PROPOSALS will be received by the State Highway Commissioner, 12 Washington Street, Hartford, Conn., until 2 P. M., STANDARD TIME on Wednesday, July 26th, 1922, for the following sections of State work, in accordance with plans and specifications on file in the office of the State Highway Commissioner and at the following places:

TOWN OF COVENTRY: About 20,125 lin. ft. of 3 in. bituminous macadam over 7 in. broken stone base on the Willimantic Road. Plans and specifications at the Town Clerk's office, Coventry, Conn., and at the office of R. W. Stevens, Division Engineer, 12 Washington Street, Hartford, Conn. NOTE: Local stone of a quality satisfactory to the Engineer will be used for both base and surface courses of this road.

TOWN OF ELLINGTON: About 3,000 linear ft. of 3 in. gravel over 8 in. Telford Base on the Sadd's Mill Road. Plans and specifications at the town clerk's office, Ellington, Conn., and at the office of R. W. Stevens, Division Engineer, 12 Washington Street, Hartford, Conn.

TOWN OF NORWICH: About 2,650 linear ft. of plain cement concrete pavement and vitrified hillside brick over 6 in. concrete base on the Fox Hill Road. Plans and specifications at the office of A. W. Bushell, Division Engineer, Thayer Building, Norwich, Conn. NOTE: The cement for the above work both for the concrete pavement and the concrete base will be furnished to the Contractor by the State without expense to the Contractor.

All bids must be accompanied by a surety company bond or a certified check not less than one-third of the cost of the work. The State Highway Commissioner reserves the right to reject any and all bids.

Dated at Hartford, Connecticut, July 11th, 1922.

C. J. BENNETT,
State Highway Commissioner.
12 Washington Street, Hartford, Conn.

OFFICIAL PROPOSALS

Bids: Aug. 15.

Street Improvement

Wadsworth, Ohio.

Notice is hereby given by direction of the Council of the Village of Wadsworth, Ohio, that sealed proposals will be received by the council of said village at the office of the Village Clerk until 12 o'clock noon on August 15, 1922, for the improvement of Highland Avenue, from Prospect Street northerly one block including intersection by construction of vitrified brick pavement on concrete base, curbs and storm sewers.

The following items relating to work and material for said improvement are from engineer's estimate:

1,840 cubic yards excavation; 2,700 square yards paving; 1,700 lineal feet curbing; 1,700 lineal feet drain; 1,000 lineal feet storm sewer.

The plans, profiles, estimates and specifications are on file in the office of the Village Clerk.

Each bid must be accompanied by a certified check for $500.00 conditioned for the proper entering into contract for construction of said improvement.

The council reserves the right to reject any and all bids.

R. W. SIMESTER,
Dated: July 7, 1922. Village Clerk.

Engineering News-Record Reaches Your Local Contractors

Its distribution among the contractors of any one state is in proportion to the number of contractors situated in that state. The Official Proposal Colums of *Engineering News-Record* offer precisely the same efficient service to municipalities, counties, and state and government departments in every section of the United States.

Bids: Aug. 10.

Drainage and Ditch Improvement

Wooster, Ohio.

Notice is hereby given that sealed proposals for the construction of the JOINT WAYNE-HOLMES COUNTY DITCH IMPROVEMENT will be received up until twelve o'clock noon Eastern Standard Time on Thursday, August 10, 1922, at the office of the Secretary of the Joint Board of County Commissioners of Wayne and Holmes Counties at the Court House at Wooster, Ohio.

The work to be done consists of the draining and dredging of Killbuck Creek in Wayne and Holmes Counties, in all, the distance of One Hundred and Fifty-Six Thousand (156,000) feet.

The yardage of earth to be moved is estimated at about 1,780,000 cubic yards, consisting principally of Hydraulic dredge work. The date of completion will be eighteen months from the date of awarding of contract.

A certified check in the amount of $10,000.00, payable to the Joint Board of County Commissioners of Wayne and Holmes Counties, Ohio, must accompany each proposal. Checks of unsuccessful bidders will be returned within ten days of the awarding of the contract.

The said board reserves the right to reject any or all bids. Plans, specifications and proposals are on file at the Secretary's office at the Court House, Wooster, Ohio, or same will be mailed upon application when same is accompanied by a deposit of $20, which will be refunded if plans are returned in good condition.

By order of the Joint Board of
County Commissioners of Wayne
and Holmes Counties.
CHAS. F. SCHOPF,
Secretary.

OFFICIAL PROPOSALS

Bids: Aug. 9.

Road Work

Hackensack, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders for the construction of Section 3, Route No. 10, from the Borough of Little Ferry to the Borough of Ridgefield, in the County of Bergen, with an 8-in. one course reinforced concrete pavement; estimated amount of surface pavement required is 17,680 sq. yds.; and opened and read in public at Court House, Hackensack, N. J. on Wednesday, August 9th, 1922, at 1.30 P. M. (daylight savings time).

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by the County Engineer, and approved by the State Highway Commission, have been filed in the office of the said Engineer at the Court House, Hackensack, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to the Board of Chosen Freeholders of the County of Bergen and must be accompanied by a certificate from the Bonding Company and a certified check for not less than 10 per cent of the bid and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

Work to be performed under County Reimbursement Act Chapter 183 Laws of 1918, and amended by Chapter 317, Laws of 1920.

By Order of Board of Chosen Freeholders, Bergen County, N. J.

JAS. M. HARKNESS,
Clerk.

Bids: Aug. 2.

High School Building

Perry, N. Y.

Sealed bids will be received by the Board of Education, District No. 6, towns of Perry and Castile, Perry, N. Y., at the office of the Secretary T. H. Donnelly, High School building on Leicester Street on or before 12 o'clock noon Eastern Standard Time, August 2nd, 1922, for making the proposed alterations in the old building and the construction of a two story brick addition 146x150 feet, according to plans and specifications prepared by Gordon and Kaelber, Architects, 125 Sibley Building, Rochester, N. Y.

The plans and specifications may be inspected at the office of said architects or said secretary of the Board of Education, and obtained together with bidding sheets at the office of said architects.

Each bid shall be accompanied by a certified check amounting to 5 per cent of the amount of the bid. If the bid is accepted a contract will be entered into within thirty days. The performance of said contract shall be properly secured by United States Government bonds or surety bonds duly approved by the Board of Education.

The Board of Education may at its discretion reject all bids as the interests of the district may appear.

Bids will be received on the following types of work:

No. 1—Mason, Steel and Iron, Tile and Marble Work.
No. 2—Carpenter Work and Hardware.
No. 3—Painting and Finishing.
No. 4—Roofing and Metal Work.
No. 5—Electrical Work.
No. 6—Sprinkler System.
No. 7—Heating and Ventilating.
No. 8—Plumbing.

If any contractor prefers to submit a general bid on the first six types of work listed above the Board will receive and consider it.

By order of the Board of Education,
C. W. TORREY,
G. L. PECK,
W. D. OLMSTED,
MRS. ANNA SMITH,
MRS. THEO. CALKINS,
DR. C. R. BROWN,
W. W. McMAHAN.

July 10, 1922.

OFFICIAL PROPOSALS

Bids: Aug. 17.

Street Improvement

Henderson, N. C.

Sealed proposals will be received for the materials and labor in connection with the improvements of certain streets of the City of Henderson, N. C., by the Mayor and Board of Commissioners of said city until three o'clock P.M., of August seventeenth, when they will be opened and publicly read.

The specifications cover sheet asphalt and bituminous concrete pavements, and in addition to the above, proposals will be considered upon Warrenite-Bitulithic and other special forms of pavement. Work contemplated includes grading, furnishing placing and constructing concrete curb and gutters and the installation of storm drains.

Bids are asked upon approximately 60,000 square yards of pavement. Pavement will be constructed from one or more of the above classes as may be selected by the city, and the entire work to be done will be awarded under one or more contracts as the city may elect.

Plans and specifications may be examined at the office of the City Clerk or at the office of the Engineer. Specifications will be ready for delivery on or about July 20, and prospective bidders may obtain same by addressing direct to the Engineer at Henderson, N. C., and making a deposit of $10.00, which deposit will be refunded upon the return of the specifications in good condition.

Each proposal must be accompanied by a certified check in the sum of five (5) per cent of the amount bid as evidence of good faith upon the part of the bidder.

The City reserves the right to reject any or all bids or accept any which may seem to be to the best interest of the City of Henderson.

A. A. BUNN, Mayor.
S. B. BURWELL, Clerk.
R. D. GLADDING, Engineer.

Bids: July 21.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m., advanced standard time which is twelve o'clock noon eastern standard time, on Friday, the 21st day of July, 1922, for the improvement of the following in Cattaraugus County.

Highway No. 8018-A. Bradford-Carrollton, Part 2 (Carrollton Bridge). The work to be done under this contract includes seven spans of steel trusses weighing approximately 1,150,000 lbs. with six concrete piers and two abutments. The approximate length of steel structure is 895 feet and the roadway is 20 feet in width, surfaced with wood block on a reinforced concrete floor. Also for the improvement of the following highways:

Allegany......	(two highways: 2.77 & 8.35)
Fulton...............	(one highway: 4.23)
Oneida................	(one highway: 2.75)
St. Lawrence..........	(one highway: 7.73)
Steuben..............	(one highway: 1.01)
Wayne...............	(one highway: 1.65)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

J. C. FINCH, Secretary.
HERBERT S. SISSON, Commissioner.

Bids: Aug. 18.

Channel Work

Bloomington, Ill.

Sealed bids will be received by the Trustees of the Bloomington and Normal Sanitary District, at 404 Unity Building, Bloomington, Illinois, up to 2 o'clock p. m., August 18, 1922, for construction of the open channel work of the District as follows:

71,300	cubic yards excavation in open channel.
76,200	square yards hand dressed spoil bank.
150	lineal feet retaining wall requiring 56 cu. yd. concrete.
75	lineal feet reinforced concrete sewer crossing under channel.
1	manhole on 33-inch sewer.
1	manhole on 48-inch sewer to be repaired.
	Supports for two sewers crossing proposed channel.

Open channel has bottom widths from 8 feet to 26 feet, with side slopes 1½ to 1, average depth 7 feet.

Separate bids will be received on the dredging and spoil bank work and on the incidental work above listed.

All bids must be on forms prescribed by the Trustees and bidding blanks may be obtained from Taylor & Woltmann, 428 Unity Bldg., Bloomington, Illinois, Engineers for the District.

Plans, profiles and specifications for the work may be obtained from the Engineers.

All bids must be accompanied by a check for 10 per cent of the amount of the bid, certified by a responsible bank, payable to John W. Harber, President of Board of Trustees.

The Trustees reserve the right to reject any and all bids.

Dated Bloomington, Illinois, July 8, 1922.

JOHN W. HARBER,
FRED D. BARBER,
JOHN J. CONDON,
Trustees, Bloomington and Normal Sanitary District.

Bids: July 31.

Tenders for Incinerator

Chatham, Canada.

Sealed Bids will be received by the undersigned up to 4 p.m., Monday, July 31st, for the construction of a mixed garbage and refuse incinerator for the City of Chatham, Ontario.

Each bid must be accompanied by a satisfactory bidder's bond for 5% of the bid price.

A deposit of Five dollars is required to obtain plans and specifications. Further information will be supplied at the office of the City Engineer and Manager, Chatham, Ont.

The City reserves the right to reject any or all bids.

C. H. R. FULLER,
City Engineer and Manager.

Bids: Aug. 6.

Mill Type Crane

Aberdeen, Wash.

Sealed proposals will be received by the Port of Grays Harbor at the office of the Commission, 206 E. Wishkah St., Aberdeen, Wash., until 10 o'clock A.M., August 6, 1922, for one 5 Ton, or 7½ Ton, 78-foot span, Mill Type Traveling Crane.

Further information on application.

PORT OF GRAYS HARBOR.
FRANK H. LAMB, President.
J. A. VANCE, Secretary.

A CONTRAST—NOT A COMPARISON

¶All things are comparable. ¶Your necktie is better than mine or mine better than yours; your automobile is better than mine or mine better than yours by comparison. ¶Suppose then for a moment you compare Swart Contract Bond Service with the ordinary sort. ¶With the ordinary sort your Contract Bond application is filled in and goes to the underwriters and the balance is largely "hope" that nothing will happen to keep it from going through. ¶With Swart Service, after your application is made out your case is as thoroughly prepared as a lawyer would prepare a case to put before a judge. ¶Then Swart personally presents that case to the underwriters in exactly the same way the lawyer presents his case to the judge. ¶Nothing is left undone, no stone left unturned. ¶Result—a contrast to the ordinary service rather than a comparison—and your credit is built in the bank of underwriting. ¶It will cost you nothing to know more of this service and may cost you a lot to not know about it.

HARMON V. SWART
Contract Bonds *Compensation Insurance*
92 William Street, New York

OFFICIAL PROPOSALS

Bids: Aug. 10.

Spring Street Viaduct

Atlanta, Ga.

Sealed proposals to be addressed to and filed with J. N. Landers, Purchasing Agent, City of Atlanta, will be received up to two p. m. Thursday, August 10, 1922, for the construction of the Spring Street Viaduct. The work will be let under two contracts to one or two bidders. Contract No. 1 will be for the manufacture and delivery of superstructure metal work; contract No. 2, for the erection of the superstructure metal work and for the construction complete of the viaduct, approaches and incidental work. The viaduct and approaches include about 1,700 lin. ft. of elevated viaduct structures in part of structural steel and in part of reinforced concrete, and about 600 lin. ft. of approaches between the retaining walls, together with regrading and repavement of certain roadways, and alterations to certain incidental structures, and attendant construction. About 1,200 tons structural steel, 10,000 cu. yds. reinforced concrete.

Each bid shall be accompanied by certified check payable to J. N. Landers, Purchasing Agent, in an amount not less than 2 per cent of the gross amount of the bid, to be forfeited as liquidated damages by any bidder who is awarded a contract and who fails promptly to execute contract and bond. Certified checks will be returned to bidders, upon execution of contract and bond or sooner upon action of the Viaduct Committee.

Contracts will be awarded to the lowest responsible and competent bidders, but the City reserves the right to reject any and all bids and to waive informalities. Bids shall be based upon plans and specifications now on file in the office of J. N. Landers, Purchasing Agent, and in the offices of Harrington, Howard & Ash, Kansas City, and of Robert & Co., Inc., Atlanta, Associated Consulting Engineers. Copies of the plans and specifications may be secured from either of these engineers' offices by depositing $35.00. These plans and specifications shall be returned and $20.00 will be refunded.

A bond satisfactory to the City of Atlanta equal to the total gross amount of the bid will be required.

J. N. LANDERS,
Purchasing Agent, City of Atlanta.
(2nd floor City Hall.)

Bids: July 24.

Sanitary Sewer Outlet

South Chicago Heights, Ill.

SEALED PROPOSALS will be received by the Board of Trustees of the Village of South Chicago Heights, Illinois, on Monday July 24th A. D. 1922, at the hour of 8:00 o'clock P. M. (Daylight Saving Time), at the Village Hall in said Village, for the construction and completion of a Main Sanitary Sewer Outlet, including the furnishing all labor and materials and the necessary machinery, tools and equipment to properly construct the same, in accordance with plans, profiles and specifications on file in the office of the Village Clerk, Mrs. Elizabeth C. Hansen.

The following estimated quantities comprise the work contemplated to be done:

1645.15 lin. ft. of 18 inch, inside diameter, double strength, Vitrified Tile Sewer average cut 13 ft., maximum cut 23 ft.

205.3 lin. ft. of 18 inch inside diameter (Class A.) Cast-Iron Pipe Sewer, average cut 15 ft., (or alternate tunnel trench).

11 Brick Manholes, with 450 lb. cast-iron covers; and wrought Iron Steps.

150 cu. yds. excavation in open ditch outlet.

Copies of the plans, specifications and bidding blanks can be obtained at the office of Mr. Howard P. Roe, Unity Bldg., Chicago Heights, Ill., and at the office of Allen L. Fox, Engineer, Commercial Bank Bldg., Chicago Heights, Ill.

Each bid must be accompanied by cash or certified check in an amount equal to (10 per cent) of the total proposal, payable to Emil Barnick, President of said Village.

The successful bidder will be required to furnish a Bond acceptable to said Village in the amount of one-half of the total proposal, within (10) days from the award of the contract.

The Village reserves the right to reject any or all proposals.

EMIL BARNICK,
President.
MRS. ELIZABETH C. HANSEN,
Clerk.

OFFICIAL PROPOSALS

Bids: Aug. 1.

Extension of Sea Walls

Longport, N. J.

Sealed proposals for the construction or extension of stone jetties or sea walls or any or all of them on the Atlantic Ocean, in the Borough of Longport, County of Atlantic, State of New Jersey, will be received by the Board of Commissioners of the Borough of Longport at 7:30 o'clock in the evening, Eastern Standard Time, August 1, 1922, during a regular meeting of said Board of Commissioners, at the Commission Chamber, Borough Hall, Longport, N. J., said bids to be opened and read in public at the aforesaid time and place.

Plans, specifications and form of bid, certificate of surety, contract and bond, covering proposed work, are on file in the office of the Borough Clerk, at Borough Hall, Longport, N. J., where they may be inspected during business hours. Each bid must be made on the standard proposal form in the manner required by the specifications, must be enclosed in a sealed envelope marked "Proposals for Construction of Stone Jetties or Stone Seawalls or any or all of them at Longport, N. J., to be opened at 7:30 P.M., Eastern Standard Time, August 1, 1922," and with the certificate of surety properly filled in, and shall be enclosed in another envelope addressed to William S. Gilmore, Borough Clerk, Borough Hall, Longport, N. J. These envelopes must not be marked in any other manner. Each bid must be accompanied by a certified check payable to the Director of Revenue and Finance, or cash, in the amount of $10,000.00, and no bid will be received after the hour fixed for receipt of bids.

A contract will be awarded, if awarded at all, within one month of the date of receiving bids and such award will be made subject to the sale and delivery of bonds to be issued for the purpose of financing the above work.

The right is reserve to reject any or all bids.

By order of the Board of Commissioners of the Borough of Longport, N. J.

WILLIAM S. GILMORE,
Borough Clerk.

Bids: Aug. 1.

Street Improvements

Saranac Lake, N. Y.

Sealed bids for the improvement of streets, namely: Park Ave., Shepard Ave., South St., and Helen St., will be received by the Village Clerk of the Village of Saranac Lake, N. Y., until 7:30 P.M. (Daylight Saving Time), Tuesday, August 1st, 1922.

Plans, details, profiles, specifications, approximate quantities, and instructions to bidders will be on file at the Village Engineer's Office after July 18th and copies may be procured from Engineer on deposit of $10.00.

The Village Board of Trustees reserves the right to reject any or all bids.

(Signed)
DAN S. FOSTER,
Village President.
SEAVER A. MILLER,
Village Clerk.
HARRY HULL, Engineer.

Bids: Aug. 7.

Street Improvement

White Plains, N. Y.

Sealed bids or proposals for the construction of North Broadway, City of White Plains, with cement concrete and asphaltic concrete surface on a cement concrete foundation will be received at the office of the Clerk of the Board of Supervisors, Court House, White Plains, N. Y., until 10 a.m. (Standard Time), August 7th, 1922.

Specifications, proposal sheets and all information relative to same may be procured at the office of the County Superintendent of Highways, Court House, White Plains, N. Y., upon making a deposit of four dollars ($4.00).

BOARD OF SUPERVISORS.
FRED L. MERRITT, Clerk.

U. S. GOVERNMENT

COMMISSIONERS, D. C., WASHINGTON, July 14, 1922. Sealed proposals will be received at Room 509 District Building until 2 o'clock P. M., July 31, 1922, for grading, improving, and paving streets, roads, and avenues. For detailed information, apply Room 427 District Building. Cuno H. Rudolph, James F. Oyster, Charles Keller, Commissioners, D. C.

OFFICIAL PROPOSALS

Bids: Aug. 1.

Sanitary Sewer and Septic Tanks

Lake Worth, Fla.

Sealed proposals for the following contracts will be received by the Town Commissioners of Lake Worth, Florida, at the office of the Town Clerk until 10 o'clock a.m., August 1, 1922, for furnishing all materials, equipment and labor for the construction of a sanitary sewer system and septic tank, complete as per plans and specifications adopted by them.

The contracts will be divided as follows:

DISTRICT No. 1. Approximately 22,613 feet of 8-in. vitrified tile sewer, 1,620 feet of 10-in. vitrified tile sewer, 1,656 feet of 15-in. vitrified tile sewer, 370 feet of 14-in. cast-iron outfall and a reinforced concrete septic tank, all of the above to be complete with manholes and appurtenances.

DISTRICT No. 2. Approximately 19,297 feet of 8-in. vitrified tile sewer, 3,482 feet of 12-in. vitrified tile sewer, 250 feet of 14-in. cast-iron outfall and a reinforced concrete septic tank, all of the above to be complete with manholes and appurtenances.

Bids must be made out on blanks furnished by the City Engineer and must be accompanied by a certified check for $1,000 for each contract.

Plans, specifications and other necessary data may be obtained from the Town Clerk upon deposit of $10.00, of which the sum of $5.00 will be refunded upon return of the plans and specifications in good condition.

The bidder to whom the contracts are awarded must furnish surety bond in the sum of 25 per cent of the amount of the bid.

The Commissioners reserve the right to reject any and all bids.

J. L. BOSLEY,
City Clerk.
WARD RANDOLPH,
City Engineer.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, Buffalo, N. Y. Sealed proposals will be received here until 11 a.m. (Eastern standard time), July 27, 1922, and then opened, for constructing rubble mound east breakwater extension at Fairport Harbor, O. Further infomation on application.

UNITED STATES ENGINEER OFFICE, Duluth, Minn., July 14, 1922. Sealed proposals will be received here until 10 o'clock a.m., August 14, 1922, and then opened, for constructing and delivering a steel derrick scow, complete with machinery and equipment. Further information on application.

U. S. ENGR. OFFICE, WILMINGTON, Del. Sealed proposals will be received here until 11 a.m., standard time, Aug. 15, 1922, and then opened, for excavating Inland Waterway from Delaware River to Chesapeake Bay, Del. and Md. (Chesapeake and Delaware Canal). Further information on application.

U. S. ENGINEER OFFICE, Providence, R. I. Sealed proposals will be received here until 11 o'clock a.m., Eastern Standard Time, August 15, 1922, and then opened, for rock removal in Stamford Harbor, Conn. Further information on application.

U. S. ENGINEER OFFICE, Galveston, Tex. Sealed proposals will be received here until 12 M., Aug. 15th, 1922, and then opened, for dredging the Houston Ship Channel, Texas. Further information on application.

PROPOSALS FOR PONTOON CATAMARANS.—U. S. Engineer Office, 2d District, Portland, Ore.—Sealed proposals for 80 all steel pontoon catamarans will be received here unti 11 a.m., August 21, 1922, and then opened. Further information on application.

U. S. VETERANS' BUREAU, Office of the Director, Washington, D. C., July 15, 1922. Sealed proposals will be received at this office until 3 o'clock p.m., on September 1, 1922, and then opened, for the purchase of 2 complete York 100-ton refrigerating plants in U. S. Veterans' Hospital No. 42, Perryville, Md. The sealed envelope must be plainly marked "Proposal for purchase of refrigerating machinery to be opened at 3 p.m., September 1, 1922," and addressed to U. S. Veterans' Bureau, Room 1027, Arlington Building, Washington, D. C. A description of the equipment to be sold, conditions, etc., can be had on application to the Medical Officer in Charge, U. S. Veterans' Hospital No. 42, Perryville, Md. L. B. Rogers, Acting Director.

U. S. GOVERNMENT

PROPOSALS FOR STEEL HULL.—U. S. Engineer Office, Montgomery, Ala. Sealed proposals will be received here until 11 A. M., July 31, 1922, and then opened, for furnishing one steel hull for dipper dredge Upatoi. Further information on application.

PROPOSALS FOR STONE.—U. S. ENGINEER OFFICE, 329 Custom House, New Orleans, La.—SEALED PROPOSALS will be received here until 11 a.m., August 15, 1922, and then opened, for furnishing and delivering stone for Southwest Pass, Head of Passes and South Pass, Mississippi River. Further information on application.

U. S. ENGINEER OFFICE, 616 Army Building, New York City.—SEALED PROPOSALS will be received here until 11 a.m., Eastern Standard Time, August 19, 1922, and then opened, for dredging in Passaic River, N. J. Further information on application.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., July 5, 1922.—SEALED PROPOSALS will be opened in this office at 3 p.m., July 31, 1922, for the construction (exclusive of mechanical equipment) of an Additional Wing to the Main Hospital Building, of the United States Public Health Service Hospital at Tanner's Creek, Norfolk, Va., in accordance with drawings and specifications, which may be obtained from Neal A. Melick, Superintendent of Construction, at the Site of the Hospital, Norfolk, Va., or at this office, in the discretion of the Supervising Architect. Proposals will be considered only from individuals, firms, or corporations possessing satisfactory financial and technical ability, equipment and organization to insure speedy completion of the contract, and who have established a record for expedition on contracts of similar character and magnitude. The fact that any concern obtains a set of the plans and specifications from any source whatever and submits a bid, shall not constitute a waiver of the foregoing stipulations. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, 815 Witherspoon Bldg., Philadelphia, Pa. Bids are wanted until Aug. 7, 1922, for dredging in Delaware River in front of Camden, N. J. Further information on application.

PROPOSALS FOR WIRE MESH AND MACHINE BOLTS. — Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn.—Sealed proposals for furnishing and delivering wire mesh and machine bolts will be received at this office until 11 a.m., July 25, 1922, and then opened. Further information on application.

SEALED PROPOSALS, INDORSED "PROPOSALS FOR DISTILLING PLANT, KEY WEST, FLA., Specification No. 4546," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., August 2, 1922, and then and there publicly opened, for an addition to power house, including foundations for all equipment; for laying approximately 800 lineal feet of 20-inch, cast iron, bell and spigot circulating water pipe; for the installation of six evaporators, two condensers, two distilled water and two dense sea water pumps, one drip trap, and certain fittings and valves to be furnished by the Government, and for furnishing and installing a traveling crane, two turbine-driven, centrifugal circulating pumps, a combined twin pump and receiver, three drip traps, oil separator, sluice gates, and strainers including operating mechanism in connection with the circulating water mains, all necessary accessories and complete piping systems for distilling plant equipment at the Naval Operating Base, (Naval Station) Key West, Fla. The distilling house will have concrete foundations, supported on concrete piles, concrete ground floor and equipment foundations, brick walls, asbestos shingle roof, steel roof trusses and steel sash, doors, platforms and stair. Drawings and Specification No. 4546 may be obtained on application to the Bureau or to the Commandant, Naval Operating Base, Key West, Fla. Deposit of a check or postal money order for $10, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the drawings and specification. L. E. GREGORY,
Chief of Bureau.

June 6, 1922.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
July 28	Ebensburg, Pa.	July 13
July 31	Murdo, S. D.	July 13
Aug. 1	Ogden, Utah	July 27
Aug. 1	Coalport, Pa.	July 20
Aug. 1	Reedley, Cal.	July 20
Aug. 1	Santa Rosa, Cal.	July 20
Aug. 1	Sturgeon Bay, Wis.	July 27
Aug. 2	Oklahoma City, Okla.	July 20
Aug 7	Mitchell, S. D.	July 13
Aug. 7	Okeene, Okla.	July 27
Aug. 7	Altamont, Ill. Adv. July 27.	July 27
Aug. 7	Iron Bridge, Wis.	July 27
Aug. 7	Falls Creek, Pa. Adv. July 27.	July 27
Aug. 8	Walbridge, O.	July 20
Aug. 10	Poughkeepsie, N. Y. Adv. July 27.	July 27
Aug. 10	Benton Harbor, Mich. Adv. July 27.	July 27
Aug. 10	New Orleans, La.	July 27
Aug. 16	Sayreville, N. J. Adv. July 27.	July 27
Aug. 16	Glendive, Mont.	July 27
Aug. 24	Sacramento, Cal. Adv. July 27.	July 27
Aug. 26	Wahalla, N. D.	July 27
Sept. 15	Grants Pass, Ore.	July 27

SEWERS

Bids Close		See Eng. News-Record
July 31	St. Charles, Minn.	July 20
July 31	Indianapolis, Ind.	July 13
July 31	Alexandria, Minn.	July 27
Aug. 1	Toronto, Ont.	July 27
Aug. 1	Albany, Ga.	July 27
Aug. 1	Wheeling, W. Va. Adv. July 27.	July 27
Aug. 1	Lake Worth, Fla.	July 13
Aug. 1	Knoxville, Tenn.	July 20
Aug. 1	Sturgeon Bay, Wis.	July 27
Aug. 2	Avon, S. D.	July 13
Aug. 2	Blairstown, Ia.	July 27
Aug. 4	Gregory, S. D.	July 13
Aug. 4	Milwaukee, Wis.	July 27
Aug. 7	Hamilton, Ont.	July 27
Aug. 14	Hondo, Tex.	July 27
Aug. 14	Pensauken, N. J. Adv. July 27.	July 27
Aug. 16	Sayreville, N. J. Adv. July 27.	July 27
Aug. 22	Newark, N. J.	July 27
Aug. 23	Rye, N. Y. Adv. July 27.	July 27

BRIDGES

Bids Close		See Eng. News-Record
July 29	Cleveland, O.	July 13
July 31	Ohio	July 20
Aug. 1	Georgia	July 20
Aug. 1	Ft. Lauderdale, Fla.	July 20
Aug. 1	Georgia	July 27
Aug. 1	West Palm Beach, Fla.	July 27
Aug. 4	Seattle, Wash. Adv. June 29, July 6, 20 and 27.	June 29
Aug. 4	Kingman, Kan.	July 20
Aug. 4	New Boston, Tex.	July 27
Aug. 5	Yakima, Wash.	July 27
Aug. 5	Eureka, Cal.	July 27
Aug. 8	Stockton, Cal.	July 20
Aug. 8	Indiana	July 27
Aug. 10	Atlanta, Ga. Adv. July 20 and 27.	July 20
Aug. 10	Columbus, O.	July 20
Aug. 11	Madison, Wis.	July 27
Aug. 14	California	July 27
Aug. 15	Miami, Fla. Adv. July 27.	July 27
Aug. 15	West Virginia Adv. July 27.	July 27
Aug. 16	Ballston Spa, N. Y. Adv. July 27.	July 27
Aug. 29	Wellington, New Zealand	July 13
Sept. 1	Knoxville, Tenn.	July 27
Oct. 1	Siam	July 13
Oct. 31	Sydney, Australia	Jan. 12

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Aug. 1	Hampden, Wis.	July 20
Aug. 1	Merced, Cal.	July 20
Aug. 4	Taylorville, Ill.	July 27
Aug. 5	Salisbury, Mo.	July 27
Aug 5	Albert Lea, Minn.	July 27
Aug. 8	Grants Pass, Ore.	July 20
Aug. 10	Wooster, O. Adv. July 13 to 27.	July 13
Aug. 12	Kokomo, Ind. Adv. July 20 and 27.	July 20
Aug. 14	Benton, Mo. Adv. July 20 and 27.	July 20
Aug. 15	Ft. Lauderdale, Fla. Adv. July 13 to 27.	July 13
Aug. 18	Bloomington, Ill. Adv. July 20 and 27.	July 20

STREETS AND ROADS

Bids Close		See Eng. News-Record
July 29	Wheeling, W. Va.	July 13
July 29	Lockport, N. Y.	July 20
July 29	Cleveland, O.	July 27
July 31	Eastwood, N. Y. Adv. July 27.	July 27
July 31	Pella, Ia.	July 27
July 31	Greenville, N. C.	July 13
July 31	Washington, Pa. Adv. July 13 to 27.	July 13
July 31	Wash., D. C.	July 20
July 31	Ohio	July 20
July 31	Winona, Minn.	July 20
July 31	Goshen, Ind.	July 20
July 31	Crown Point, Ind.	July 20
July 31	Syracuse, N. Y.	July 27
July 31	Little Rock, Ark.	July 27
July 31	Monroe, Mich.	July 27
Aug. 1	West Palm Beach, Fla.	July 27
Aug. 1	Niagara Falls, N. Y.	July 27
Aug. 1	Michigan	July 27
Aug. 1	San Antonio, Tex.	July 27
Aug. 1	Georgia	July 20
Aug. 1	Georgetown, Tex.	July 20
Aug. 1	Minnesota	July 13
Aug. 1	Oil City, Pa.	July 13
Aug. 1	Quebec	July 20
Aug. 1	Louisiana	July 20
Aug. 1	Centerburg, O.	July 20
Aug. 1	Maryland Adv. July 20 and 27.	July 20
Aug. 1	Saranac Lake, N. Y. Adv. July 20 and 27.	July 27
Aug. 1	Hendersonville, N. C.	July 27
Aug. 1	Atlanta, Ga.	July 27
Aug. 1	Erie, Pa.	July 27
Aug. 1	New York, N. Y.	July 27
Aug. 2	Brooklyn, N. Y.	July 27
Aug. 2	New York, N. Y.	July 27
Aug. 2	Woodland, Cal.	July 20
Aug. 2	South Carolina	July 20
Aug. 2	Minnesota	July 13
Aug. 2	Akron, O.	July 20
Aug. 3	Lenoir, N. C.	July 20
Aug. 3	Albion, Ind.	July 27
Aug. 3	San Marcos, Tex.	July 27
Aug. 4	Wisconsin	July 27
Aug. 4	Michigan	July 27
Aug. 4	Hallstead, Pa. Adv. July 13 to 27.	July 20
Aug. 4	Roswell, N. M.	July 13
Aug. 4	Mt. Holly, N. J. Adv. July 27.	July 27
Aug. 4	Missouri	July 27
Aug. 5	Missouri	July 27
Aug. 5	Lambertville, N. J.	July 27
Aug. 7	Sacramento, Cal.	July 27
Aug. 7	California	July 20
Aug. 7	White Plains, N. Y. Adv. July 20 and 27.	July 27
Aug. 7	Leechburg, Pa. Adv. July 27.	July 27
Aug. 7	San Luis Obispo, Cal.	July 27
Aug. 7	Brownstown, Ind.	July 27
Aug. 7	Catasauqua, Pa.	July 27
Aug. 7	Paoli, Ind.	July 27
Aug. 7	Brazil, Ind.	July 27
Aug. 7	Jasper, Ind.	July 27
Aug. 8	San Rafael, Cal.	July 20
Aug. 8	Crown Point, Ind.	July 27
Aug. 8	Maryland Adv. July 27.	July 27
Aug. 8	Monticello, Ind.	July 27
Aug. 8	Trenton, N. J. Adv. July 27.	July 27
Aug. 8	Millville, N. J. Adv. July 27.	July 27
Aug. 8	Louisiana	July 20
Aug. 8	Washington, Ind.	July 27
Aug. 8	Ontario	July 27
Aug. 8	Savannah, Ga.	July 27
Aug. 8	Napa, Cal.	July 27
Aug. 9	Valparaiso, Ind.	July 27
Aug. 9	Ft. Myers, Fla.	July 27
Aug. 9	Ft. Myers, Fla.	July 6
Aug. 9	Hackensack, N. J. Adv. July 20 and 27.	July 20
Aug. 9	Mays Landing, N. J. Adv. July 27.	July 27
Aug. 10	Woodbury, N. J. Adv. July 20 and 27.	July 20
Aug. 10	Fredericktown, O.	July 20
Aug. 10	South Amboy, N. J. Adv. July 27.	July 27
Aug. 10	Burlington, Vt. Adv. July 27.	July 27
Aug. 10	Quebec	July 27
Aug. 12	Quebec	July 27
Aug. 12	Wheeling, W. Va.	July 27
Aug. 14	California	July 27
Aug. 15	Santa Rosa, Cal.	July 27
Aug. 15	Beaumont, Tex.	July 27
Aug. 15	Wadsworth, O. Adv. July 20 and 27.	July 20
Aug. 15	Alabama	July 27
Aug. 15	Knoxville, Tenn.	July 20
Aug. 17	Henderson, N. C. Adv. July 20 and 27.	July 27
Sept. 19	New Orleans, La.	July 6

BUILDINGS

Bids Close		See Eng. News-Record
July 28	Cleveland, O.	July 27
July 29	Southern Pines, N. C.	July 20
July 31	Rocky River, O.	July 27
Aug. 1	Taft, Cal.	July 20
Aug. 2	Perry, N. Y.	July 20
Aug. 2	Berkeley, Cal.	July 13
Aug. 2	Brunswick, Ga.	July 13
Aug. 2	Astoria (Long Island City P. O.), N. Y.	July 27
Aug. 4	Dickinson, N. D.	July 27
Aug. 5	Belfast, Me.	July 13
Aug. 7	Pelham Manor, N. Y. Adv. July 27.	July 27
Aug. 8	Mankato, Minn.	July 27
Aug. 8	Saginaw, Mich.	July 27
Aug. 9	Detroit, Mich.	July 27
Aug. 9	Ogden, Utah	July 27
Aug. 10	Erie, Pa.	July 27
Aug. 10	Pittsburgh, Pa.	July 27
Aug. 10	Mt. Sterling, O.	July 20
Aug. 12	Akron, O.	July 27
Aug. 12	Louisville, O.	July 27
Aug. 14	Cleveland, O.	July 27
Aug. 14	Oakland, Cal.	July 20
Aug. 15	Grandview Heights (Columbus P. O.).	July 20
Aug. 16	Owen Sound, Ont.	July 27
Aug. 20	Erie, Pa.	July 13
Sept. 1	Knoxville, Tenn.	July 20
Sept. 30	Duluth, Minn.	July 13

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
July 31	Steel Hull — Montgomery, Ala. Adv. July 6 to 27.	July 6
July 31	Hospital, Norfolk, Va.	July 13
July 31	Mechanical Equipment—Norfolk, Va.	July 20
Aug. 1	Cement—Memphis, Tenn. Adv. July 27.	July 27
Aug. 1	Pools—Chicago, Ill.	July 27
Aug. 2	Mortuary—Chelsea, Mass.	July 27
Aug. 2	Refrigerating Plant—Annapolis, Md.	July 27
Aug. 2	Riprap — Staten Island, N. Y.	July 27
Aug. 2	Dredges—Wash., D. C.	June 15
Aug. 2	Ordnance Buildings, etc.—Pearl Harbor, H. T.	June 15
Aug. 2	Distilling Plant—Key West, Fla.	July 13
Aug. 7	Dredging, etc. — New York, N. Y. Adv. July 6, 13 and 27.	July 6
Aug. 7	Dredging—Camden, N. J. Adv. July 13 to 27.	July 13
Aug. 9	Chimney and Flue—Guantanamo, Cuba	July 27
Aug. 10	Tank — Ft. MacKenzie, Wyo.	July 20
Aug. 11	Piping — North Platte, Neb.	July 20
Aug. 12	Timber Turnout, etc.—Klamath Falls, Ore. Adv. July 27.	July 27
Aug. 12	Oil Burning Apparatus — Houston, Tex.	July 27
Aug. 14	Scow—Duluth, Minn. Adv. July 20 and 27.	July 20
Aug. 15	Excavation — Wilmington, Del. Adv. July 20 and 27.	July 20
Aug. 15	Rock Removal — Providence, R. I. Adv. July 20 and 27.	July 20
Aug. 15	Dredging—Galveston, Tex. Adv. July 20 and 27.	July 20
Aug. 15	Stone—New Orleans, La. Adv. July 20 and 27.	July 20
Aug. 15	Electric Pump — St. Louis, Mo.	July 27
Aug. 15	Lighthouse Tender — Wash., D. C.	July 27

Bids Close		See Eng. News-Record
Aug. 16	Wire Partition—San Diego, Cal.	July 27
Aug. 18	Radial Gates, etc.—Riverton, Wyo.	July 13
Aug. 19	**Dredging—New York, N. Y.** Adv. July 20 and 27.	July 20
Aug. 21	Catamarans — Portland, Ore. Adv. July 20 and 27.	July 20
Aug. 21	Dredging—Baltimore, Md. Adv. July 27.	July 27
Aug. 22	Post Office—Spanish Fork, Utah Adv. July 27.	July 27
Aug. 22	Post Office—Fond du Lac, **Wis.**	July 27
Aug. 23	Retaining Walls — Quantico, Va.	July 27
Aug. 23	Quarrywalls, etc.—Pearl Harbor, H. T.	July 20
Aug. 23	Dredging—Norfolk, Va. Adv. July 27.	July 27
Aug. 30	Circulating Loop — Mare Island, Cal.	July 27
Aug. 31	Canal—Klamath Falls, Ore. Adv. July 27.	July 27
Sept. 1	Refrigerating **Plants—Perryville, Md.** Adv. July 20 and 27.	July 20
Sept. 6	Motors, etc.—Yuma, Ariz. Adv. July 27.	July 27

MISCELLANEOUS

July 31	Paving Brick—Washington, Pa.	July 13
July 31	Wood Blocks, etc.—St. Paul, Minn.	July 27
July 31	Power Plant Equipment—Detroit, Minn.	July 27
Aug. 1	Paving Blocks — Farrell, Pa.	July 20
Aug. 1	Drainage Pumps—New York, N. Y.	July 20
Aug. 1	Seawall—Port Tampa, Fla.	July 27
Aug. 2	Granite Facing Stone — Lincoln, Neb.	July 27
Aug. 3	Transmission Line—Turlock, Cal.	July 20
Aug. 3	Portland Cement—New York, N. Y.	July 27
Aug. 4	Retaining Wall — Trenton, N. J.	July 27
Aug. 6	Mill Type Crane—Aberdeen, Wash. Adv. July 20 and 27.	July 27
Aug. 7	Engines and D. C. Generators —Rome, N. Y.	July 13
Aug. 7	Scarifier Attachment—St. Paul, Minn.	July 20
Aug. 7	Electric Light Equipment — Hanna, Alta.	July 27
Aug. 8	Cement—Napa, Cal.	July 27
Aug. 9	Heating Oil Distributor—Ft. Myers, Fla.	July 27
Aug. 9	Transformers, etc. — San Francisco, Cal.	July 20
Aug. 15	Hydro-electric Development—Dothan, Ala. Adv. June 22 to July 27.	June 29
Aug. 15	Transmission Line, etc.—Hobgood, N. C.	July 27
Aug. 15	Foundation — Minneapolis, Minn.	July 13
Sept. 16	Strain & Pin Type Insulators —Melbourne, Australia Adv. July 27.	July 27

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Le Roy—See "Streets **and Roads.**"

Va., Clarendon—See "Sewers".

N. C., Monroe—Having surveys made for water supply system. $50,000. Carolina Eng. Co., Wilmington, engrs.

N. C., Raleigh—See "Miscellaneous."

N. C., Salisbury—See "Miscellaneous."

O., Columbus—Franklin Co. making plans waterworks system in Sewer Dist. Clinton 2, 12,630 ft. of 6 in., 3,570 ft. of 8 in. and 2,540 ft. of 12 in. c.i. pipe, etc. $40,000. E. G. Bradbury, 174 East Long St., engr. This corrects report in July 13 issue.

O., Dayton—Authorized $50,000 bonds for new water supply system for golf links and greens at community club grounds. I. E. Houk, city engr.

Ill., Jerseyville—Receives bids about Aug. 28, waterworks improvements. $150,000. Fuller & Beard, Chemical Bldg., St. Louis, Mo., engrs.

Wis., Wauwatosa—See "Sewers."

Kan., Satanta—Aug. 7 to vote on $30,000 bond issue for pumping and distributing systems. Total cost $40,000. Ruckel Eng. Co., Interurban Bldg., Hutchinson, engrs.

BIDS DESIRED

N. Y., Poughkeepsie—Aug. 10, by Bd. Pub. Wks., Eastman Park Mansion, c.i. or steel mains and covered reservoir. Hazen, Whipple & Fuller, 30 East 42nd St., New York, consult. engrs.; adv. this issue.

N. J., Sayreville—Aug. 16, by E. E. Clark, mayor, and Boro Council, Boro Hall, waterworks system, steel tower tank and c.i. pipe. W. S. Coulter, 114 Liberty St., New York City, consult. engr.; adv. this issue.

Pa., Falls Creek—Aug. 7, remodeling water treatment plant. Banks & Craig, Telegraph Bldg., Harrisburg, engrs.; adv. this issue.

La., New Orleans—Aug. 10, by Bd. Comrs. of Port of New Orleans, Suite 200 New Court Bldg., boring test wells, Toulouse and Dumaine Sts., 150 ft. deep; foot of Barracks St., 200 ft.; foot of Port St., 150 ft. deep. J. H. Walsh, genl. mgr.; adv. this issue.

Mich., Benton Harbor—Aug. 10, at City Hall, (a) piping and equipment for 2,000,000 gal. per day water softening and purification plant, (b) 2 story superstructure. Pearse, Greeley & Hansen, 39 West Adams St., Chicago, archts.; adv. this issue.

Ill., Altamont—Aug. 7, for waterworks improvements. Fuller & Beard, Ry. Exch. Bldg., St. Louis, Mo., engrs.; adv. this issue.

Wis., Iron Ridge—Aug. 7, (a) 7,500 ft. 4-12 in. water pipe, (b) 10 hydrants, 8 and 6 in. valves, (c) 40,000 gal. tank on 55 ft. tower, complete foundation and erection, (d) pump and motor for 6 in. well, pump to deliver 100 g.p.m. J. Donohue Co., 606 North 8th St., Sheboygan, engrs.

Wis., Sturgeon Bay—Aug. 1, by E. S. Ackermann, city clk., 6,000 ft. 6 in. c.i. mains and connections in various streets. $20,000-$25,000. E. W. Odbert, Egg Harbor, engr.

N. D., Walhalla—Aug. 26, by City auditor, new waterworks and distribution systems, either (a) 920 lin.ft. 6 in. and 100 lin. ft. 8 in. c.i. pipe or (b) 5,800 lin. ft. 6 in. c.i. pipe, well, pump station, elevated steel tank or concrete reservoir. $20,000. C. L. Pillsbury Co., 1200 2nd Ave. S, Minneapolis, Minn., engrs.

Mont., Glendive—Aug. 16, for 7 mi. 4-8 in. c.i. mains, hydrants, specials, etc. $60,000 bonds voted for project. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, Minn., engr. Noted July 13.

Okla., Okeene—Aug. 7, by City Clerk, one well, extending light and power systems. $45,000. V. V. Long & Co., Colcord Bldg., Oklahoma City, engrs.

Tex., Hondo—Aug. 14, 1,500 ft. 30 in. circular storm sewer, incl. 275 cu.yd. concrete, 2,000 cu.yd. trench excav., 260 lin. ft. 15 in. vitr. pipe, etc. Walton & Avneson, 418 Gunter Bldg., San Antonio, engrs. Noted June 8.

Utah, Ogden—Aug. 1, by C. O. De Wolfe, city recdr., laying 43 blocks 12-20 in. steel or c.i. mains. $150,000. W. C. Craven, city engr. Noted July 6.

Ore., Grants Pass—Sept. 15, by Bd. Dirs. Grants Pass Irrigation Dist., 2 centrifugal pumps, one with 45 hp. motor, 9,000 g.p.m. 154 ft. head and other 200 hp. motor, 4,500 g.p.m. 141 ft. head, direct connected units equipped with automatic compensators. $7,000. Bids soon for 2,000 ft. 34 in. and 900 ft. 24 in. pipe. J. H. Fertig, Grants Pass, engr.

Cal., Sacramento—Aug. 24, at office H. G. Denton, city clk., rapid sand filtration plant and appurtenances, contr. 24; adv. this issue.

Ont., Alvinston—Receiving bids pumphouse and electric driven centrifugal pumps, about 1,000 and 500 g.p.m. J. Irving, clk.

BIDS RECEIVED

N. Y., Buffalo—Dept. Pub. Wks., Municipal Bldg., opened bids June 27, furnishing, installing and connecting all steam, exhaust, water suction and discharge piping from 8-30 in. with valves, etc., for 3 high pressure turbine pumping units in Col. Ward Pumping Station, from M. J. Dougherty Co., 25th and Washington Sts., Phila., $16,000; J. O'Connor, 98 West Delavan Ave., $16,974; Power Efficiency Corp., White Bldg., $18,250. Noted June 22.

N. Y., Saugerties—Bd. Water Comrs., Market St., opened bids July 19, excavating about 30,000 cu.yd. material, also excavating and laying about 1,800 ft. 18 in. temporary main at Blue Mountain, from J. C. Tierner, Oradell, N. J., $18,050; C. J. Burgess, Marcy, $32,280; D. Schoentag, John St., $32,680. Noted June 29.

O., Cleveland—Cuyahoga Co. opened bids July 19, (1) 6,500 ft. 4-8 in. c.i. mains in Parma Dist. Impvt. 18 (2) 21,320 ft. 4-10 in. c.i. mains in Parma Dist. Impvt. 17, from Water & Sewer Impvt. Co., 10923 Detroit Ave., (1) $30,009; D. Pfahl, Berea Rd., (1) $30,506 (2) $104,125; E. Cesa & Son, 2462 Baldwin Rd., (1) $30,738; Post Constr. Co., 10823 Fairchild Ave., (2) $90,351; Langahan Constr. Co., Marshall Bldg., (2) $103,125.

O., Geneva—Opened bids July 19, pumping station, furnishing and erecting Imhoff tank and filter beds, from Ashtabula Constr. Co., Ashtabula, $49,500; Johnson-Erickson Constr. Co., Ashtabula, $57,000.

CONTRACTS AWARDED

Conn., Berlin—For 3½ mi. 4-12 in. c.i. mains, etc., in Hudson St., Farmington Ave., Middletown Rd. and Worthington Bridge Dist., general contract to E. B. Curtis Constr. Co., Bristol, and Driscoll Constr. Co., Torrington; piping to United States Cast Iron Fdry. Co., Morris Blk., Phila.; hydrants to A. P. Smith Mfg. Co., Norman St., East Orange, N. J.; special castings to Builders Iron Fdry., 9 Codding St., Providence, R. I. Engrs. est. $60,000. Noted June 29.

Conn., West Hartford—Bd. of Water Comrs., 1026 Main St., circular gate chamber, 1 story, 25 ft. diam. over gates and piping controlling inflow of water to filtration plant, 1 story, 42 x 42 ft. office and laboratory, two 1 story, 26 x 60 ft. regular houses, to industrial Constr. Co., 721 Main St., Hartford, $67,460. Engrs. est. $75,000.

N. Y., Niagara Falls—For 36 in. iron mains in Adams Ave. from waterworks pumping station to Sugar St. and in Sugar St. to Buffalo Ave., to Neilans Bros. Co., Tonawanda, $59,303.

Pa., Moosic—Spring Brook Water Supply Co., selected earth dam, 1,490 ft. long, 125 ft. high, capacity 1,800,000,000 gal., about 9 mi. from here, also 900 ft. tunnel, to Winston & Co., American Natl. Bank Bldg., Richmond, Va. Exceeds $1,000,000.

W. Va., Fairmont—Intake well at city pumping station, to Rogers-Shumway, Worthington, $16,450.

W. Va., Wheeling—Extending water system to Foundation Co., Fulton Bldg., Pittsburgh, Pa. Engrs. est. $40,000. Noted March 16.

Tenn., Lebanon—See "Sewers."

O., Columbus—See "Streets and Roads."

O., Garfield Heights (Cleveland P. O.)—See "Sewers."

Ia., Nevada—For 200,000 gal. rein.-con. reservoir, 376 lin. ft. 8-10 in. c.i. pipe and specials, 170 lin.ft. 8 in. sewer pipe, etc. to H. E. Rhodes, Guthrie Center, $9,330. Noted July 6.

Minn., Royalton—Waterworks extensions, etc., distribution to Phelps-Drake Co., 719 Metropolitan Life Bldg., Minneapolis, $17,714; 10 in. well to McCarthy Well Co., 670 Eustis Ave., St. Paul, $7 per ft. for drilling and casing, $18 per ft. for screen.

Wyo., Laramie—Laying 6,000 ft. 12 in., 400 ft. 8 in. and 800 ft. 10 in. mains, etc., also building concrete spring house, to J. S. Schwartz, 1015 East Boulder St., Colorado Springs, Col., $41,000.

Wash., Walla Walla—Completing Div. 2 of waterworks system, incl. new diversion dam and intake, 4 mi. of 20 in. creosoted wood stave pipe, to Puget Sound Bridge and Dredging Co., Central Bldg., Seattle, $132,716. Noted June 29.

Sewers

PROPOSED WORK

Pa., Farrell—Making plans sewage disposal plant. $25,000. Banks & Craig, 709 Telegraph Bldg., Harrisburg, engrs.

Pa., Carbondale—Plans $25,000 bond issue for sewers in Harlem and Williams Aves., Wayne, Brooks and Main Sts. and Fallbrook Creek. W. L. Giles, city engr.

Pa., Oil City—Plans sewage disposal plant $400,000. A. R. Smart, dir. pub. wks.

Va., Clarendon—Plans sewerage and water system. $30,000. Engineer not selected. Address C. B. Taylor, pres. Citizens Assn.

N. C., La Grange—Plan election to vote on $50,000 bonds for sewerage system.

N. C., Raleigh—See "Miscellaneous."

N. C., Salisbury—See "Miscellaneous."

Mich., Springwells—Making plans 78,000 ft. sewer arms varying from horseshoe section 13 ft. 6 in. x 18 ft. to 24 in., greater part to be 48-60 in. in diameter, tunnel or open cut. $1,200,000 voted for project. A.

Sewers (Continued)

Roth, 2438 Penobscot Bldg., Detroit, engr. C. W. Hubbel, 2348 Penobscot Bldg., Detroit, consult. engr.

Wis., Wauwatosa—Story Estate, c/o H. W. Story, 644 51st St., Milwaukee, having preliminary plans prepared vitr. pipe sewers and watermains in new subdivision. Story Hill No. 2, 45th St. and Blue Mound Rd. near here. $25,000. Parsons & Orbert, 216 West Water St., Milwaukee, engrs.

Ia., Kalona—Making plans sanitary sewage system. $35,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Wash., Port Angeles—Rejected bids opened July 12, 14,000 ft. 6-21 in. rein.-con. sewers in Main St. $35,000. Will readvertise.

Cal., Sacramento—See "Streets and Roads".

Cal., Vallejo—Having plans prepared 8 blocks sewers in Hirst and Vallejo Heights sub-division. F. Steinger, Fairfield, engr.

Cal., Yuba City—Plans to vote on $25,000 bonds for sewerage system. E. Von Geldern, city engr.

Ont., St. Thomas—Plans storm sewers. $30,000. Prices wanted on materials up to 18 in. W. C. Miller, city engr.

BIDS DESIRED

N. Y., Eastwood—See "Streets and Roads."

N. Y., New York — See "Streets and Roads."

N. Y., Rye—Aug. 23, by Village Trustees, certain pipe sewers and disposal works. G. E. Hill, 45 7th Ave., New York, engr.; adv. this issue.

N. J., Newark—Aug. 22, by Passoic Valley Sewerage Comrs., 128 Market St., city dock local sewer connection. Former bids rejected. J. R. Van Duyne, ch. engr. Noted June 29.

N. J., Pensauken—Aug. 14, by Top. Com., Cove and Centre Sts., sanitary sewerage system, Contr. 1, and 2 sewage pumping stations, Contr. 2, Remington & Vosbury, 601 Market St., Camden, engrs.; adv. this issue.

N. J., Sayreville—Aug. 16, by E. E. Clark, mayor, and Boro Council, Boro Hall, sewers and sewage pumping station. W. S. Coulter, 114 Liberty St., New York City, consult. engr.; adv. this issue.

W. Va., Wheeling—Aug. 1, (change of date), sewers in Market, Main, 12th and South Market Sts. H. A. Conrad, city engr.; adv. this issue. Noted July 20.

Ga., Albany—Aug. 1, by J. W. Armstrong, clk., sewers in East Albany, incl. 7,816, ft. 8-18 in. concrete pipe, 4,572 cu.yd. earth trenching, etc. P. F. Whittier, City Hall, engr.

Wis., Milwaukee—Aug. 4. by Metropolitan Sewerage Comn., 508 Market St., main sewer in Watertown Plank Rd., incl., 1,962 ft. 24 in. c.i. pipe siphon, 5,936 ft. 48 in. concrete sewer.

Wis., Sturgeon Bay—Aug. 1, by E. S. Ackermann, city clk., 9,500 ft. 8 in. vitr. sewers in various streets. $25,000. E. W. Odbert, Egg Harbor, engr.

Ia., Blairstown—Aug. 2, for 13,087 ft. 8 or 12 in. sanitary sewers and sewage treatment plant. $32,000. M. Tschirgi & Son, 711 Amer. Trust Bldg., Cedar Rapids, engrs. Noted June 15.

Minn., Alexandria—July 31, sewer extensions and improvements, incl. 15,273 lin.ft. 8-15 in. pipe, 34 manholes, 1 lamphole, sewage disposal plant. $60,000. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs. Noted July 28, 1921.

Tex., Ft. Worth—City Council receiving bids large disposal plant, 4 Imhoff tanks, 3 filter beds, sprinkling filter system, three 16-in. centrifugal pumps, etc. $500,000. City Engineer in charge of work. E. E. Sands, Mason Bldg., Houston, consult. engr.

Ont., Hamilton—Aug. 7, by S. H. Kent, clk., 4,880 ft. 5 ft. x 6 ft. 9 in. to 7 ft. 6 in. x 7 ft. 6 in. rein.-con., and 1,800 ft. 12 in. vitr. pipe. $200,000. E. R. Gray, city engr

Ont., Toronto—Aug. 1, by C. A. Maguire, city engr., 20,000 ft. 8-20 in. vitr. pipe sewers in Victoria St., Rosewell Ave., Cortleigh Crescent, Rose Park Crescent, Nursewood Rd. and Macpherson Ave. $125,000.

BIDS RECEIVED

N. Y., Mt. Kisco—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, opened bids July 21, resanding existing filter beds and constructing new filter beds at Mt. Kisco sewage disposal plant, near here, Westchester Co., from Carroll Contg. Co., 103 Park Ave., New York, (a) $38,426, (b) $42,987; Garofano Contg. Co., (a) $38,938, (b) $47,982; Suburban Eng. Co., (a) $48,883, (b) $54,056. Noted July 13.

N. Y., New York—J. Miller, pres. Manhattan Boro, opened bids July 20, sewer in easterly side of Riverside Dr. from point about 141 ft. south of Plaza Lafayette (West 181st St.), etc., from M. DelBalso, University Ave. and 195th St., $11,842; D. Bonacci, $14,243; McLaughlin & Buckley, 337 East 134th St., $14,968. Noted July 13.

O., Cleveland—Cuyahoga Co., 9,240 ft. 8 in. vitr. sewer in Snow Rd., from Carrocio & Gandio, 14910 Benwood Ave., $56,884; Joseph & Kalill, Bangor Bldg., $62,730.

S. D., Yankton—Opened bids July 17, 17,435 lin.ft. 10-36 in. sewer incl. 7,000 lin.ft. 10 in. connecting pipe, etc., in various streets, from Cady & Savonell, Sioux City, Ia., $35,943; Kruse Constr. Co., Spencer, Ia., $36,006; City Sewerage Co., Sioux City, Ia., $36,472. Noted July 6.

CONTRACTS AWARDED

Me., Portland—Comr. Pub. Wks., 2,250 ft. 24-30 in. vitr. clay sewer in Forest Ave., to Monitor Contg. Co., Portland, $23,133. Noted July 13.

N. J., Woodbury Heights—Boro Council sanitary sewerage system, to G. S. Miller & Co., Pitman, $33,000; disposal plant, to Wedow & Myers, 426 Walnut St., Phila., $15,000. Noted June 22.

Pa., Bradford—See "Streets and Roads."

Pa., Phila.—F. H. Caven, dir. pub. wks., branch sewers in 12th St. from Thompson St. to Columbia Ave., to M. Mattia, 263 Simpson St., $28,150; Roosevelt Blvd. from Summerdale Ave. to Pennsylvania R.R. Schillier St. from Thompson to Richmond Sts., Tulip St. from Cottman to Friendship Sts., to W. H. Yettman, Jr., Lincoln Bldg., $26,313; Grange Ave. from 4th to 3rd Sts., 4th St. from Grange to Nedro Ave. and 4th St. from Chew to Grange Aves., to E. Lera, 3851 North 10th St., $25,492; American St. from Luzerne St. to Rising Sun Ave., American St. from Chew St. to a point 304 ft. north and Delphine St. from 3rd to American Sts., to J. Lombardi, Lincoln Bldg., $26,849. Noted July 3.

N. C., Rocky Mount—For 7,140 ft. 24 in. vitr. pipe and 675 ft. 15 in. standard pipe, to R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, $29,385.

S. C., Charleston—Constructing 90,000 ft. 8-36 in. terra cotta pipe sewers, from Bryan & Co., Jacksonville, Fla., $358,000. Noted June 22.

Fla., Eustis—For 2½ mi. 8-12 in. sewers and disposal plant, to Lord & Armiston, Dunedin, $24,215. Noted June 15.

Fla., Winter Haven—For 12 mi. of 8-15 in. terra cotta sanitary sewers and 3 disposal plants, to Dysard Constr. Co., Austell Bldg., Atlanta, Ga. Noted June 8.

Tenn., Lebanon—Complete sewage disposal plant and addition to present water plant, to Tennessee Mfg. & Constr. Co., Lebanon, $220,000. Noted June 29.

O., Akron—M. P. Tucker, dir. Pub. Serv. 1405 ft. 6-24 in. vitr. clay and 1195, 66 in. brick sewer in Sweitzer Ave. and 2,280 ft. 8-15 in. vitr. clay and 1,555 ft. 39 in. segmental block sewer in Crozier Ave., to T. E. McShaffrey Constr. Co., 171 South Forge St., $30,490 and $20,267, respectively. Noted July 20.

O., Garfield Heights (Cleveland P. O.)—Sewers and water mains in 5 streets, to A. Hosine, 635 Bradley Court, Cleveland, $9,742; 1 street, to Kassouff Co., 3182 West 25th St., Cleveland, $16,667; 3 streets, to Salem & George Bros., 237 Bradley Court, Cleveland, $82,833; 5 streets, to B. J. Whittaker, West 98th St., Cleveland, $9,278.

Wis., Kenosha—Vitr. pipe sewers, etc., in Edward, Congress, Fleet, Pearl and Huron Sts. and Rice Ave., to M. Thomson, 1620 Salem Ave., $17,787; P. Frandsen, 1667 Sellick Ave., $9,566; E. Till, Kenosha, $23,603; C. Johnson, Kenosha, $22,347; Walraven & De Young, Kenosha, $3,391; Ostergaard & Ostergaard, Kenosha, $11,825.

Minn., Graceville—Sewer Dist. 5, 7,400 lin.ft. 15 in. and 3,800 lin.ft. 8 in. vitr. sewer pipe, 24 manholes, to Coolsaet Bros., Marshall, $26,312; 1 flush tank, 1 Imhoff tank and sludge bed, to Ward & Weighton, Sioux City, Ia., $5,645. Noted June 22.

Cal., Los Angeles—Sewerage system in El Sereno Dist., 6-18 in. rein.-con. and vitr. pipe, to Bebek & Brkich, 425 West 78th St. $135,126.

Cal., Los Angeles—Rimpau Hill & Wilshire Crest Syndicate, 1,700 ft. 45 and 48 in. rein.-con. storm drains and 5 rein.-con. culverts, to Robinson-Roberts Co., 5000 Country Club Dr. $30,000.

Waste Disposal

PROPOSED WORK

O., East Youngstown—Plans election to vote on $35,000 bonds to buy and equip garbage incinerator plant. H. L. Jones, pres. village council.

Bridges

PROPOSED WORK

N. Y., Celeron—Village and Erie R.R., 50 Church St., New York, plan new concrete bridge over railroad crossing on Dunham Ave., here, or improvements to present structure. $25,000. W. T. Price, village engr. R. L. Turner, grade crossing engr. for Erie R.R.

N. C., Troy—See "Streets and Roads."

Tenn., Nashville—Freeland, Roberts & Acker, engrs., Independent Life Bldg., soon receive bids 2 rein.-con. viaducts over tracks on Church and Meridian Sts., for city. $275,000 and $375,000 respectively. Noted July 6.

Missouri—State Hy. Dept. at div. office Bloomfield, rejected bids opened July 2, one 40 ft. I-Beam, two 20 ft. rein.-con. slab, three 50 ft. steel, one 24 ft. and one 30 ft. rein.-con. deck girder spans, on road from Advance northeastward and southward, Federal Aid Project 187, Stoddard Co. Noted July 6.

Kan., Cambridge—Cowley Co. (Winfield) had plans prepared 120 ft. concrete bridge, 18 ft., probably 3 deck girder spans near here. W. S. Ruggles, Winfield, engr.

Wyo., Sheridan—Plans 60 ft. concrete arch bridge, 2 spans, over Big Goose Creek on Doucks St. $30,000. E. C. Gwillim, City Hall, engr.

Tex., Beaumont—Jefferson Co. making plans 0.098 mi. steel and concrete bridge across Neches River on State Highway 3. 200,000 lb. structural steel for movable spans, 198,500 lb. reinforcing, 32,750 lin.ft. wooden piling. $234,000. A. C. Love, co. engr.

Tex., Palestine—Anderson Co. preliminary inspections made steel span and timber pile trestle, (200 ft. steel truss) over Trinity River between Anderson and Freestone. $119,000. H. I. Myers, chn. good roads com.

Cal., San Luis Obispo—Having plans prepared 2 rein.-con. bridges over Cholame Lateral, $20,000; rein.-con. bridge over Villa Creek, $10,000; steel bridge over Santa Rosa Creek in town of Cambria, $15,000; 4 rein.-con. culverts near Templeton, $9,000.

BIDS DESIRED

N. Y., Ballston Spa—Aug. 16, by J. H. Whitney, clk. Bd. Supervs. Saratoga Co for Saratoga Lake Bridge, steel, over narrows at north end of Saratoga Lake. J. A. L. Waddell, 35 Nassau St., New York, consult. engr.; adv. this issue.

West Virginia—Aug. 15, by State Rd. Comn., Charleston, Witcher Bridge 772, Project 116; Cedar Grove Bridge 773, Project 3179; Hugheston Bridge 783, Project 3135B; Hartland Bridge 805; Bartow Bridge 829, Project 3185; Poca Bridge 619; East Keystone Bridge 727, Project 3096; Clothier Bridge 810, Project 3059; Sharpless Bridge 826, Project 3059; Seng Camp Bridge 830, Project 3059; Allen Creek Bridge 730, Project 3062; Cross Creek Bridge 819, Project 3126; Granny Creek Bridge 807, Project 3110; Junction Bridge 802, Project 3011B; Reynolds Gap Bridge 808, Project 3013; Judy Bridge 809, Project 3014; Reeds Creek Bridge 828, Project 3105; grading and paving Project 3126, Brooke Co. E. B. Carskadon, secy.; adv. this issue.

Georgia—Aug. 1, by State Hy. Dept., Atlanta, removing old bridges and constructing 4 bridges and approaches on Tipton-Moultrie Rd., Tipton Co., 94,415 lb. reinforcing, 665.44 cu.yd. concrete, 2,900 lin.ft. concrete piles, 1,006 sq.yd. concrete paving, 11,949 cu.yd. borrow excav., 110,476 sta.yd. overhaul. F. M. Hill, Tipton, engr.

Fla., Miami—Aug. 15, bridge over Miami River on Southwest 2nd Ave. F. H. Wharton, city mgr.; adv. this issue.

Fla., West Palm Beach—Aug. 1, by Comrs. Palm Beach Co., timber bridge, 1 lift, over Jupiter Narrows; rein.-con. bridge either slab arch or girder, 15 ton load, over south fork of St. Lucie River. $25,000. R. F. Goodman, West Palm Beach, engr. Noted June 1.

Alabama—See "Streets and Roads."

Tenn., Knoxville—Sept. 1, by J. L. Greer, city recdr., 2,000 ft. rein.-con. truss bridge

Bridges (Continued)

over Southern R.R. tracks on Bway. $300,000. A. R. Frierson, Knoxville, engr.

Indiana—Aug. 8, by J. D. Williams, dir. State Hy. Dept., Indianapolis, 2 bridges over Deer Creek, State Rd. 3-F, Putnam Co., one to have two 60 ft. spans, other two 70 ft. rein.-con. arches; 16 ft. rein.-con. box culvert over Heston Ditch, State Rd. 1-G, St. Joseph Co.; 32 ft. rein.-con. slab over Drainage Ditch, State Rd. 4-D, Spencer Co.; 55 ft. steel truss over Bruce Ditch, State Rd. 4-D, and 72 ft. steel truss over Little Pigeon Creek, State Rd. 4-D, Warrick Co.; rein.-con. arch having two 60 ft. spans, over Lick Creek, State Rd. 4-K, Orange Co.; 72 ft. steel truss over Robbins Ditch, State Rd. 15-F, Starke Co.; 13 ft. rein.-con. slab over Drainage Ditch, State Rd. 13-G, Blackford Co.; 28 ft. rein.-con. girder over Drainage Ditch, State Rd. 4-Z, Posey Co.; 12 ft. rein.-con. slab over Indian Creek, State Rd. 2-K, Noble Co.

Ill., Taylorville — See "Excavation and Dredging."

Wis., Madison — Aug. 11, by E. E. Parker, engr., City Hall, 60 ft. rein.-con. arch span bridge, 44 ft. road, two 8 ft. walks, on East Johnson St. $25,000.

Tex., New Boston—Aug. 4, by O. B. Pirkey, judge Bowie Co., 1.59 mi. steel bridge over Sulphur River, 150 ft. steel span over main channel, earth approaches, timber piling, etc. Alternate bids on timber pile trestle over main channel. $100,300. Hess & Skinner, Southwestern Life Bldg., Dallas, engrs.

Wash., Yakima—Aug. 5, by Comrs. Yakima Co., 252 ft steel bridge to replace present wooden structure at Painted Rocks. $40,000. W. C. Marion, Yakima, engr.

California—Aug. 14, by State Hy. Comn., Sacramento, rein.-con. girder bridge over San Gabriel River near Azusa, Los Angeles Co., eighteen 54 ft. spans and one 31 ft. approach span, with piers, abutments, wing walls and bank protection. A. B. Fletcher, state highway engr.

Cal., Eureka—Aug. 5, by F. M. Kay, clk. Humboldt Co., 3 steel bridges over Akens, Slate and Bluff Creeks, each about 100 ft. long. A. J. Logan, co. surv. Noted July 13.

BIDS RECEIVED

New York—See "Streets and Roads."

Fla., West Palm Beach—Comrs. Palm Beach Co., constructing (1) West Palm Beach Canal Bridge, (2) Poppleton Bridge, (3) 2 other smaller bridges, from L. S. Fox Co., Dayton, O., (1) $9,865; Pensacola Shipbuilding Co., Amer. Natl. Bank Bldg., Pensacola, (1) $10,540; H. C. Daniels, West Palm Beach, (1) revised plans $6,100, (2) $17,960, (3) $6,300; C. E. Hillyer, Blum Bldg., Jacksonville, (2) $19,700, (3) $7,890. Noted June 22.

Alabama—State Hy. Dept., Mongtomery, for Tombigbee River bridge at Moscow Ferry, known as Rooster Bridge, 990 ft. long, 18 ft. roadway, concrete and steel, Marengo and Sumter Counties, (1) superstructure, (2) concrete substructure and approaches, (a) Waddell design, (b) Strauss design, from Doullut & Williams Co., 816 Howard Ave., New Orleans, La., (1a) $98,109, (1b) $94,068, (2) $117,269; Virginia Bridge & Iron Co., Roanoke, Va., (1a) $98,310; Louisville Bridge & Iron Co., 11th and Oldham Sts., Louisville, Ky., (1a) $110,756; Reid & Lowe, B-M Bldg., Birmingham, (2) $156,564; C. M. Sartain, Jasper, (2) $171,539. Noted June 29.

Alabama—State Hy. Dept., Montgomery, concrete bridge on concrete piles with two 80 steel spans on Montgomery-Tuskegee Rd., Macon Co., from W. D. Owens, Belahatchee, Miss., $59,507; Austin Bros. Bridge Co., Hurt Bldg., Atlanta, Ga., $73,764; Worthington & Co., Birmingham, $75,394. Noted June 29.

Col., Ft. Morgan—Morgan Co. concrete bridge and approaches across South Platte River, State Project 682, twenty 50 ft. concrete girder spans, (a) State type, (b) Marsh type, from Colorado Bridge & Constr. Co., Gas & Electric Bldg., Denver, (a) $80,939, (b) $80,101; E. Lindsay Co., Denver, (a) $89,396; Pueblo Bridge & Constr. Co., Pueblo, (a) $91,498. Noted June 29.

Cal., Los Angeles—Los Angeles Harbor Comn., City Hall, 4 piers for bascale bridge, Badger Ave., in San Pedro Dist., 257 wood piles, 12-ton reinforcing, 1,700 cu.yd. concrete, from Ross Constr. Co., Van Nuys Bldg., $262,400; F. Hoffman, 111 East 12th St., Long Beach, $268,000; San Francisco Bridge Co., Nevada Bank Bldg., San Francisco, $275,000.

CONTRACTS AWARDED

Pa., Williamsport—Bd. Comrs., Lycoming Co., 1,500 ft. riveted steel truss bridge over west branch of Susquehanna River between Arch St., West Williamsport, and High St., Duboistown, seven 200 ft. spans, 7 concrete piers, creosoted wood block roadway, rein.-con. sidewalks, ornamental lighting system, etc., to Bethlehem Steel Bridge Co., Bethlehem, $271,170. Noted July 20.

North Carolina—State Hy. Dept., Raleigh, rein.-con. bridges and culverts on State Project 200, Carteret Co., to Batson-Cook Co., West Point, Ga., $27,005; State Project 800, Avery Co., to J. A. Kreis, Holston Bank Bldg., Knoxville, Tenn., $32,883; State Project 145, Hertford Co., to Atlantic Bridge Co., Roanoke, Va., $38,112; State Projects 386 and 387, Robeson Co., to J. O. Heyworth, Harvester Bldg., Chicago, $36,601. Noted July 13.

North Carolina—See "Streets and Roads."

S. C., Barnwell—Comrs. Barnwell Co., rein.-con. bridge over Salkehatchie River, to Elliott & Sons, Spartanburg, $38,000. Noted June 15.

Fla., Clearwater—Comrs. Pinellas Co., 1 creosoted timber bridge with 25 ft. clear span, single lift, 30 ton, 20 ft. wide, and 5 smaller wooden bridges on Rds. 2, 3, 4, 7, 8 and 13, to Pensacola Shipbuilding Co., Amer. Natl. Bank Bldg., Pensacola, $42,136; 7 concrete arch construction and 16 flat slab bridges on Rds. 6, 8 and 11, to Luten Bridge Co., Palatka, and West Market St., York, Pa., $68,041. Noted July 6.

Ohio—Dept. Highways and Pub. Wks., Columbus, concrete bridge on Dayton-Indianapolis Rd., Preble Co., to F. K. Vaughn Co., Hamilton, $24,740; bridge over Dry Run, on Sect. "G" Chillicothe-Jackson Rd., Ross Co., to E. F. Bearce, Chillicothe, $5,456. Noted July 20.

O., Cleveland—Cuyahoga Co., concrete viaduct on West 73rd St., to Central States Eng. & Constr. Co., Union Commerce Bldg., $218,382, engrs. est. $281,567. Noted June 15.

Minn., Minneapolis—Northern Pacific R.R., 5th and Jackson Sts., St. Paul, enlarging two concrete bridges, one on 4th St. and 15th Ave. S. E., other on University and 14th Aves. S. E.; constructing new concrete bridge over tracks on 20th Ave. S.; incl. retaining wall, 9,000 cu.yd. concrete, 100,000 cu.yd. excav., etc., to Grant Smith & Co., 1505 Pioneer Bldg., St. Paul. Cost complete $600,000. Owner to furnish materials. Noted May 4.

Minn., Roseau—Roseau Co., State Project 11-22, Bridge 3688, four 75 ft. truss spans, 20 ft. roadway, 5 ft. walk, rein.-con. abutments and piers, to Guaranty Constr. Co., 305 Essex Bldg., Minneapolis, $28,600. Noted Feb. 17, 1921.

Minn., Waseca — See "Excavation and Dredging."

Neb., Clay Center — Clay Co., Flesner Bridge in Inland, Hoyden Bridge in Fairfield and Springranch Bridge in Springranch, to Nicholls Bros., Fairmont, $1,597, $3,438 and $4,010 respectively; Paris Bridge in Leicester, Hatchel Bridge in Harvard, and Clark Bridge in Sutton, to J. W. Kempf, Shickley, $1,733, $3,892 and $4,156 respectively; Hill Bridge in Edgar, to F. H. Kilts, Hastings, $4,154. Noted June 1.

Missouri—State Hy. Dept. at div. office Fredericktown, one 24 ft. rein.-con. deck girder, one 60 ft. steel truss and seventeen 10 ft. rein.-con. slab spans, on road from Fredericktown to Farmington and Greenville, Federal Aid Project 101 B, Madison Co., to Hogan-Humphreys, Little Rock, Ark., $16,923. Noted July 6.

Missouri—State Hy. Dept. at div. office Marble Hill, one 30 ft. rein.-con. through girder, one 120 ft., one 100 ft. and one 80 ft. steel truss spans, 18 ft. roadways, on road from Lutesville northeastward, Federal Aid Project 174, Sect. B, Bollinger Co., to M. E. Gillioz, Monett, $39,080. Noted July 6.

Missouri—State Hy. Dept. at div. office Ironton, three 40 ft. rein.-con. spandrel filled arch, four 16 ft. and one 20 ft. rein.-con. slab and two 24 ft. rein.-con. deck girder spans, 18 ft. roadways, on road from Ironton to Potosi, Federal Aid Project 107 A, Iron Co., to St. Louis Bridge & Supply Co., Frisco Bldg., St. Louis, $21,360. Noted July 13.

Mo., Chillicothe—Bd. Supervs. Grand River D.D., 560 lin.ft. steel bridges, 16 ft., across new channels, to Midland Bridge Co., 509 Railway Exch. Bldg., Kansas City, $37,400. Noted June 15.

Tex., Colorado—Mitchell Co. 1,200 ft. bridge across Colorado River, 6 concrete deck girder spans, to Brown-Abbott Constr. Co., Loraine, $44,327. Noted July 13.

Cal., Miranda—Supervs. Humboldt Co., Eureka, cable suspension bridge over South Fork Eel River, in Rd. Dist. 2, near here, to Padgett & Kelly, Eureka, $21,849. Noted May 25.

Dams

CONTRACTS AWARDED

Pa., Moosic—See "Waterworks."

Cal., Placerville—El Dorado Water Corp., dam, 3 arch concrete, 110 ft. high, 300 ft. long, 2 ft. wide at top, 10 ft. wide at bedrock, 5,000 cu.yd. concrete; excavating dam site, 800 cu.yd. excav.; tunnels, 1,100 ft long, 4 x 5 ft. dia.; pipe line, pipe and syphon in cradles, 2,700 lin.ft. 30 in. wood stave pipe; ditches 32,000 ft. long, 24,000 cu.yd. excav., to Coast Constr. Co., Crocker Bldg., San Francisco, $150,000. Owner furnishes reinforcing and ditch structures.

Railways

PROPOSED WORK

California—Amador-Central R.R., Amador, plans extending railroad 22 mi. from Amador into gold mining region, standard gauge. $50,000. Address M. J. Erickson, Amador, owner.

Excavation and Dredging

PROPOSED WORK

Mich., Detroit—Wayne Co. and Macomb Co. (Mount Clemens) having plans prepared 9½ mi. open cut drain beginning at Lake St. Clair at Milk River and reversing flow of Milk River and Fox Creek and emptying through Black Marsh Drain. $200,000. G. W. Dingman, County Bldg., Detroit, engr.

Cal., Salem — Consolidated Irrigation Dist., 1st Natl. Bank Bldg., plans additions and betterments to canal system, involving check gates, culverts and concrete drops. $75,000. Noted March 30.

BIDS DESIRED

Ill., Taylorville—Aug. 4, by Comrs. North Fork Outlet D.D., Court House, dredging 16 mi. Sangamon River, from point south of Niantic to point below Robey, 1,625,000 ft. earth and 3,300 ft. rock and shale excav., clearing right of way, removing and replacing 2 highway bridges, 2 new highway bridges and 1 ford. Goodell & Millard, Beardstown, engrs.

Minn., Albert Lea—Aug. 5, by F. Tavis, aud. Freeborn Co., Co. Ditch 5, 32,814 lin. ft. 6-28 in. tile, 1,60 cu. yd. excav., $22,584; Co. Ditch 37, 7,354 lin. ft. 6-22 in. tile, $5,513. J. H. Severson, Albert Lea, engr.

Mo., Salisbury—Aug. 5, by Bd. Supervs. Bee Branch D.D., at office of G. Lamb, atty., Salisbury, 110,900 cu.yd. levee, 132,500 cu.yd. ditches, 110 lin.ft. 12 and 18 in. sluiceways, etc. T. N. Jacob, 1900 Railway Exch. Bldg., St. Louis, engr.

CONTRACTS AWARDED

Minn., Austin—Mower Co., Judicial Ditch 6, Section O, 11,153 lin.ft. main open ditch, 60,796 cu.yd. excav., 30,000 cu.yd. leveling spoil bank, 34 flood water control structures, 2 weirs and spillways, 3 timber bridges; Sect. T-39, 583 lin.ft. 6-24 in. tile; Sect. L-39, 583 lin.ft. trenching, etc., to J. Rofdal, Northwood, Ia., $28,000. Noted June 29.

Minn., Elk River—Sherburne Co., Ditch 28, 11,508 cu.yd. excav., 71,578 lin.ft. 6-24 in. tile, etc.; excavation to J. H. Arnold, Princeton, $10,705, and K. C. Richardson, 460 Park St., Anoka, $2,542; tile to Elk River Concrete Products Co., Elk River, $11,552. Noted June 8.

Minn., Redwood Falls—Redwood Co., Co. Ditch 69, tile material to Tracy Cement Tile Co., Tracy, $24,025, labor, to L. Kramme, Sanborn, Ia., $15,999; Co. Ditch 52, 257,561 cu.yd. excav., to Mulgrew Sons & Co., Dubuque, Ia., $0.13 per cu.yd. for open work, $0.02 for leveling; Co. Ditch 68, 147,806 cu.yd. excav., to T. Jensen, Tracy, $33,200. Noted June 29.

Minn., Waseca—Waseca and Freeborn Counties, Judicial Ditch 8, 163,501 cu.yd. excav., 6 timber bridges, 44 water control structures, 72,245 lin.ft. 6-28 in. tile, forty 24 in. water intakes, 2 wells, to W. L. Martin, Albert Lea, $75,000. Noted June 22.

Streets and Roads

PROPOSED WORK

N. Y., Hancock—Voted $50,000 bonds for repairing and reconstructing pavements.

N. Y., Le Roy—Plans Paving Gilbert, Union and Exchange Sts., etc., $25,000; water mains and installing meters in North Ave., $10,000. Engineer not announced.

N. Y., Waterloo—Plans paving 3 mi. various streets, bituminous macadam. Engineer not announced.

Streets and Roads (Continued)

N. Y., Wilson—Village and Niagara Co. (Lockport) plan constructing 6 mi. East Lake St. and East Youngstown Rd., 18 ft., concrete. $200,000. W. V. S., village pres.

N. J., Mt. Holly—Bd. Freeholders Burlington Co. plans improving 7 mi. Mt. Holly-Burlington Rd.; 1½ mi. Edgewater Park Sta. Rd.; 0.5 mi. Broad St. to city line, Burlington City. $250,000. B. H. Wills, Kelsey & Killie Bdg., co. engr.

Pa., Beaver—Authorized sale of $75,000 bonds to improve College Hill St. and 4th Ave. Engineer not announced.

Pa., Wesleyville—Soon receives bids paving Station St., 30 ft., concrete and macadam. $27,145. C. Briggs, boro. engr.

North Carolina—State Hy. Dept., Raleigh, rejected bids grading, paving and bridging 3.53 mi. Project 713, Ashe Co. Will readvertise. C. M. Upham, state highway engr. Noted July 13.

N. C., Henderson—City will sell $200,000 bonds Aug. 14, for paving streets. R. D. Gladding, Henderson, engr.

N. C., Hillsboro—Plans paving 1 mi. road from court house to depot, concrete or some asphaltic type. $40,000. Engineer not selected.

N. C., Kernersville—Plans 2½ mi. concrete sidewalks. $60,000.

N. C., Morgantown—Soon takes bids concrete paving 3 mi. various streets, 18-30 ft. wide. $100,000. O. B. Lackey, town mgr.

N. C., Salisbury—See "Miscellaneous."

N. C., Troy—Montgomery Co. had surveys made clearing, grading, topsoiling and constructing rein.-con. bridges and culverts on 18 mi. road from Troy, via Uwharrie Bridge to Davidson Co. line $90,000. L. V. Edwards, Winston-Salem, engr.

N. C., Wadesboro—Plans paving various streets, probably asphalt. $40,000.

Tenn., Knoxville—Knox Co. plans grading and paving 8 mi. Lovell, Pedigo and Lows Ferry Rds., 20 ft., macadam. $30,000. J. C. Thomas, Knoxville, engr.

Tenn., Knoxville—Making plans removing old street surface and laying 32,000 ft. asphalt on Park St., 30 ft. $25,000. J. H. Kidd, Knoxville, engr.

Tenn., Nashville—Davidson Co. having plans prepared paving 2½ mi. Harding Pike from Park Circle to Belle Meade Country Club Rd., 24 ft., bituminous concrete on concrete. D. Q. McComb, State Hy. Dept., Nashville, ch. engr.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids which were to be opened July 21, grading, bridging and paving 1.69 mi. Sect. "G" Bucyrus Chesline Rd., Crawford Co., rein.-con., bituminous macadam or brick. Noted July 13.

O., Columbus—Franklin Co. received no bids July 19, paving 1.34 mi. Boehm Rd., Plain Twp. 16 ft., bituminous macadam. Noted July 6.

O., Dayton—Plans paving 1,100 ft. Red Haw Ave. 30 ft., 3.750 sq.yd. sheet asphalt or Kentucky rock asphalt, $14,970; 3 alleys, 2,600 ft. long, 16 ft., 4,500 sq.yd. rein.-con., $13,068. I. E. Houk, City engr.

O., Marietta—Plans resurfacing, widening and paving 2nd, Bellevue, Barrett and Marion Sts., vitr. brick. G. L. Haenn, city engr.

Ill., Columbia—Soon takes bids 18,000 sq.yd. concrete paving. Fuller & Beard, Chemical Bldg., St. Louis, Mo., engrs. Noted Feb. 9.

Ill., Lewistown—Soon takes bids for 10,000 sq.yd. brick paving. Fuller & Beard, Chemical Bldg., St. Louis, Mo., engrs.

Wis., Wauwatosa—Story Estate, c/o H. W. Story, 644 51st St., Milwaukee, having preliminary plans prepared concrete paving and grading new Story Hill subdivision No. 2, 45th St. and Blue Mound Rd., near here. $30,000. Parsons & Orbert, 216 West Water St., Milwaukee, engrs.

Missouri—State Hy. Dept. at div. office Bloomfield, rejected bids opened June 2, 14.841 mi. road from Advance northeast and south, Federal Aid Project 187, Stoddard Co. Noted July 6.

Tex., Brenham—Washington Co. making plans grading and gravel surfacing on rock, 20 mi. State Highway 36 from Austin Co. line to Burleson Co. line, 16 ft., 250,000 cu.yd. roadway and 3,000 cu.yd. rock excav., 3,400 cu.yd. concrete. G. A. Bracher, co. engr.

Tex., Paris—Lamar Co. making plans surfacing 11.16 mi. State Highway 5 west of here to Fannin Co. line, 12 ft., 17,435 cu. yd. gravel. $76,300. W. M. Fooshee, co. engr.

ROAD WORK—CALIFORNIA

Following are lowest bids opened July 10 by State Highway Comn., Forum Bldg., Sacramento, for constructing 16.58 mi. state highway in Placer Co., Div. 3, Route 37, Sects. A, B and C, (A) C. H. & A. W. Gorrill, Oakland; (B) Grant Smith & Co., San Francisco; (C) J. A. Costello, Jr., San Francisco. The unit bids were as follows:

	A	B	C
129,100 cu. yd. excavation without classification	$1.07	$0.98	$1.23
62,700 tons broken stone (bituminized macadam)	3.50	3.90	3.25
920 tons asphalt, Grade "E" spread (bituminized macadam)	16.50	20.00	30.00
395 cu. yd. concrete, culverts and monuments	25.00	24.00	25.00
2204 lin. ft. 12 in. corrugated metal pipe	1.25	1.25	1.10
21,736 lin. ft. guard rail	.90	.90	1.25
504 monuments, hauling and setting	2.00	2.00	2.00
Extended totals	$408,955	$425,606	$433,678

SEWER—AKRON, OHIO

Following are lowest bids opened July 5 by M. P. Tucker, dir. Pub. Serv., for installing sewer in East Tallmadge Ave. from North Main St. to east corporation line; (A) McAlonan Bros., 506 Woodland Ave., (awarded contract); (B) T. E. McShaffrey Constr. Co., 171 South Forge St.; (C) V. Olson Contg. Co., Herberich Bldg. The unit bids were as follows:

TRUNK SEWER			
755 lin.ft. 30-in. brick sewer complete	$9.40	$9.25	....
2,480 lin.ft. 36-in. brick sewer complete	8.15	9.50	....
9 manholes (standard) on brick sewers	100.00	85.00	....
150 cu.yd. concrete masonry class "3"	5.00	8.00	....
755 lin.ft. 30-in. seg. block sewer complete	7.85	9.00	10.60
2,480 lin.ft. 36-in. seg. block sewer complete	7.20	8.50	9.50
9 manholes (standard) on seg. block sewer	100.00	85.00	75.00
175 cu.yd. concrete masonry class "3"	5.00	8.00	8.00
2,575 lin.ft. 8-in. vitrified pipe sewer complete	1.45	1.00	1.26
1,676 lin.ft. 12-in. vitrified pipe sewer complete	1.10	1.10	1.36
770 lin.ft. 15-in. vitrified pipe sewer complete	1.35	1.50	2.05
200 lin.ft. 18-in. vitrified pipe sewer complete	2.60	2.00	2.40
925 lin.ft. 20-in. vitrified pipe sewer complete	2.80	2.60	3.75
1,320 lin.ft. 24-in. vitrified pipe sewer complete	4.20	3.70	5.00
32 manholes (standard) on pipe sewer	90.00	80.00	85.00
63 street inlets complete, plan 1	30.00	25.00	30.00
6 street inlets complete, plan 3	50.00	35.00	40.00
1 street inlet complete, wingwall	50.00	20.00	40.00
2 street inlets, complete type "D"	30.00	20.00	20.00
150 M. ft. b.m. sheeting left in place	25.00	20.00	35.00
Extended totals for brick sewer (42 items)	$58,708	$59,712	$68,900
Extended totals for seg. block sewer (42 items)	55,307	57,243	....

Tex., Waco—McLennan Co. plans grading, gravel surfacing, etc., 3.17 mi. State Highway 7 between here and McGregor, 15 ft., 14,685 cu.yd. borrow, 195 cu.yd. concrete, 17,280 lb. reinforcing, 3,587 cu.yd. gravel, 3,587 cu.yd. crushed rock. $34,000. M. Hannah, co. engr.

Okla., Sayre—Having preliminary plans prepared concrete paving various streets. $50,000. V. V. Long & Co., Colcord Bldg., Oklahoma City, engr.

Cal., Bakersfield—City Clerk takes bids about Aug. 15, paving 20 blocks Oak St., asphaltic concrete on 4 in. concrete. Noted July 13.

Cal., Los Angeles—Bd. Supervs. Los Angeles Co. takes bids about Aug. 1, grading, curbing, building walks and laying clay sanitary sewers in 2.12 mi. various streets near Alamitos Bay, 16,745 lin.ft. cement curbing, 84,558 sq.ft. sidewalk, 11,516 cu.yd. grading. $120,248.

Cal., Marysville—Had plans prepared paving various streets in Dist. 16, 533,879 sq.ft. 1½ in. warrenite on 3½ in. bituminous; improving various streets in Dist. 15, 784,381 sq.ft. 1½ in. warrenite on 3½ in. bituminous, 24,390 sq.ft. concrete gutter, 12,633 lin.ft. concrete curb. W. Meeks, city engr.

Cal., Sacramento—Had plans prepared curbing, guttering, paving and laying sewers in portion of Riverside Blvd., 15,662 lin.ft. concrete curb and gutter, 220 lin.ft. vitr. sewer pipe; 963 lin.ft. curb wall, 6,301 lin.ft. 6-22 in., 318,476 sq.ft. 5½ in. pavement, 8,830 sq.ft. 6 in. pavement, concrete curb laying sewer in portion of 41st St., 4,440 lin. ft. 6-24 in. vitr. pipe. A. Givan, city engr.

Cal., Vallejo—Having plans prepared paving 12 blocks in Hirst and Vallejo Heights Dist. F. Steiger, Fairfield, engr.

Cal., Visalia—Had plans prepared improving Northeast 2nd, Northwest 2nd, Northeast 3rd Aves., et al., 229,789 sq.ft. 1½ in. warrenite on 4 in. asphaltic concrete, 4,486 cu.yd. grading, 496 cu.yd. fill, 9,073 lin.ft. curb, 8,602 lin.ft. gutter, 1,522 lin.ft. corrugated iron culverts, 1,000 lin.ft. 8 in. vitr. sewer pipe, etc. L. H. Gadsby, city engr.

Ontario—Provincial Hy. Dept., Toronto, plans paving 6 mi. Talbot Rd., to connect with main highway. Hy Dept., engrs.

Ont., Hamilton—Having plans prepared and receives bids about Aug. 15, paving Gibson, Connaught, and Edgemont Aves., Cannon, Wentworth and King Sts., asphalt. $80,000. Prices wanted on materials. E. R. Gray, City Hall, engr.

BIDS DESIRED

Vt., Burlington—Aug. 10, improving South Union St. and Shelburne Rd. E. Corley, clk.; adv. this issue.

N. Y., Brooklyn—Aug. 2, by E. Riegelmann, pres. Brooklyn Boro., Borough Hall, repaving roadway Church Ave. from Flatbush to Rogers Aves., Porter Ave. from Johnson Ave. to Ingraham St., 17th Ave. from 86th St. to Cropsey Ave., asphalt on 6 in. concrete; Ralph Ave. from Macon St. to Atlantic Ave. and from Bergen St. to St. Marks Ave., asphalt and grade 1 granite on 6 in. concrete; Ralph Ave. from Atlantic Ave. to Bergen St. grade 1 granite.

N. Y., Eastwood—July 31, by Bd. Village Trustees, Village Hall, South Midler Ave., concrete paving and concrete curbing various streets, also 8 in. vitr. sanitary sewer in Lamson St., Homecraft and Glencove Rds. G. E. Higgins, engr.; adv. this issue.

N. Y., New York—Aug. 1, by H. Bruckner, pres. Bronx Boro., Municipal Bldg., Crotona Park, adjusting curb and sidewalks and paving roadway Valentine Ave. from Burnside Ave. to Kingsbridge Rd. at East 192nd St., asphalt on concrete; grading, setting curb, laying sidewalks, building inlets, receiving basins, approaches, etc. East 228th St. from Paulding to Laconia Aves.; sewers and appurtenances in Middletown Rd. between Westchester and Edison Aves.

N. Y., New York—Aug. 2, by J. Miller, pres. Manhattan Boro., Municipal Bldg., repaving widened portion of roadway West 57th St. from 6th to 7th Aves., asphalt on concrete; South and Marginal Sts., wharf or place on East River from Peck Slip to Montgomery St.; West and Marginal Sts., wharf or place on North River from Cortlandt to Duane Sts., granite block on concrete; alterations and improvements to sewer in West 57th St. between 5th and 6th Ave.

N. Y., Niagara Falls—Aug. 1, by E. J. Fort, city mgr., paving 1,254 ft. 24th St., granite, wood block, asphalt or brick, ($33,870 estimate based on wood block); Whitney Ave. between 22nd and 24th Sts. 40 ft., sheet asphalt, $25,000. W. B. Bennett, city engr. Noted June 8 and 22.

N. Y., Saranac Lake—Aug. 1, by S. A. Miller, village clk., improving Park and Shepard Aves., South and Helen Sts. H. Hull, engr.; adv. this issue.

N. Y., Syracuse—July 31, by Bd. Contract & Supply, paving Renwick Ave. from Harrison to Raynor Sts., 27 ft., 10,760 sq. yd. asphalt, $55,000; West Belden St. from Wallace to West Sts., 30 ft., 3,028 sq. yd. asphalt, $22,00; East Colvin St. from tracks of Delaware, Lackawanna & Western R. R. to city line, 18 ft., 16,160 sq. yd. asphalt, $70,600; Jamesville Ave. from Colvin St. to city line, 18 ft., 10,840 sq. yd. asphalt, $49,200; Adams St. from Almond to Crouse Sts., 27 and 30 ft., 4,550 sq. yd. asphalt, $30,200; South State St. from Raynor to Castle Sts., 30 ft., 2,850 sq. yd. asphalt, $20,000; Lilac St. from Union Pl. to Mary St., 24 ft., 3,830 sq. yd. asphalt, $23,330. T. H. Mather, City Hall, engr.

N. Y., White Plains—Aug. 7, at office of F. L. Merritt, clk. Bd. Supervs. Westchester

Streets and Roads (Continued)

Co., Court House, constructing North Bway. Former bids rejected; adv. this issue. Noted July 13.

N. J., Lambertville—Aug. 5, paving Main, York and Union Sts., 9,000 sq.yd. asphalt on scarified base, 150 ton crushed stone and 3,000 sq.yd. shoulders. I. L. Smith, city clk.

N. J., Mays Landing—Aug. 9, by Bd. Freeholders, Atlantic Co., Guarantee Trust Bldg., Atlantic City, reconstructing Sect. 6 of Route 14 in Hamilton Twp., warrenite bitulithic concrete. A. H. Nelson, 636 Guarantee Trust Bldg., Atlantic City, co. engr.; adv. this issue.

N. J., Millville—Aug. 8, by Cumberland Co., Court House, Bridgeton, constructing State Highway Route 15, Sect. 4, West Main St., here. W. M. Sharp, Bridgeton, co. engr.; adv. this issue.

N. J., Mt. Holly—Aug. 4, by Bd. Freeholders Burlington Co., reconstructing Medford-Mt. Holly Rd. 27, in Medford and Lumberton Twps., sheet asphalt on macadam. B. H. Wills, Kelsey & Killie Bldg., co. engr.; adv. this issue.

N. J., South Amboy—Aug. 10, by State Hy. Dept., Trenton, bituminous concrete shoulders 2 ft. wide on each side of present concrete pavement on Route 4, Job 445, Bway from Main St. to Scott Ave., here, Middlesex Co. A. L. Grover, ch. clk.; adv. this issue.

N. J., Trenton—Aug. 8, by Bd. Freeholders Mercer Co. constructing 2.4 mi. road parallel to D. & R. Canal Feeder from Scudders Falls to Washingtons Crossings, 8 in. rein.-con. H. F. Harris, Court House, co. engr.; adv. this issue.

Pa., Catasauqua—Aug. 7 concrete paving 40,000 sq.yd. various streets. $110,000. Bascom & Sieger, Allentown Bank Bldg., Allentown, engrs.

Pa., Chester—Pennsylvania R.R., Broad St., Sta., Phila., receiving bids grading and paving from Ridley River to Pennell St., 3,750 ft. curbing, 5,400 ft. Belgian blocks, 3,000 cu.yd. earth excav., 2,000 cu.yd. ballast, etc., A. C. Shand, ch. engr.

Pa., Erie—Aug. 1, paving Chestnut St. from 26th to Peach Sts., asphalt. $25,720. F. G. Lynch, city engr. Noted July 20.

Pa., Leechburg—Aug. 7, grading, curbing and paving Linden Ave., and portions of 1st St., Center and Floral Aves. C. A. Ehrenfeld, boro. engr.; adv. this issue. Noted July 13.

Maryland—Aug. 8, by State Roads Comn., Baltimore, building 9 sections of State Highways as follows: Contr. A-21, Allegany Co.; Contr. F-51, Frederick Co.; Contr. HO-24, Howard Co.; Contr. AA-20, Anne Arundel Co.; Contrs. P-38 and P-33, Prince George Co.; Contr. CH-20, Charles Co.; Contr. SM-18, St. Marys Co.; Contr. D-26, Dorchester Co. J. N. Mackall, chn.; adv. this issue

West Virginia—See "Bridges."

W. Va., Wheeling—Aug. 12, by Comrs. Ohio Co., surfacing Stone Church Rd., Triadelphia Dist., brick on slag. $25,000. A. C. Hoffman, co. rd. engr.

N. C., Henderson—Aug. 17, by A. A. Bunn, mayor, and Bd. Comrs., 60,000 sq.yd. pavement, etc. R. D. Gladding, Henderson, engr.; adv. this issue.

N. C., Hendersonville—Aug. 1, by Comrs. Henderson Co., surface treating 63,360 sq. yd. macadam road with bituminous carpet. C. Turner, Hendersonville, engr.

Georgia—Aug. 1, by State Hy. Dept., Atlanta, gravel and clay surfacing 10.08 mi. Brunswick-Darien Rd., between Brunswick and Broadfield, Federal Aid Project 261, Glynn Co., 106,163 sq.yd. clay gravel surfacing, 21.64 acres clearing, 6,870 sta.yds. overhaul borrow excav., 29.66 cu.yd. concrete. State to furnish cement f.o.b. nearest railroad station. W. R. Neel, State Hy. Dept., Atlanta, engr.

Ga., Savannah—Aug. 8, by F. R. Butler, clk. Chatham Co. Comrs., paving 17.23 mi. White Bluff Rd., Montgomery Cross Rds., and Skidway Rd., 18 ft. concrete.

Fla., Ft. Myers—Aug. 9, by Comrs. Lee Co., clearing and grading road in Special Rd. & Bridge Dist. 4, on Captiva Island, over 6 mi. long. R. P. Ransome, Ft. Myers, engr.

Fla., West Palm Beach—Aug. 1, by Bd. Comrs. Palm Beach Co., paving with 8 in. rock, oil surface, 11½ mi. Palm City loop, $55,000; 6.8 mi. Ocean Blvd. from Delray to Boca Rotone; 6½ mi. 2nd St. in Hobe Sound, $30,000; paving Ocean Blvd. on Jupiter Island and resurfacing road from county line to Seevells Point, $26,000. R. F. Goodman, West Palm Beach, engr.

Alabama—Aug. 15, by W. S. Keller, state highway engr., Montgomery, grading, concrete surfacing and constructing bridge on 4.7 mi. Montgomery-Selma Rd., Selma-Uniontown Rd., Dixie Overland Highway, 2.5 acres clearing, 25,877 cu.yd. excav., 576.43 cu.yd. concrete, 58,484 lb. reinforcing, 51,000 sq.yd. one course plain cement concrete pavement, one 120 ft. steel span, etc.

O., Cleveland—July 29, by Cuyhoga Co. paving Riverside Rd., 11,200 lin. ft. stone curb, 10,230 cu. yd. earth excav., 21,800 sq.yd. vitr brick or asphalt, 5,400 sq.yd. concrete base, $140,134; Lorain Rd. through West Park, 28,750 lin.ft. stone curb, 31,200 lin.ft. 4 in. vitr. tile gutter, 3,720 cu.yd. earth excav., 65,120 sq.yd. vitr. brick, granite block or asphalt, 13,900 sq.yd. concrete base, $573,751. F. J. Lander, Court House, engr.

Ind., Albion—Aug. 3, by Comrs. Noble Co., grading, draining and gravel surfacing 8.7 mi. Samuel Weimer Rd., 18 ft., $72,070; 11.4 mi. Krieger Rd., 24 ft., $114,533; 5.2 mi. A. J. Rich Rd., 18 ft. $55,523; 3.4 mi. Bert Hines Rd., 18 ft., $27,999. Co. surv., engr.

Ind., Brazil—Aug. 7, by Comrs. Clay Co., grading and surfacing, stone and gravel, 3 mi. Harry Frud Rd., 18 ft. $31,000. Co. Surveyor, Brazil, engr.

Ind., Brownstown—Aug. 7, by Comrs. Jackson Co., grading and gravel surfacing 26,170 ft. Daniel Compson Rd., 16 ft. $36,700. Co. Surveyor, Brownstown, engr.

Ind., Crown Point—Aug. 8, by Comrs. Lake Co., grading and gravel surfacing 3.8 mi. E. O. Sutton Rd., 18 ft., $40,461; 3.9 mi. Adolph Lottes Rd., 18 ft., $40,460; 18,400 ft. George Melcher Rd., 16 ft., $34,493; 17,250 ft. M. P. Hawkinson Rd., 16 ft., $34,721. Co. Surveyor, Crown Point, engr.

Ind., Jasper—Aug. 7, by Comrs. Dubois Co., grading, and gravel surfacing 4 mi. 717 ft. Herman Hopenjans Rd. $60,050, and 5,065 ft. Andrew Wagner Rd., macadam, $37,646, both 16 ft. Co. Surveyor, Jasper, engr.

Ind., Monticello—Aug. 8, by Comrs. White Co., grading and gravel surfacing 15,830 ft. Jacob Vogel Rd., 18 ft. $30,155. Co. Surveyor, Monticello, engr.

Ind., Paoli—Aug. 7, by Comrs. Orange Co., grading and gravel surfacing 13,083 ft. French Lick Rd., 18 ft. $27,000. Co. Surveyor, Paoli, engr.

Ind., Valparaiso—Aug. 8, by Comrs. Porter Co., grading and gravel surfacing 4.643 mi. Louis J. Gast Rd., 24 ft. $86,136. Co. Surveyor, Valparaiso, engr.

Ind., Washington—Aug. 8, by Comrs. Daviess Co., grading and gravel surfacing 17,000 ft. Jerome De Mottie Rd., 18 ft. $27,000. Co. Surveyor, Washington, engr.

Michigan—Aug. 1, by State Hy Dept., Lansing, grading and surfacing 2.266 mi. State Trunk Line Rd. 17-5, Van Buren Co., 18 and 20 ft., 25,287 sq.yd. asphalt, concrete or bituminous concrete, 7.101 cu.yd. earth excav. State Hy. Dept., engrs.

Michigan—Aug. 4, by State Hy. Dept., Lansing, grading and surfacing 2.324 mi. State Trunk Line Rd. 14-23, Sect. B, 16 ft., Gratiot Co., 21,603 sq.yd. gravel, 10,336 cu.yd. earth excav., 23,846 lin.ft. tile drains, etc. State Hy. Dept., engrs.

Mich., Monroe—July 31, by Monroe Co., grading and surfacing with waterbound macadam, 3½ mi. Assessment Dist. Rd. 26, and 5 mi. Assessment Dist. Rd. 27, both 16 ft.

Wisconsin—Aug. 4, by State Hy. Dept., Madison, grading and surfacing 2.14 mi. Spooner-Cameron Rd., Federal Aid Project 251, Washburn Co., 4.09 acres clearing, 16,249 cu.yd. earth excav., 3,696 cu.yd. gravel surfacing; 2.58 mi. Webster-Milltown Rd., Federal Aid Project 265-C, Polk Co., 8.72 acres clearing, 17,050 cu.yd. earth excav., 4.451 cu.yd. gravel surfacing. A. R. Hirst, highway engr.

Ia., Merrill—Aug. 2, paving 24,000 sq.yd. various streets, concrete and vibrolithic with gravel and granite aggregates, vertical fibre brick, asphaltic concrete or sheet asphalt. $55,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs. Noted June 22.

Ia., Pella—July 31 for (a) repairs to present pavement (b) resurfacing 36,200 sq.yd. asphalt Class 1, asbestos-asphalt Class 2, or tarvia Class 3, 1 in. thick. $40,000. A. C. Kuyper, clk.

Missouri—Aug. 4, by State Hy. Dept. at div. office Bethany, surfacing road from Bethany northward and southward, Federal Aid Propect 8, Harrison Co. Work consists of surfacing with following alternatives: 2.471 mi. 1½-2 in. rock asphalt, 3.115 mi. 2½ in. penetration bituminous macadam, 2.66 2 in. asphaltic concrete, all foregoing 18 ft. wide on 8 in. sledged stone, 3.361 mi. 4 in. waterbound macadam intermediate course and 1 in. inverted penetration course on 6 in. sledged stone, 18 ft. wide, and 2.717 mi. of 7 in. 1 course cement concrete, 16 ft. wide. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Aug. 5, by State Hy. Dept. at div. office Paris, 6.7 mi. road from Paris, eastward, westward and northeastward, 24 ft., State Aid Project 20.181, Monroe Co. To exceed $25,000. B. H. Piepmeier, Jefferson City, state highway engr. Noted July 20.

Ark., Little Rock—July 31, by H. R. Carter, engr., Exch. Bank Bldg., paving 22,500 sq.yd. Battery St., sheet asphalt or bitulithic on concrete.

Tex., Beaumont—Aug. 15, by Judge Jefferson Co., paving, scarifying, reshaping, etc., 3 mi. road from Port Arthur west to Gulf Co., offices and dock along 7th St.; 3 mi. from Port Arthur west of Gulf Co. refinery along 16th St.; 4½ mi. from Nederland to Port Neches; 3 mi. from here to Spindletop; 4½ mi. from here to a point beyond Brooks along an extension of Franklin St. Work includes 15.7 mi. scarifying and reshaping, 4.434 cu.yd. removing shell surfacing, 37,118 cu.yd. earth roadway and 21,374 cu.yd. earth borrow excav., 4,446 cu.yd. earth overhaul, 88,390 lb. reinforcing, etc. A. C. Love, co. engr.

Tex., San Antonio—Aug. 1, by A. McCloskey, judge Bexar Co., grading, gravel surfacing and topping 2.23 mi. State Highway 9, Pearsel Rd., 18 ft., 21,267 sq.yd. 1 in. bituminous macadam, 542 cu.yd. concrete, 30,100 cu.yd. earth excav., 5,395 cu. yd. gravel surfacing, 67,141 lb. reinforcing. R. E. Killmer, co. highway engr.

Tex., San Marcos—Aug. 3, by J. R. Wilhelm, judge Hays Co., paving 3.02 mi. State Highway 29 A, Martindale Rd., 16 ft., incl. 33,591 sq.yd., (a) 1½ in. bituminous treatment using asphaltic oil and crushed rock, (b) 1½ in. limestone rock asphalt, cold application. $25,500 incl. engineering and contingencies. J. W. Puckett, co. engr.

California—Aug. 14, by State Hy. Comn., Sacramento, grading 3.3 mi. highway between Hueneme Rd. and point 3½ mi. southeast, Ventura Co.; asphaltic concrete surfacing 4.3 mi. between Carnadoro and southern boundary, Santa Clara Co. A. B. Fletcher, state highway engr.

Cal., Napa—Aug. 8, by Supervs. Napa Co., improving Charles Valley Rd., 7,500 cu. yd. excav., 236 lin.ft. 12-24 in. corrugated culverts, 40 cu.yd. concrete, 1,200 lb. reinforcing, 2,500 cu.yd. crushed rock or graded gravel. County furnishes corrugated metal pipe and cement. E. Ball, co. surv.

Cal., Sacramento—Aug. 7, by Supervs. Sacramento Co., paving with 2 in. asphalt macadam on 4 in. base 1 mi. Antelope Rd., 16 ft.; 5,963 lin.ft. Sylvan-San Juan Lateral, 16 ft. C. W. Deterding, co. surv.

Cal., San Luis Obispo—Aug. 7, by Supervs. San Luis Obispo Co. improving Avila Rd., 5,500 cu.yd. excav., 8,296 lin.ft. shaping and rolling road-bed, 2,049 cu.yd. concrete pavement, 7,500 lb. reinforcing; Templeton-Willow Creek, Templeton-Creston and Templeton-Vasa Rds., 284 cu.yd. excav., 187 cu.yd. concrete, 128,000 lb. reinforcing. W. B. Burch, Lowe Bldg., engr.

Cal., Santa Rosa—Aug. 15, by Supervs. Sonoma Co., improving 22,490 lin.ft. Guerneville-Jenner Highway, Sects. B and C, 23,000 cu.yd. unclassified excav., (1,336 lin.ft. 12-36 in. corrugated iron pipe to be furnished by county). R. P. Smith, Santa Rosa, engr.

Quebec—Aug. 10, by I. L. Boulanger, Dept. Roads, Parliament Buildings, Quebec, improving 29,006 ft. Levis-Rimourlsi, and Levis-St. Lambert Highway, 16 ft., incl. 27,706 ft. bituminous macadam and 1,300 ft. gravel. M. Necktar, Dept. Roads, engr.

Quebec—Aug. 12, by I. L. Boulanger, deputy minister of roads, Quebec, graveling 3.73 mi. Montreal-Sherbrooke Highway, 16 ft., in parish of St. Michel de Rougemont and village of Rouville. M. Necktar, Dept. of Roads, Quebec, engr.

Ontario—Aug. 8, by W. A. McLean, deputy minister roads, Parliament Bldg., Toronto, paving concrete, 2½ mi. road from Arkwood westerly to present pavement, Chatham Twp.; Contr. 776; grading road from Toronto city limits to Kingston Rd., York and Scarboro Twps., Contr. 778. $120,000. G. Hogarth, Parliament Bldgs., ch. engr.

Ontario — Aug. 8, by W. A. McLean, deputy minister highways, Toronto, macadam base, 30 ft. wide, from Clappesons Corner, near Hamilton, 1.9 mi. south, Contr. 777. $40,000. G. Hogarth, Parliament Bldg., engr.

Streets and Roads (Continued)

BIDS RECEIVED

New York—H. S. Sisson, comr. State Hy. Dept., Albany, opened bids July 21, improving (1) 2.77 mi. Highways 5679 and 8114, Allegany Co., engrs. est. $81,027, (2) 8.35 mi. Highway 8125, Allegany Co., engrs. est. $277,286, (3) 4.23 mi. Highways 5680 and 8127, Fulton Co., engrs. est. $139,051, (4) 2.75 mi. Highway 8124, Oneida Co., engrs. est. $103,331, (5) 7.73 mi. Highways 8100 and 1631, St. Lawrence Co., engrs. est. $220,346, (6) 1.65 mi. Highway 8126, Steuben Co., engrs. est. $25,596, (7) 1.01 mi. Highway 1647, Wayne Co., engrs. est. $52,569, (8) bridge on Highway 8018-A, Cattaraugus Co., engrs. est. $193,768, from P. H. Murray, Rochester, (1) $71,697, (2) $263,538; S. Rosoff, Warsaw, (1) $74,658; Greenfield Constr. Co., 89 Main St., Hornell, (1) $79,709, (6) $23,566; Sweeney & Boland, Rochester, (2) $246,057; W. L. Collins, Hornell, (2) $246,677, (6) $24,830; S. B. Van Wagenen, Rondout, (3) $132,782; A. V. Leo Constr. Co., Thompson, Conn., (4) $100,126; H. P. Burgard Co., 1968 Fillmore Ave., Buffalo, (5) $210,339; W. D. Fote, Olean, (5) $212,145; Dale Eng. Co., Mann Bldg., Utica, (6) $22,939; F. W. and J. J. Crouch, Rochester, (7) $49,998; Cleveland & Sons Co., Brockport, (7) $50,724; J. DePeter, Red Creek, (7) $51,123; Amer. Pipe & Constr. Co., 112 North Broad St., Phila., (8) $174,829; Eastover Constr. Co., Inc., Herkimer, (8) $186,293; Peckham Constr. Co., Inc., Niagara Life Bldg., Buffalo, (8) $192,357. Noted July 13.

N. Y., Buffalo—Bd. Supervs. Erie Co. opened bids July 17, constructing County Aid Town Highway 97, concrete and asphalt, from H. P. Burgard Co., 1968 Fillmore Ave., $30.780; Rock Asphalt & Construction Co., 1104 Morgan Bldg., $32,157.

Pa., Erie—A. Eichorn, street dir., received bids asphalt paving (1) State St., engrs. est. $77,500, (2) 3,300 sq.yd. 27th St., (3) 2,530 sq.yd. 21st St., from J. and M. Doyle, Erie, (1) $75,132, (2) $2.96 per sq.yd., (3) $2.15; M. A. McCormick Co., Erie, (1) $83,178, (2) $3 per sq.yd.; Mayers Bros. Constr. Co., Erie, (3) $2.25 per sq.yd. Noted March 2.

Alabama—State Hy. Dept., Montgomery, grading and gravel surfacing 20.488 mi. Montgomery-Tuskegee Rd., Macon Co., from Vaughn Davis Constr. Co., Montgomery, $157,898, Keyser, Gillis & Keenan, Brewton, $162,582, J. F. Giddens & Sons, Troy, $176,453; grading and surfacing with chert 3.48 mi. road from Calhoun Co. line to Heflin, Cleburne Co., from Stanley & Singer Constr. Co., Lafayette, $25,507, Nixon Transfer Co., Anniston, $30,717; grading and surfacing with (a) bituminous macadam, (b) gravel 14.617 mi. road from Athens to Elk River, Limestone Co., from E. L. Batson, Birmingham, (a) $321,654, (b) $157,056, Municipal Paving & Constr. Co., Athens, (a) $364,938. Noted June 29.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 10,297 mi. Sects. D. C. and E Windsor-Geneva Rd. and Sect. "C-1" Painesville-Warren Rd., Ashtabula Co., (a) monolithic brick, (b) bituminous macadam, tar or asphalt, from T. P. Fitzgerald, (a) $311,044 (b) $299,076; Seiple-Wolfe Co., Youngstown, (b) $312,044; Mahoning Constr. Co., Warren, (b) $313,030. Noted July 6.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids July 21, grading, bridging and paving roads with (a) bituminous concrete, oil, brick gutter, (b) bituminous concrete, lake, brick gutter, (c) bituminous concrete, oil, concrete gutter, (d) bituminous concrete, lake, concrete gutter, (e) brick, (f) semi-monolithic brick, in following counties: Hancock Co., Sect. "Arlington" Findlay-Kenton Rd., 0.362 mi., from Thompson-O'Roark Co., Toledo, (a) $30,598, (b) $32,040, (c) $27,684, (d) $29,126; H. E. Pratt Constr. Co., Mt. Blanchard, (a) $32,030, (b) $32,030, (c) $29,490, (d) $29,490; Dorsey Constr. Co., Findlay, (c) $29,767, (d) $30.078. Hocking Co., Sect. "G-2" Logan-Lancaster Rd., 1.292 mi., from E. N. Turner, Logan, (e) $51,360. Hocking Co., Sect. "L" Logan-Lancaster Rd., 1.776 mi., from E. N. Turner, Logan, (e) $71,300. Tuscarawas Co., Sect. "Newcomerstown" Uhrichsville-Newcomerstown Rd., 0.63 mi., from W. M. Brode Co., Newcomerstown, (f) $31,543; Henderson Bros., Coshocton, (f) $35,552. Muskingum Co., Sect. "R" Zanesville-McConnelsville Rd., 0.96 mi., grading from Stein & Geisel, Niles, $10,651; Sterling Contrs., Akron, $12,488. Noted July 13.

O., Akron—S. Porter, clk. Summit Co., opened bids July 20, grading and paving 8,834 ft. Brittain-Massillon Rd. 49, Sect. D, 17 ft. 4 in., engrs. est. $63,770, and 3.046 mi. Krumroy-Myersville Rd. 130, Sects. A and B, 16 ft., bituminous concrete, engrs. est. $77,900, from T. E. McShaffrey Constr. Co., 171 South Forge St., $59,727 and $77,642 respectively; 6,918 ft. Cuyahoga Falls-Hudson Rd. 34, Sect. B, waterbound macadam with 3 in. bituminous macadam top, 16 ft., from A. F. Wible, 859 Chalker St., $32,885, engrs. est. $34,350; 5 mi. various streets in Fairlawn Heights allotment, 16 ft., bituminous macadam, from Fairlawn Heights Co., Fairlawn, R. F. D. Copley, $108,550, engrs. est. $108,550. Noted July 13.

O., Cleveland—Paving driveways in Highland Park Cemetery, 3,300 cu.yd. earth excav., 12,376 sq.yd. asphalt or concrete, 111,384 sq.yd. 6 in. concrete base, from M. P. Platten, Engineers Bldg., 1 course concrete, $42,978; Garland Bros., Pavers Exch. Society for Savings Bldg., 2 course concrete, $43,244; A. M. Pejsa, Euclid Heights Blvd., Cleveland Heights, asphalt, $52,765.

O., Cleveland—Paving Kinsman Rd. from East 55th to East 79th Sts., 3,700 lin.ft. stone curb, 15,400 sq.yd. asphalt and 110,000 granite block relaid, from River Constr. Co., Schofield Bldg., $57,653; Cleveland Trinidad Paving Co., The Arcade, $58,725; Rieley Bros., The Arcade, $62,288.

O., Cleveland—Paving (1) East 107th St. from Euclid to Wilbur Aves., (2) East 113th St. from Kinsman Rd. to Regalia Ave., 10,450 sq.yd. vitr. brick, 9.000 sq.yd. relaid granite block and 4,650 sq.yd. asphalt, from Bentley Bros., 1836 Euclid Ave., (1) $13,322; Rieley Bros., The Arcade, (1) $14,136 (2) $12,469; Garland Bros., Pavers Exch. Society for Savings Bldg., (2) $12,191.

O., Columbus—Franklin Co. opened bids July 22, surface treating 28 roads from H. E. McCollister, 2334 East 5th Ave., $24,611; Byrne-Conway Co., Columbus, $29,754.

O., Euclid—Opened bids July 17, paving (1) Eastbrook, Gilchrist, Glenside, Parkview, Westbrook and Wondergrove Aves., (2) Lakewood and Seabrooke Aves., 11,360 lin.ft. 5 x 20 in. stone curb, 19,750 sq.yd. asphalt. 161,600 sq.ft. concrete base, from River Constr. Co., Schofield Bldg., Cleveland, (1) $61,304, (2) $19,084; H. G. Herring, Pavers Exch. Society for Savings Bldg., Cleveland, (1) $68,080; Cleveland Trinidad Paving Co., The Arcade, Cleveland, (2) $21,302.

O., New Philadelphia—Tuscarawas Co. opened bids July 18 paving Sect. B-2 Strasburg-Bolivar Rd., concrete, from Daley Bros. Constr. Co., New Philadelphia, $49,818.

Wisconsin—State Hy. Dept., Madison, Madison-Verona Rd., Project N. 312, Dane Co., from Odea & Shaffer, 824 East Washington Ave., Madison, 3,143 cu.yd. earth excav., $0.73, 9,000 sq.yd. concrete surfacing $1.37, 11,475 lb. reinforcing steel in pavement $0.04, etc., total $16,397; Reedsburg-Spring Green Rd., Project 243, Sauk Co., from J. Marsch, Inc., 1302 Wrightwood Ave., Chicago, East Route, 43,728 cu.yd. earth excav. $0.35, 2,100 cu.yd. loose rock $0.65, 2,605 cu.yd. solid rock $1.05, 4,636 cu.yd. borrow $0.35, 56,090 lb. structural steel $0.10, etc., total $53,054, West Route, 39,866 cu.yd. earth excav., $0.38, 2,100 cu. yd. loose rock $0.65, 6,754 cu.yd. solid rock $0.95, 5,522 cu.yd. borrow $0.38, 3,102 cu.yd. channel change $0.60, 10,400 lb. structural steel $0.10, etc., total $55,268. Noted July 13.

Wisconsin—State Hy. Dept., Madison, Menomonie-Hudson Rd., Project 1023, and Menomonie-Hudson Rd., Project 1024, both Dunn Co., from Ofstie & Mulheron, Spring Valley, $8,588 and $9,442 respectively. Noted July 13.

Michigan—State Hy. Dept., Lansing, grading and surfacing (1) 2.767 mi. State Trunk Line 59-1, Sect. B, 18 ft., Macomb Co., (2) 2.04 mi. State Trunk Line Rd. 59-2, 18 ft., Oakland Co., from Meredith & McVaugh, 220 Horton Ave., Detroit, (1) $47,381, (2) $32,978; J. A. McKay & Co., 403 Melbourne Ave., Detroit, (1) $47,495, (2) $33,639; T. E. Curne, Detroit, (1) $52,333; L. A. and P. E. Moran Howell, (2) $33.660. Noted July 6.

Michigan — State Hy. Dept., Lansing, grading and surfacing 4.862 mi. Assessment Dist. Rd. 346, 12 ft., Ionia and Barry Counties, from Saginaw Constr. Co., Saginaw, $33,228; Byam & Whitmore, Eagle, $39,605; Hunter & Prescott, $39,870. Noted July 13.

Mich., Detroit—Paving (1) Baylis Ave. from Fenkell to Puritan Aves., (2) Burke Ave. from Panama to Wagner Aves., (3) Canfield Ave. from Iroquois to Burns Aves., (4) Edgewood Ave. from Van Dyke to Murat Aves., (5) Fairview Ave. from Warren to Shoemaker Aves., (6) Highland Ave. from La Salle to Linwood Aves., (7) Strong Ave. from Sherwood to Helen Aves., (8) Sturtevant Ave. from Pere Marquette R.R. right of way to Linwood Ave., all above 26 ft. wide, 3½ in. sheet asphalt (natural lake or oil) on 8 in. concrete; (9) Fern Ave. from Burton to Martin Aves., (10) Pelouze Ave. from Livernois to Martin Aves., 26 ft. wide 3 in. sheet asphalt (natural lake or oil) on 6 in. concrete; (11) Louis Ave. from Highland Park to Log Cabin Ave., 24 ft. wide 3 in. sheet asphalt (natural lake or oil) on 6 in. concrete; (12) Leslie Ave. from east line of Pere Marquette R.R. right of way to Linwood Ave., 24 ft. wide, 3½ in. sheet asphalt (natural lake or oil) on 8 in. concrete, from Detroit Asphalt Paving Co., 20 McGraw Bldg., (1) $38,534, (2) $18,873, (3) $8,985, (4) $6,851, (5) $19,399, (6) $14,671, (7) $7,222, (8) $19,182, (9) $7,476, (10) $20,376, (11) $11,177, (12) $18,193; Cleveland Trinidad Paving Co., 402 Hamomnd Bldg., (1) $38,915, (2) $20,375, (3) $9,589, (4) $7,161, (5) $20,465, (6) $14,325, (7) $7,304, (8) $18,717, (9) $7,778, (10) $21,205, (11) $10,895, (12) 17,738.

Tex., Gonzales—Gonzales Co. opened bids grading and gravel surfacing 9.27 mi. State Highway 29, from R. G. Buckner & Sons, Cleburne, $48,528; D. E. Miller, Port Lavaca, $49,542; McCall-Moore Eng. Co., 308 Amicable Bldg., Waco, $50,081. Noted June 22.

Tex., Karnes City—Karnes Co. grading, surfacing, etc., 14.54 mi. Highway 9 through Rd. Dist. 4 incl. 50,003 lin.ft. header curb, 104,644 cu.yd. roadway and 5,687 cu.yd. borrow excav., 660.5 cu.yd. concrete, 192,694 lb. reinforcing, 25,584 cu.yd. gravel and 20,227 cu.yd. caliche surfacing, from F. P. McElwrath, Corsicana, $107,953, W. T. Hutto & Sons, Gonzales, $108,222, Wear & Thomas, Rogers, $109,224; surfacing with bituminous topping, State Highway 9, 16 ft., (a) inverted penetration asphalt, (b) Uvalde rock asphalt, (cold aplication) from Smith Bros., Crockett, (a) $70,487, (b) $82,235, R. W. Coglazier, Austin St., San Antonio, (b) $88,109, Haden & Austin, Hill and Marsch Sts., Houston, (a) $65,641, (b) $96,186, M. M. Craven, Fredericksburg, (a) $72,690.

California—State Hy. Comn., Sacramento, grading 11.3 mi. highway between Chester Grade and N. E. quarter of Sect. 3, T 28 N., R 9 E., M. D. B. & M., Plumas and Lassen Counties, from Isbell Constr. Co., P. O. Box 584, Fresno, 71,000 cu.yd. excav. at $.145, 225 cu.yd. portland cement concrete (culverts and monuments) $50, etc., total $116,227. Noted June 29.

California—State Hy. Dept., Sacramento, grading and paving with bituminous macadam 16.58 mi. highway between Auburn and Colfax, Placer Co., from C. H. and A. W. Gorrill, Oakland, $408,955; Grant, Smith & Co., Flood Bldg., San Francisco, $425,606; J. A. Costello, Jr., 1083 Shotwell St., San Francisco, $433,678. State furnishes cement, reinforcing steel, asphalt and metal pipe. Noted June 29.

Cal., Hemet—Improving Buena Vista St., et al., 409,700 sq.ft. 4 in. concrete pavement, 8,600 lin.ft. cement curb, 6,600 sq.ft. cement sidewalks, from G. H. Oswald, 366 East 58th St., Los Angeles, $72,785; Southwest Paving Co., 415 Washington Bldg., Los Angeles, $77,369; Wells & Bressler, Santa Ana, $81,390.

Cal., Los Angeles—Improving 4,120 ft. Whittier Blvd. between Rowan St. and Pasadena Ave., 14,791 sq.yd. asphalt, 14,791 sq.yd. concrete, 3,347 lin.ft. concrete curbing, 5,925 cu.yd. excav., 16,026 sq.ft. concrete gutter, from G. R. Curtis, 2440 East 26th St., $80,762; Fairchild-Gilmore-Wilton Co., Los Angeles Ry. Bldg., $97,480; G. H. Oswald, 58th and Towne Sts., $117,583. Noted June 22.

Cal., San Rafael—For 267,000 sq.ft. asphaltic concrete wearing surface on existing roadways, (a) fine graded aggregate type, (b) coarse graded aggregate type, (c) Warrenite bitulithic, from J. A. Costello, 1083 Shotwell St., San Francisco, (a) $30,920, (b) $30,920, (c) $54,380; S. P. Brownlee, San Rafael, (a) $41,520, (b) $41,520, (c) $41,520; Fay Impvt. Co., Phelan Bldg., San Francisco, (a) $38,622, (b) $41,382, (c) $56,148; Oakland Paving Co., 5000 Bway., Oakland, (a) $42,150, (b) $40,770.

Cal., Stockton—Improving streets in Searchlight Addition, from C. Moreing, Commercial & Savings Bank Bldg., 21,667 cu.yd. excav. at $0.75 per cu.yd., 754 cu. yd. fill $0.25, 10,805 lin.ft. concrete curb and gutter $0.95, 98,301 sq.ft. cement walks $0.20, 355,062 sq.ft. 2 in. asphaltic macadam on 4 in. gravel, $0.155, total $102,349. Noted June 15.

CONTRACTS AWARDED

New Hampshire—State Hy. Dept., Concord, paving 1.67 mi. Daniel Webster Rd., in Hooksett, 18 ft., modified asphalt on crushed stone, to Colburn Constr. Co., Concord, $26,739.

Streets and Roads (Continued)

N. Y., Buffalo—Paving Houghton St., 28 ft., to Rock Asphalt & Constr. Co., Morgan Bldg., $2,021; Cable St., 26 ft., to H. P. Burgard Co., 1968 Fillmore Ave., $15,550, both specification B standard asphalt on concrete; Kirkpatrick and Gorski Sts., both 26 ft., specification B brick on brick, to Erie Contg. Co., Morgan Bldg., $8,536 and $8,995 respectively.

N. Y., Jamestown—Will pave Lincoln St. between 6th & 8th Sts., No. 1 state brick blocks and Hillside brick blocks on 5 in. concrete, Winsor St. between East 2nd and Falconer Sts., Hillside brick blocks on 5 in. concrete; 11th St. between Main and Washington Sts., No 1 state brick blocks on concrete, by day labor under supervision of Bd. Estimate & Review. $25,000. L. Bergman, City Hall engr.

New Jersey—State Hy. Dept., Trenton, for 314,550 gal. lignin binder for State Hy. Dept. and 581,600 gal. lignin binder for repair of gravel roads in New Brunswick, to J. S. Robeson, 435 East State St., Trenton, $29,882 and $51,571 respectively.

N. J., Belvidere—Warren Co., Court House, paving 2½ mi. road between Barkers Corner to Great Meadows, concrete, to Salmon Bros., Netcong, $186,688. Noted July 6.

N. J., Somerville—Somerset Co. constructing 38,419 sq.yd. State Highway Route 16, Sect. 2 Mine Mount Rd. to Bedminster Corner, cement, concrete, to Eng. Constr. Co., 720 Commercial Bldg., Phila., $181,801. Noted June 29.

Pennsylvania—State Hy. Dept., Harrisburg, rein.-con. paving 9,638 ft. Route 214, Brady Twp., Clarion Co., to T. W. Munro & Co., Du Bois, $81,239, 24,039 ft. Routes 100 and 101, Port Allegheny Boro., Liberty Twp., McKean Co., to G. Metzger, Jr., 12 4th St., Emporium, $197,134, 12,048 ft. Sect. 1 A, Route 4, Salem Twp., Shickshinny Boro., Luzerne Co., to D. L. Risser, 713 Walnut St., Lebanon, $112,682, 8,648 ft. Route 322, Scott Twp., Lackawanna Co., to M and T. E. Farrel Co., 209 West Chestnut St., West Chester, $81,262; rein.-con. and Hillside vitr. brick paving 13,917 ft. Route 251, Bruin Boro. and Parker Twp., Butler Co., to C. E. Walter, Butler, $131,445; 20,057 ft. Route 174, Harford Twp., Susquehanna Co., to R. D. Richardson Constr. Co., 828 Connell Bldg., Scranton, $190,353; 22,171 ft. Route 12, Bridgewater and Dimock Twps., Susquehanna Co., to W. C. Evans, Ambler, $174,472. Noted July 6.

Pa., Altoona—Rein.-con. paving 3,721 ft. 14th St., 20th and 22nd Aves., 22-30 ft., to L. A. Brau, Hollidaysburg, engrs. est. $40,000; 1,980 ft. 25th St. and 4th Ave., 30 ft., to Loomis & King, Central Trust Bldg., engrs. est., $25,000.

Pa., Bradford—To F. D. Ross, 74 High St., paving Mill St., $20,133; York St., $6,765; Hobson Pl. $7,694 and Pearl St. $4,501; sewers in Holley and Willis Aves., $3,511. Noted July 20.

Pa., Monongahela—Resurfacing Marne Ave. between 4th and Meade Sts., concrete, to McCreary Bros. Constr. Co., Braddock, $41,810. Engrs. est. $50,000. Noted Feb. 2.

Pa., Monongahela—Repaving 3rd, 5th, 6th, 7th, 8th, 9th and Parkinson Sts., brick on slag, to Donora Constr. Co., Donora, $25,000. Engrs. est. $27,000.

Pa., Phila.—F. H. Caven, dir. pub. wks., paving (1) 51st St. from Viola St. to Leidy Ave., Tower St. from Roxborough Ave. to Jamestown St., Marshall St. from Brown to Polar Sts., (2) Chester Ave. from 65th to 66th Sts., Percy St. from Emily to Snyder Sts. and Madison St. from Cedar to Aramingo Sts., to Barber Asphalt Paving Co., Land Title Bldg., (1) $25,890, (2) $25,111; Hutchinson St. from Ruscomb St. to Lindley Ave., Indiana Ave. from Broad to 15th Sts., Franklin St. from Wyoming to Louden Sts., to Eastern Paving Co., Colonial Trust Bldg., $26,168; (1) Snyder Ave. from 23rd to 24th Sts. and Brewster Ave. from 83rd to 86th Sts., (2) Delaware Ave. from Columbia Ave. to Dyott St., to Union Paving Co., 34th and Spruce Sts., (1) $27,483, (2) $492,435. Noted July 20.

Pa., Pittsburgh—Repaving Boulevard of the Allies, Contr. 22, to Booth & Flinn, Ltd., 1942 Forbes St., $22,164; repaving (1) Boulevard of the Allies, Contrs. 12 and 20, and Benter St., (2) grading, curbing and paving Bascom St., (3) Bethel Pl., Lillian Way and Nader Way, to T. Cronin Co., South 18th St., (1) $25,480, (2) $32,318, (3) $27,950.

Pa., Sharon—Paving 6,320 sq. yd. Pearl St., Case, Euclid and South Water Aves., resurfacing South Dock St. and South Main Ave., Atlantic asphalt on concrete, to Union Paving Co., 34th and Spruce Sts., Phila., $45,601; repaving 2,330 sq.yd. East State St., asphalt to Minteer & Anderson, New Wilmington, O., $4,645; repaving North Water Ave., Bessemer brick, to W. McIntyre & Sons, Sharon, $10,742. Noted July 6.

Pa., Windber—Concrete curbing and paving 4,675 ft., various streets, 22 and 28 ft., to Buterbaugh & Larson, Windber. Engrs. est. $30,000. Noted June 22.

W. Va., Fairmont—Marion Co. paving brick on 5 in. concrete Water St. and Morgantown Ave., projects 1 and 2, to F. F. Hallam, Fairmont, $82,948; paving with brick in city limits and penetration macadam outside city, Hopewell Rd., Projects 7 and 10, to Monongahela Constr. Co., Fairmont, $37,877, Grafton Rd., Projects 6 and 9, to W. H. Armstrong, Fairmont $58,439; concrete paving Bentons Ferry Rd., Project 8, to N. M. Leigh, Fairmont, $55,342. Noted June 22.

North Carolina—State Hy. Dept., Raleigh, clearing, grading, bridging and topsoiling 9.76 mi. State Project 661, Richmond Co., to McDonald & Brooks, Hamlet, $36,985, 6.92 mi. State Project 402, Chatham Co., to J. F. Mulligan Constr. Co., North Wilkesboro, $30,855; grading, bridging and plain concrete paving 7.83 mi. State Project 743, Vance Co., to R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, $241,426, 1.56 mi. State Project 420 A and B, Franklin Co., to Chandler & Ragland, Virgilina, Va., $50,383, 10.62 mi. State Project 742, Forsyth Co., to Harris Constr. Co., Newton, $375,516, 11.24 mi. State Project 463, Person Co., to Porter & Boyd, Realty Bldg., Charlotte, $297,428; clearing and grading 12.88 mi. State Project 145, Hertford Co., to N. L. Teer, Durham, $42,035, 13.68 mi. State Project 200, Carteret Co., to Eagle Eng. Co., New Bern, $43,385; grading and plain concrete paving 19.08 mi. State Projects 386 and 387, Robeson Co., to J. O. Heyworth, Harvester Bldg., Chicago, $552,024; grading, bridging and rein.-con. paving .14 mi. State Project 264, Craven and Pamlico Counties, to Rhyme & Kitchen, Blacksburg, S. C., $25,606; grading and plain or rein.-con. paving 5.84 mi. State Project 800, Avery Co., to O'Brien Constr. Co., Balsam, $147,869; grading, bridging and asphaltic concrete paving on cement concrete 5.77 mi. State Project 665, Richmond Co., to A. J. Wardrep, Holston Bank Bldg., Knoxville, Tenn., $176,819; grading and topsoiling 12.82 mi. State Project 419, Franklin Co., to Jamison Bros., High Point, $42,004, rein.-con. bridges and culverts on above to Chandler & Ragland, Virgilina, Va., $15,288; clearing and topsoiling 20.48 mi. State Project 167, Northampton Co., to Virginia Contg. Co., Petersburg, Va., $67,443, rein.-con. bridges and culverts on above to Bacon & Moore, Littleton, $16,597. Noted July 13.

North Carolina—State Hy. Dept., Raleigh, will grade, topsoil, pave with water-bound macadam, construct rein.-con. bridges and culverts on 11.5 mi. road from Caldwell Co. line to Boone, State Project 770, Watauga Co., $160,000; 14 mi. road from 'Boone to Tennessee State Line, State Project 771, Watauga Co., $200,000. Work will be done by day labor. C. M. Upham, state highway engr.

N. C., Southport—Brunswick Co. paving with bituminous macadam penetration type on sand clay, Supply Shallotte Rd., to W. B. Bennett, Whiteville, $77,751.

S. C., Union—Asphalt paving various streets, to Southern Paving Constr. Co., Vol. Life Bldg., Chattanooga, Tenn., $150,000.

Fla., Clearwater—Comr. Pinellas Co. paving with vitr. brick with asphalt filler on 5 in. combined rock base 36.4 mi. Rd. 1 from St. Petersburg to Pasco Co., 11.45 mi. Rd. 2 from Clearwater to Hillsboro Co., 5.93 mi. Rd. 3 from Southerland to Rd. 2, to J. G. Yeates Co., Port Tampa, curbing at $0.47 per lin.ft., base $0.85 per sq.yd., surfacing $2.52 per sq.yd.; surfacing with 2½ in. asphalt on 6 in. rock, 1.05 mi. Rd. 4, 6.35 mi. Rd. 5 from Tarpon Springs to Rd. 3, 7.2 mi Rd. 6 from Dunedin to Ozona and Rd. 1, 4.7 mi. Rd. 7 from Sunset Point to Coachman, 2 mi. Rd. 8 from Clearwater to Haines Rd., 2.32 mi. Rd. 9 from Bellaire to T 29S, R 15 E, 11.4 mi. Rd. 11 from Clearwater to Largo via Indian Rocks, 3.3 mi. Rd. 13 from St. Petersburg to Pt. Pinellas, 2.25 mi. Rd. 14 from Maximo Rd. to Pt. Pinellas Rd., 2.8 mi. Rd. 15 extension of Lake View Ave. (St. Petersburg). 4.25 mi. Rd. 16 from Gulfport to Tampa Bay, to W. P. McDonald Constr. Co., Orlando, and 342 Madison Ave., New York, base $0.90 per sq.yd., surfacing $1.60 per sq.yd. Noted July 6.

Fla., Eustis—For 85,000 sq.yd. 2 in. asphalt on Ocola lime rock, also curbing and guttering various streets to Hutton Eng. & Constr. Co., Kelly Bldg., Savannah, Ga., $225,000. Noted June 15.

Fla., Titusville—Comrs. Brevard Co., improving 7.9 mi. Indian River-Orlando Highway, Spec. Rd. and Bridge Dist. 7, to G. W. Mitchell, Titusville, 5,000 ton coquina rock at $5 per ton, 41,000 sq.yd. bituminous penetration wearing surface $0.23. Noted May 25.

Fla., West Palm Beach—Palm Beach Co., to Maule Paving Co., Jacksonville, resurfacing 3½ mi. Stuart Annie Rd., $10,031, repaving 4.3 mi. St. Lucie Blvd., $21,617, constructing road from Dixie Highway to Stuart Annie, $8,439; to R. Tomasello, West Palm Beach, clearing, grading and paving with ojus rock 9 mi. Jupiter Ocean Blvd., $48,250. Noted March 30.

Fla., Winter Haven—For 120,000 sq.yd. paving, to Stidham & Hughes, Lake Wales. Noted June 8.

Tenn., Knoxville—Paving Elenor, White, Walker Lynch, Patton and Quincy Sts., et al., 22,500 sq.yd. asphalt, to Murry Constr. Co., Holston Bank Bldg., $138,044.

Ky., Harlan—Harlan Co., to Dempster Constr. Co., North Bway., Knoxville, Tenn., grading 6 mi. road, 4 mi. Martin Fork and 3½ mi. Clover Fork Rds., $93,000, $35,000 and $30,000 respectively.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties: Clinton Co., Sect. "R" Cincinnati-Zanesville Rd., 7.545 mi., brick, to Brewer & Brewer Sons, Chillicothe, $310,953; Columbiana Co., Sect. "A-1" Lisbon-Canton Southern Rd., 3.922 mi., brick, to E. J. Kane, 461 West Indianola Ave., Youngstown, $156,843; Henry Co., Sect. "Napoleon" Wauseon-Napoleon Rd., 0.5295 mi., rein.-con., to Zeller Bros. & McDonald, Maumee, $13,059; Henry Co., Sect. "B" Ottawa-Napoleon Rd., 4.04 mi., to R. Stone Constr. Co., Lima, $70,535; Noble Co., Sect. "O" Cambridge-Caldwell Rd., 4.716 mi., brick, to J. P. Mumaw, Cambridge, $133,199; Pickaway Co., Sect. "New Holland" Cincinnati-Zanesville Rd., 0.923 mi., brick, to Reichelderfer Co., Circleville, $30,297; Pickaway Co., Sect. "F-2" Columbus-Washington C. H. Rd., 0.8 mi., brick, to Reichelderfer Co., Circleville, $32,990; Pickaway Co., Sect. "F-2" Columbus-Washington C. H. Rd., 0.19 mi., brick, to Reichelderfer Co., Circleville, $42,325; Portage Co., Sect. "D" Aurora-Warren Rd., 3.593 mi., brick, to Ready Bros., Warren, $107,572. Noted July 20.

O., Bexley (Columbus P. O.)—Grading, curbing and paving 1,700 ft. Peck Ave., 24 ft., asphalt, to Cleveland Trinidad Paving Co., The Arcade, Cleveland, $24,766.

O., Cleveland—Cuyahoga Co. paving Kinsman Rd., engrs. est. $227,738 and Lee Rd. 6, engrs. est. $69,150, to Cleveland Trinidad Paving Co., The Arcade, $221,277 and $68,334 respectively. Noted July 20.

O., Cleveland—Cuyhoga Co., paving Pleasant Valley Rd. 1, to M. A. Ryan, c/o Pavers Exch., Society for Savings Bldg., $73,616, engrs. est. $87,527. Noted July 13.

O., Columbus—Grading and laying sidewalks on 5 streets, to C. Snyder, 76 West 8th Ave., $7,225; 14 streets, cement, to Standard Paving Co., 685 South Ohio Ave., $19,829. Noted July 6.

O., Columbus—W. H. Duffy, dir. Pub. Serv., grading, curbing, laying water mains and paving 2,060 ft. Adams Ave., 24 ft., Mexican asphalt, 410 ft. Mt. Pleasant Ave., 20 ft., brick, and 1,427 ft. Olentangy Blvd., 26 ft., asphalt, to B. F. Patterson, Columbus, $26,270, $6,294 and $25,401 respectively; 247 ft. alley north of 17th Ave., 15 ft., concrete, to R. J. Dienst, 68 South Harris Ave., $1,493; 785 ft. Markison Ave., 24 ft., asphalt, to Franklin Asphalt Paving Co., 209 South High St., $15,620; 1,805 ft. Mooberry St., 26 ft., asphalt, to Knight & Wells, Columbus, $23,265. Noted June 29.

O., Dayton—Montgomery Co. paving Janette St., Kentucky rock asphalt, to W. I. Anderson, R. F. D. 5, New Troy Pike, $18,600. Engrs. est. $25,000. Noted July 13.

O., Euclid—Paving Beachview Ave., to H. G. Herring, c/o Pavers Exch., Society for Savings Bldg., Cleveland, $23,403; Cambridge, Elsmer and Hawthorne Aves., to Cleveland Trinidad Paving Co., The Arcade, Cleveland, $22,925.

O., Fremont—Sandusky Co. paving about 1 mi. streets with brick, to Modern Constr. Co., Fremont, $115,617, engrs. est. $115,854.

O., Tiffin—Seneca Co. resurfacing highways, concrete and macadam, to L. W. Dehmer, Tiffin, $15,925, (engrs. est. $21,425); 2 mi. Schreiner Rd., 16 ft., macadam, to Wolfe & Bell, Scipio Bldg., $15,692.

Ind., Monticello—White Co., grading, draining and paving 22,125 ft. Renck. Rd., 16 ft., 37,334 sq.yd. vitr. brick on concrete, to Northern Constr. Co., Elkhart, $115,738. Engrs. est. $125,000.

Ind., New Albany—Floyd Co., grading, draining and surfacing 27,155 ft. Galina Rd., 18 ft. gravel on crushed stone, to Wolfe

Streets and Roads (Continued)

Bros., 217 East 10th St., New Albany, $70,000. Engrs. est. $72,000.

Mich., Dearborn—Wayne Co., 25,000 sq.yd. 8 in. concrete pavement on Park, Maple and Nona Sts., Monroe and Garrison Aves., to P. M. Lau Co., D. U. R. Bldg., Pontiac, $106,470. Noted June 15.

Wis., Juneau—Dodge Co. Road and Bridge Com. concrete paving 1.51 mi. Beaver Dam-South Beaver Dam Rd., 9 ft., to Schreiber & Waterworth, Randolph, $24,820; 4.54 mi. Juneau-Watertown Rd., to M. Martin, Berlin, $83,462. County to furnish cement. Noted July 20.

Ia., Ottuma—Paving 22 blocks various streets, brick paving to J. C. Blunk, Ottumwa, $3.65 per sq.yd.; concrete paving to Layton Constr. Co., Muscatine, $2.91, $3.10 and $3.20 per sq.yd. Engrs. est. $75,000. Noted May 18.

Kan., Enterprise—Paving 18 blocks, asphaltic concrete on 5 in. concrete, to Kaw Paving Co., 506 N. E. Bldg. Topeka. Noted July 13.

Minn., Faribault—Rice Co., Job 2205, State Rd. 26, grading to M. J. Nolan Constr. Co., 609 Kasota Bldg., Minneapolis, $18,099; concrete bridges and culverts to Wessel Bros., 721 Guardian Life Bldg., St. Paul, $7,56, corrugated metal culverts to Northfield Iron Co., Northfield, $1,896; Job 2206, State Rd. 7, grading to Gould & Huntington, Glencoe, $6,374, concrete culverts to W. Weires & Co., Faribault, $1,545, corrugated metal culverts to Northfield Iron Co., Northfield, $305; Job 2207, State Rd. 23, grading to Gould & Huntington, Glencoe. Noted June 22.

Mont., Helena—Paving 4,500 ft. Stuart St., Park and Benton Aves., bitulithic on crushed rock, 41 ft., to S. Birch & Sons Constr. Co., 314 Ford Bldg., Great Falls, $70,752. Noted June 29.

Missouri—State Hy Dept. at div. office Boonville, 5.57 mi. road from Boonville eastward, Federal Aid Project 24, Cooper Co., to E. C. Johnson, Carrollton, $75,570. Noted July 13.

Missouri—State Hy. Dept. at div. office Carrollton, 12.211 mi. road from Ray Co. line to Chariton Co. line, State Aid Project 20.87, Carroll Co., to A. T. Cook, Ottawa, Kan., $31,186. Noted July 6.

Missouri—State Hy. Dept. at div. office Cassville, 7.396 mi. road from Monett to Eureka Springs, Federal Aid Project 124, Barry Co., to Short & Bramer, Monett, $41,781. Noted July 6.

Missouri—State Hy. Dept. at Div. office Fredericktown, 16.391 mi. road from Farmington to Fredericktown and Greenville, Federal Aid Project 101B, Madison Co., to Hogan-Humphreys, Little Rock, Ark., $167,170. Noted July 6.

Missouri—State Hy. Dept. at div. office Greenfield, 7.72 mi. road from Springfield to Lamar, Federal Aid Project 159, Sect. B. Dade Co., to A. T. Bramer & Son, Monett, $27,427. Noted July 6.

Missouri—State Hy. Dept. at div. office Ironton, 11.26 mi. road from Ironton to Polosi, Federal Aid Project 107, Sect. A, Iron Co., to St. Louis Bridge & Supply Co., Frisco Bldg., St. Louis, $40,625. Noted July 13.

Missouri—State Hy. Dept. at div. office Marble Hill, 10,045 mi. road from Lutesville southwestward, Federal Aid Project 174, Sect. A, Bollinger Co., to W. A. Reynolds, Marble Hill, $69,467; 8.499 mi. road from Lutesville northeastward, Federal Aid Project 174, Sect. B, Bollinger Co., to M. E. Gillioz, Monett, $88,652. Noted July 6.

Missouri—State Hy. Dept. at div. office Stockton, 10.416 mi. road from Springfield to Eldorado Springs, Federal Aid Project 74A, Cedar Co., to Easley Bros., Aurora, $32,500. Noted July 6.

Missouri—State Hy. Dept. at div. office Unionville, 6.357 mi. road from Unionville eastward and westward, State Aid Project 20.167, Putnam Co., to Diemer-Williams Constr. Co., Brookfield, $18.964. Noted July 6.

Tex., Richmond—Ft. Bend Co. surfacing and topping 13.01 mi. State Highway 36, 16 ft., to Haden & Austin, Hill and Marsch Sts., Houston, $129,413. Noted May 11.

Tex., San Angelo—Tom Green Co. grading, gravel surfacing, etc., 15.43 mi. State Highway 4, 16. ft., 13.43 mi. grading and surfacing with macadam on gravel with bituminous topping, 2 mi. bituminous topping on section already graded, 1,375 cu. yd. earth, 2,104 cu.yd. loose and 4,207 cu. yd. solid rock excav., 163,965 sq.yd. bituminous macadam, 20,894 cu.yd. crushed rock, 12,958 cu.yd. gravel, 6,486 cu.yd. sledged stone base, 114,776 gal. asphalt, 5,246 cu.yd. cover material, to Harris & Powell, Tyler, $93,357. Engrs. est. $110,000.

Utah, Ogden—Paving road from Harrison Ave. to mouth of canyon, bitulithic on black base, to Taylor & Childs, Ogden, $28,635.

California—State Hy. Dept., Sacramento, grading 8 mi. highway between Johnstonville and Janesville, Lassen Co., to Warren Constr. Co., 2779 Poplar St., Oakland, $37,056.

California—State Hy. Dept., Sacramento, paving 10.8 mi. highway between Canada de las Llagas and Los Chirqueros Creek, Santa Barbara Co., to Southwest Paving Co., Washington Bldg., Los Angeles, 6,720 cu.yd. portland cement concrete (shoulders and repairs to existing base) at $6, 550 cu.yd. removal of broken concrete in existing base $1.50, 18,400 ton asphaltic concrete $3.40, total $103,705; grading 0.2 mi., paving 3.2 mi. with concrete and 5.6 mi. with asphaltic concrete wearing surface, with portland cement concrete shoulders, on road between east boundary and San Juan Creek, Orange Co., to G. H. Oswald, 366 East 58th St., Los Angeles, 6,200 cu.yd. excav., at $0.40, 9,600 cu.yd. portland cement concrete (pavement shoulders and repairs to old base) $8, 300 cu.yd. removal of broken concrete in existing base $1.50, 9,000 ton asphaltic concrete $5.20, etc., total $126,615. State furnishes material. Noted June 22.

Cal., Bakersfield—Asphaltic concrete paving, concrete guttering, cement curbs and walks on D, E, G, K, L, M and P Sts., to Kneen & Austin, Dudley Bldg., Santa Monica, $174,539.

Cal., Banning—Paving and curbing San Gorgonia Ave., to J. F. Knapp, 601 East Main St., Turlock, 75,623 sq.ft. 5 in. concrete pavement at $0.2025 per sq.ft., 26,070 lin.ft. cement curb $0.85.

Cal., Hayward—Improving portions of Watkins, D and 1st Sts., to J. A. Costello, Jr., 1083 Shotwell St., San Francisco, $72,149. Noted June 22.

Cal., Napa—Napa Co. grading and paving 3.16 mi. Browns Valley Rd., 5,000 cu. yd. excav., 5,525 cu.yd. concrete pavement, to Western Constr. Co., 24 California St., San Francisco, $48,544.

Cal., Salinas—Supervs. Monterey Co., will grade 3 mi. Robinson Canyon Rd., 5,000 cu. yd. excav., by day labor. Former bids rejected . H. Cozzens, Salinas, engr. Noted June 22.

Cal., South San Francisco (San Francisco P. O.)—Improving various streets in Tecks Tract, 2,000 cu.yd. grading, 85,465 sq.ft. 1½ in. topeka on 4 in. concrete, 154 lin.ft. concrete curb and gutter, 5,375 ft. 14 in. gutter, 770 sq.ft. concrete walks, 4,000 lin.ft. 4 in. sewer pipe laterals, to Eaton & Smith, 407 11th St., San Francisco, $28,065.

Cal., Whittier—Improving Penn St., to Fairchild-Gilmore-Wilton Co., Los Angeles Ry. Bldg., Los Angeles, 199,889 sq.ft. 6 in. concrete pavement at $0.26 per sq.ft., 4,542 lin.ft. cement curb $0.60, 15,500 sq.ft. cement walks $0.22.

Ontario—Dept. Provincial Highways, Parliament Buildings, Toronto, 18 ft. concrete highway leading into St. Catherines, to Frid Constr. Co., Clyde Blk., Hamilton. Engrs. est. $75,000.

Ont., Ft. Frances—Concrete paving Main St., 26 and 30 ft., to J. East Co., Ft. Frances, $33,950. Engrs. est. $34,000. Noted June 22.

Industrial Works

PROPOSED WORK

Mass., Holyoke—Farr Alpaca Co., Jackson St., having plans prepared by S. M. Greene & Co., engrs. and archts., 293 Bridge St., Springfield, 6 story, 100 x 500 ft. yarn mill, rein.-con. and brcik. $1,000,000. Noted July 6.

N. Y., Buffalo—J. Schaaf, 974 Northampton St., plans specialty factory and shop. $75,000. Private plans.

N. Y., Buffalo—Washington-Crosby Co., Minneapolis, Minn., plans 4 story warehouse, fireproof construction, at Blackwall Canal and Michigan Ave., here. $200,000, Architect not announced.

N. Y., Elmira—Elmira Water, Light & R. R. Co., plans large artificial gas manufacturing plant to include gas holder, 500,000 ft. capacity, Madison Ave. $350,000. F. H. Hill, gel. mgr.

N. Y., Owego—Gotham Shoe Co. plans factory addition, Church St. $50,000. Architect not announced.

N. J., Trenton—Hulslander Engraving Co., 8 North Stockton St., plans 4 story, 47 x 143 ft. plant.

N. J., Trenton—F. A. Straus & Co., Johnston Ave., having plans prepared by Karno-Smith Co., archts., Broad St. Bank Bldg., 2 story, 80 x 187 ft. and 3 story, 100 x 100 ft., rein.-con. and brick additions to yarn factory. $150,000.

Pa., Bethlehem — Confederated Home Abattoirs Co., Portland, Me., plans abattoir, here. $1,000,000. Architect not selected.

Pa., Pittsburgh—Atlantic Refining Co., Chamber of Commerce Bldg., purchased 7½ acre plot adjoining present plant along Allegheny River, and plans to extend same and erect numerous storage houses. Cost exceeds $50,000. Engineer not announced.

Pa., Stroudsburg—Nitroloid Corp. of America, plans to rebuild celluloid factory recently destroyed by fire. $250,000. Architect not announced.

W. Va., Huntington—Fesenmier Packing Co., 14th St. and Madison Ave., having preliminary plans prepared converting building into ice and cold storage plant. Cost including machinery and equipment, $125,000-$150,000. M. L. Fesenmier, pres. Architect and engineer not announced.

N. C., Raleigh—Sanitary Laundry Co., South Blount St., plans 2 story, 80 x 177 ft., concrete and steel laundry, South McDowell St. $50,000. C. H. Howell, mgr.

Fla., Tallahassee—West Florida Power Co. plans hydro-electric plant, Ocklockonee River. $1,000,000. Engineer not announced.

Tenn., Knoxville—J. G. Sterchi having plans prepared by R. F. Graf & Sons, archts. and engrs., Arnstein Bldg., 3 story, 100 x 100 ft. factory, Jackson Ave. $60,000.

O., Cleveland—Ingraham Waste & Supply Co., 1539 Columbus Rd., having plans prepared by Poe Eng. Co., archts., Peoples Bank Bldg., 1 story, 50 x 125 ft., brick and steel warehouse and factory, 1450 Hamilton Ave. $50,000. Noted June 8.

O., Cleveland—Natl. Lead Co., c/o C. E. Lindsley, Comptroller, 632 Champlain Ave., plans 2 story, brick, steel and concrete warehouse, East 38th St. and St. Clair Ave. $150,000. Architect not selected.

O., Middletown—Amer. Rolling Mill Co., East Side, plans to rebuild portion of its mill, destroyed by fire. $100,000. Architect not announced.

O., Sandusky—Chamber of Commerce, Sandusky, and Ajax Rubber Co. of New York, plan rubber factory, here. $1,000,000. Private plans.

O., Sebring — Saxon China Co., South Side, plans large additions to pottery factory, incl. 3 glass, 3 bisque and 4 decorating kilns. $100,000. Private plans.

O., South Akron (Akron P. O.)—Washington Rubber Co. plans to rebuild large portion of factory, destroyed by fire. $50,000. T. Tyrell, pres. Architect not announced.

O., Warren—K-W. Brick Co. plans factory, Clinton St. To exceed $50,000. R. Swift, mgr. Architect not announced.

Ind., Evansville—Evansville Pure Milk Co., 501 U 8th St., plans 1 story, 60 x 72 ft. brick power plant, 8th and Walnut Sts. $50,000. Private plans.

Ind., Indianapolis—See "Buildings."

Ind., Indianapolis—Cleveland, Cincinnati, Chicago & St. Louis R.R., La Salle St. Sta., Chicago, plans 2 story, 75 x 1,000 ft. and 30 x 1,000 ft. freight terminal, brick and steel, here. $2,500,000. Private plans.

Ind., Plymouth—Schlasser Bros. plan 3 story, 45 x 90 ft. storage plant, brick. $150,000. M. R. Carpenter, 72 West Washington Street, Chicago, archt.

Mich., River Rouge (Detroit P. O.)—Ford Motor Co., Highland Park, having plans prepared by A. Kahn, archt., 1000 Marquette Bldg., Detroit, 5 story, 60 x 300 ft., rein.-con., brick and steel factory addition, plain and wood pile foundation.

Mo., LaValle—LaValle Light & Power Co plans hydro-electric plant and complete development of water power for lighting purposes. To exceed $100,000.

Mo., Springfield—Springfield Gas & Electric Co., Landers Bldg., plans new power plant. $800,000. Engineer not announced.

Tex., Waco—Missouri, Kansas and Texas R. R., 404 Times-Herald Bldg., plans to expend $800,000 for locomotive repair shop. A. S. Johnson, supt. Architect not announced.

Okla., Muskogee—Oklahoma General Power Co. plans power and light plant, initial capacity 10,000 hp. Engineer not announced.

Cal., Fresno—San Joaquin Light & Power Co., 1801 Tulare St., had plans prepared 48 x 110 ft. addition to sub-station, Orange Ave., increasing capacity from 10,000 to 17,000 hp. $102,000.

Cal., Los Angeles—Pub. Serv. Comn., 210 South Bway., having plans prepared 7 substations and extending power and light lines. $6,000,000. City will take bids for equipment. Some work will be done by day labor, balance by contract. E. F. Scattergood, 210 South Bway., engr.

Industrial Works (Continued)

Cal., San Diego—Klauber-Wangenheim Co., 402 Market St., having plans prepared 6 story, warehouse, 7th, I and J Sts. $300,000.

Cal., Stockton—X-clusive Laundry, 427 East Lafayette St., plans 1 story, 92 x 150 ft., laundry, Lafayette and California Sts. $50,000. Architect not selected.

Ont., London—J. W. McLaughlin, 629 Queens Ave., having plans prepared garage and repair shop. $42,000.

BIDS DESIRED

Conn., Hartford—Greenwood & Noerr, archts. and engrs., 847 Main St., taking bids 4 story, 52 x 181 ft. rein.-con. and brick factory addition, Capitol Ave., for Hart Hegeman Mfg. Co., Capitol Ave. $125,000.

O., Cleveland — M. Makoff, 551 Hippodrome Annex Bldg., taking bids and opens same about Aug. 1, 2 story, 32 x 64 ft., plant and commercial building, brick and steel, 500 Eagle Ave. $40,000. A. F. Janowitz, Permanent Bldg., archt.

Wis., Waukesha—Spring City Auto Co., 220 Main St., W., taking bids 1 and 2 story, 50 x 132 ft., concrete garage, plain foundation. $40,000. M. H. Blake, Andrews Blk., archt.

Okla., Okeene—See "Waterworks."

Cal., San Francisco—M. V. Politeo, archt., 1st Natl. Bank Bldg., receiving bids 1 story, concrete and steel factory, Howard St. near 5th St., for Eames Co., 55 1st St.

Ont., Leaside—Durant Motors of Canada, 909 Royal Bank Bldg., Toronto, taking bids auto factory, incl. 1 story, 40 x 100 ft. brick, 3 story, 80 x 401 ft. rein.-con., 3 story 100 x 401 ft. rein.-con., 1 story, 20 x 200 ft., steel and galvanized iron, and 1 story, 130 x 500 ft. metal lath stucco and brick buildings, here. $500,000. Private plans with E. A. Walberg, c/o owner. Noted March 30.

BIDS RECEIVED

N. Y., Waterford—C. L. Cadle, supt. Pub. Wks., Albany, opened bids July 14, shop buildings here, Baldwinsville and Pittsford, from W. F. Martens, 244 Cutler Bldg., Rochester, $99,470; McCann Building Co., Dove St. and Sheridan Ave., Albany, $104,838; W. S. Rae, Oliver Bldg., Pittsburgh, Pa., $110,250.

Cal., Sacramento—Crane Co., Front and M Sts., 4 story, rein.-con. warehouse, Front and M Sts., from McGillivray Constr. Co., Capitol Natl. Bank Bldg., $136,000; W. C. Keating, Capitol Natl. Bank Bldg., $137,500; W. Murcell, Oschsner Bldg., $141,964. Noted July 20.

CONTRACTS AWARDED

Pa., Dallas—See "Buildings".

Pa., Hatboro—Roberts & Manders Stove Co., 11th and Washington St., Phila., 2 story, 16 x 60 ft. and 125 x 185 ft. factory, rein.-con., brick and steel, plain foundation, to Austin Co., Bulletin Bldg., Phila. Archts. est. $50,000.

Pa., Phila.—Apex Hosiery Co., 6 story, 90 x 155 ft. factory, rein.-con., brick and steel, plain foundation, Lawrence and Luzerne St., to Belling & Bush, Drexel Bldg. Archts. est. $150,000.

Pa., Phila.—National Biscuit Co., 10th Ave. and 15th St., New York City, 1 story, 130 x 184 ft. garage, rein.-con., brick and steel, 12th and Glenwood St., here, to Turner Constr. Co., 1716 Samson St. Archts. est. $50,000.

Md., Cumberland—N. & G. Taylor Co., Inc., 300 Chestnut St., Phila., 1 story, 50 x 90 ft. foundry, also extension to tin house, here, to Belmont Iron Wks., 22nd St. and Washington Ave., Phila.

W. Va., Parkersburg—General Porcelain Co., South Side, 1 story, 65 x 225 ft., brick and steel plant, to Plate & Vogel, Parkersburg.

Tenn., Knoxville—C. B. Johnson, West Main St., 2 story, 75 x 175 ft., publishing house, rein.-con. and steel, concrete pile foundation, Church St., to Worsham Bros., Empire Bldg., $60,000.

O., Akron—M. O'Neil, c/o General Tire & Rubber Co., 2 story, 95 x 163 ft., brick, steel and concrete garage, West Market St., to Akron Storage & Contg. Co., Cole Ave. and Sherman St. Archts. est. $100,000. Cadillac Co., Akron, lessee. Noted July 6.

O., Akron — Hardware Building Co., 2 story, 125 x 470 ft., rein.-con. and flat slab warehouse, South High St., to Carmichael Constr. Co., 524 Hamilton Bldg., $250,000.

O., Cleveland—T Knight, 250 The Arcade, 1 story, 75 x 100 ft., brick and steel factory, Fairfield Ave., to Lehder Constr. Co., Rose Bldg. Archts. est. $40,000.

O., Dayton—Dayton Power & Light Co., Jefferson St., 5 story, 85 x 180 ft. electric power plant, rein.-con., brick and steel, Millers Ford, to T. E. Murray, Inc., 55 Duane St., New York City, $300,000.

Ind., Indianapolis—Jackson Power Bldg., c/o Vonnegut, Bohn & Mueller, archts., Indiana Trust Bldg., 7 story, 120 x 195 ft. brick and steel warehouse, South Meridian St., to R. W. Bauman Constr. Co., 3345 Central Ave., $212,000.

Ill., Chicago—Pelton & Pelton c/o Ronneberg, Pierce & Hauber, archts., 10 South La Salle St., 2 story, 100 x 175 ft. factory, rein.-con., brick and steel, 3317-19 Elston Ave., to Broline, Nolan & Co., 5 North La Salle St. archts est. $65,000.

Wis., Kenosha—E. Klinkert Brewing Co., 826 Washington Ave., Racine, 2 story, 30 x 90 ft. mill construction warehouse, plain foundation, West Main St., to K. P. Knudsen, 473 Pomeroy St. Engrs. est. $40,000.

Minn., South St. Paul—Katz & Horne Packing Co., South St. Paul, and 352 East 6th St., St. Paul, 3 story, 50 x 130 ft. rein.-con., brick and tile packing plant, general contract to G. Lindgren, 724 Como Blvd., St. Paul, $130,000. Noted May 25.

Cal., Napa—Growers Packing & Warehouse Co., Jackson St., subsidiary of California Prune & Apricot Growers Assn., Market and San Antonio Sts., 141 x 144 ft., heavy timber addition to packing plant, to West Coast Constr. Co., Clunie Bldg., San Francisco, $65,000. Noted June 29.

Cal., Oakland—General Electric Co., Rialto Bldg., San Francisco, 132 x 236 ft., brick and steel factory, 14th and 54th Sts., here, to Foundation Co., 58 Sutter St., San Francisco, $100,000.

Cal., Oakland—Star Motor Co. of California, c/o Durant Motor Co., East 14th St., 100 x 200 ft., brick warehouse, 80 x 150 ft., brick and concrete administration building, to P. J. Walker Co., Monadnock Bldg., San Francisco. Plant complete will cost $1,000,000.

Cal., San Jose—Central Improvement Co., 2 story, autogarage depot, concrete, Market St., to D. J. Byron, 1249 Alameda St., $41,715. Peninsular Rapid Transit Co., 119 South Market St., lessee.

Buildings

PROPOSED WORK

Conn., Hartford — Apartment — Fantone Bros., 72 Capitol Ave., having plans prepared by R. A. D'Avino, archt., 721 Main St., 6 story, brick and concrete, Capitol Ave. $150,000.

Conn., New Britain—School—St. Joseph's Roman Catholic Church plans 2 story, brick and steel, Edson St. $150,000. P. Daly, Edson St., pastor. Architect not selected.

Conn., New London—Schools—Bd. Educ. plans two 2 story, Federal St. and Riverview Ave. $150,000. Architect not selected.

Conn., Winsted—School—Boro plans 2 story grade school. $200,000. J. Lund, supt. schools. Architect not announced.

N. Y., Lackawanna—Hotel—Hoepfinger Bros. plan 7 story, Ridge Rd. $450,000. Architect not announced.

N. Y., Newark—Theatre and Office—Associated Theatres, Inc., having plans prepared by E. A. P. Krabbenschmidt, archt., Newark, 3 story, 75 x 132 ft., litholite stone, stucco, pressed brick and steel, West Miller and South Main Sts. $150,000.

Pa., Corapolis—Church and Sunday School—Corapolis Methodist Episcopal Church having plans prepared by T. B. and L. Wolfe, archts., Century Bldg., Pittsburgh, 150 x 220 ft. stone church and Sunday school, State Ave. $150,000. A. Lindsay, pastor.

Pa., Williamsport—Club House—Fraternal Order of Eagles, 470 Pine St. plans 3 story club house. $150,000. Architect not announced.

Pa., York—Hotel—C. Welsh had plans prepared by Toohey & McClymont, archts., 342 Madison Ave., New York City, remodeling Hotel Penn, 4 story, 96 x 130 ft., granite, brick and terra cotta, and adding 2 story, George St. $300,000.

W. Va., Charleston—Office—Kanawha Investment Co. plans 8 story, 161 x 168 ft., concrete and steel, Summers and State Sts. Architect not selected.

N. C., Asheville—Apartment Hotel—J. E. Swain (representing owners) plans 6 story, Haywood St. and Cumberland Ave. $250,000. Architect not announced.

N. C., Chapel Hill—Memorial—University of North Carolina having plans prepared by T. C. Atwood, engr., Chapel Hill, for first unit of Graham Memorial, 2 story, on old inn site. $150,000.

N. C., Kinston—Institution—Caswell Training School plans administration building, $400,000, and ultimately other buildings to cost $890,000. C. B. McNairy, supt.

N. C., Raleigh—School—City having plans prepared by F. Simpson, archt., 110 East Lane St., for Thompson school, 2 story, 120 x 162 ft., brick and stone, Hargett St. $153,000. T. B. Eldridge, mayor.

Ala., Montgomery—Schools—Voted $1,000,000 bonds for schools. Bids soon building number of schools including high school. J. M. Garrett, member of Bd. Educ.

Tenn., Harriman—School—Woman's Bd. of Home Missions of U. S. A., 156 5th Ave., New York City, having plans prepared by R. F. Graf & Sons, archts. and engrs., Arnstein Bldg., Knoxville, 3 story, 30 x 70 ft., home mission school, here. $150,000.

Tenn., Knoxville—Municipal—City having plans prepared by A. B. Bauman, archt., 813 Market St., 6 story, 40 x 185 ft., Market Sq. $150,000. A. R. Frierson, Knoxville, engr.

Tenn., Knoxville—Sanitarium, etc.—City having plans prepared by A. B. Bauman, archt. and engr., 813 Market St., 3 story, 40 x 85 ft., sanitarium and cottage, Beverly Pl. $150,000.

Tenn., Nashville—Office—Marshall & Bruce Printing Co., 162 4th Ave., N., having plans prepared by Hart & Nevins, archts., Watkins Bldg., office and printing plant, 9th and Berryhill Sts., $150,000. Freeland, Roberts & Acker, Independent Life Bldg., engrs.

O., Akron—Office and Mercantile—United Cigar Stores Co., 44 West 18th St., New York City, plans 8 story, Main and Market Sts., here.

O., Cleveland—Apartment—S. Selden and I. Passov, 799 East 99th St., having plans prepared by M. Altschuld, archt., 5116 Woodland Ave., 3 story, 46 x 110 ft., brick and timber, Superior Rd. $150,000.

O., Struthers—High School—Bd. Educ. will sell $160,000 bonds Aug. 7, enlarging Euclid Ave. High School, brick. M. B Stewart, clk. Architect not announced.

Ind., Indianapolis—Sales, etc.—Olin Sales Co., 515 North Meridian St., plans 3 story, 59 x 195 ft. sales and service station, rein.-con. and terra cotta, 720-722 North Meridian St. $150,000. Architect not selected.

Ind., Muncie—Temple—Masonic Temple Assn., West Main St., having plans prepared by Kibele & Gerrard, archts., Johnson Bldg., 6 story, 116 x 198 brick and steel. $700,000.

Mich., Detroit—Apartment—R. A. Bailey, archt., 92 Peterboro St., preparing plans 4 story, 75 x 120 ft., brick, steel and stone, plain foundation, Linwood Ave. $200,000. Owner's name withheld.

Mich., Detroit—Church—Jefferson Ave. Methodist Church, 1123 Marlboro Ave., having plans prepared by W. S. Holmes, archt., Tussing Bldg., Lansing, 2 story, brick, steel, stone and concrete, plain foundation, Jefferson and Marlboro Aves. $150,000.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., having plans prepared by Malcolmson, Higginbotham & Palmer, archts., 405 Moffat Bldg., 2 story, 14 room, rein.-con., brick and steel, plain foundation, Dickerson Ave. $150,000.

Mich., Iron Mountain—Academy—Franciscan Sisters, Alverno, (R. D. Manitowoc) Wis., having preliminary sketches prepared by E. Brielmaier & Sons, archts., 432 Bway., Milwaukee, Wis., 3 story, brick and concrete, plain foundation, here. $250,000.

Mich., Mt. Clemens—High School—Bd. Educ. had plans prepared by J. C. Llewellyn Co., archts., 38 South Dearborn St., Chicago, 2 story, 140 x 260 ft., brick, steel, stone and rein.-con., plain foundation, Cass Ave. $650,000.

Ill., Chicago—Apartment, Store and Office—Ronneberg, Pierce & Hauber, archts., 10 South La Salle St., soon receive bids 2 story, 100 x 125 ft., rein.-con., brick and steel, Fullerton and North Cicero Aves. $150,000. Owner's name withheld.

Wis., Milwaukee—Apartment—Glengile Realty Co., c/o Voelz & Siebert, archts., 373 Bway., preparing plans 2 story, 112 x 118 ft., brick and tile, plain foundation, Stowell Ave. $150,000.

Wis., North Milwaukee—High School—Joint School Dist. 17, 398 34th St., plans 2 story, brick, concrete and tile, plain foundation. $200,000-$300,000. Architect not selected.

N. D., Minot—Hospital—Trinity Hospital Assn. plans 5 story, 38 x 120 ft., rein.-con., brick, tile and stone. $150,000 A. O. Fonkalsorud, mgr. Architect not selected.

Cal., Fullerton—City Hall—City Trustees having preliminary plans prepared by W. H. Austin, archt., 222 First Natl. Bank Bldg., Long Beach, city hall, brick, Spadra Rd. $225,000.

Cal., Fullerton—Office—M. E. Durfee, archt., Casson Bldg., Anaheim, takes bids

Buildings (Continued)

about Aug. 1, 5 story, 70 x 130 ft., steel. Wilshire Ave., here, for C. C. Chapman, Chapman Bldg., Los Angeles. $150,000.

Cal., Los Angeles—Apartment—A. Bard and O. I. Low, having preliminary plans prepared by Russell & Alpaugh, archts., Story Bldg., 4 story, 90 x 145 ft., brick and concrete, 7th and Catalina Sts. $250,000.

Cal., Pasadena—Church—All Saints Episcopal Church had preliminary plans prepared by Johnson, Kaufman & Coate, archts., 100 East Colorado St., concrete and steel, concrete foundation, Euclid Ave. $225,000.

Cal., San Diego — G. W. Marston and others, 3525 7th St., conducting campaign to raise $150,000 to be applied toward construction of Army and Navy Y. M. C. A. building here. Total cost $750,000, ($600,000 of which is to be provided by national council of Y. M. C. A.) Project includes dormitories, clubhouse, athletic field, etc.

Cal., Santa Barbara—High School—Bd. Trustees, Anapamu and De la Vina Sts., having preliminary plans prepared by Weeks, Sauter & Lockard, archts., San Marco Bldg., concrete and brick, Carrillo St. $450,000. Noted April 13.

Cal., Santa Monica—Lodge—Santa Monica Lodge 906, B. P. O. E., having plans prepared by Russell & Alpaugh, archts., Story Bldg., Los Angeles, 4 story, brick. $250,000.

BIDS DESIRED

N. Y., Astoria (Long Island City P. O.) —School—Aug. 2, by C. B. J. Snyder, supt. schools, Concord St. Brooklyn, for new P. S. 170, on 12th Ave., here.

N. Y., Pelham Manor—Hall—Aug. 7, by Bd. Village Trustees, extension to village hall. E. D. Litchfield & Rodgers, 477 5th Ave., New York, archts.; adv. this issue.

Pa., Erie—Orphanage—Aug. 10 by J. M. Gannon, bishop, 205 West 9th St., orphanage on 6th St., for St. Joseph's Home for Children. $400,000. J. P. Brenot, Opera House Bldg., Oil City, archt. Noted March 16.

Pa., Pittsburgh—School—Aug. 10 by Bd. Educ., Fulton Bldg., 2 story, brick and steel addition to school on Hazelwood and Gladstone Sts. $200,000. O. M. Topp, Jenkins Arcade, archt. Noted May 4.

Pa., State College—Dormitory—Day & Klauder, archts., Franklin Bank Bldg., Phila., receiving bids 4 story, 42 x 106 ft., rein.-con., brick, steel and cut limestone, for Pennsylvania State College, here. $200,000.

O., Akron—Court House—Aug. 12, by S. Porter, clk. Summit Co., Court House, 3 story, 72 x 177 ft. stone or terra cotta annex, plain foundation, South Bway. $350,000. Harpster & Bliss(234 Central Savings & Trust Bldg., archts. Noted July 20.

O., Cleveland—Bank and Office—July 28, by Cleveland Trust Co., East 9th St. and Euclid Ave., 2 story, 60 x 80 ft., brick, steel and concrete, East 123rd St. and Superior Ave. $150,000. Osborn Eng. Co., 2848 Prospect Ave., archts.

O., Cleveland—Commercial, Theatre and Apartment—F. W. Bail, archt., Hanna Bldg., taking bids and opens same about July 29, 1, 3 and 4 story, brick, steel and concrete, East 105th St. and St. Clair Ave., for Clair-Doan Co., c/o J. Laronge, 214 Williamson Bldg. $300,000.

O., Cleveland—Temple—Aug. 14, by C. R. Greco, archt., Guardian Bldg., 3 story, brick, concrete and steel, East 105th St. and Ansel Rd., for Tifereth Israel Congregation, c/o H. Silver, rabbi, East 55th St. and Scovill Ave. $350,000. Noted June 29.

O., Louisville—High School—Aug. 12, by Thayer & Johnson, archts., New Castle, Pa., 2 story, brick and steel, for School Dist., here. $150,000. Noted Oct. 27.

O., Rocky River—High School—July 31, by Bd. Educ., 2 story, 14 room, brick, steel and concrete addition. $225,000. W. H. Nicklas, 1900 Euclid Ave., Cleveland, archt.

Mich., Detroit—Office—L. Kamper, archt., Kamper Bldg., 3729 Cass Ave., taking bids and opens same about Aug. 5, 21 story, 60 x 100 ft., rein.-con., brick, steel, terra cotta and stone, Washington Blvd., for J. B. Book, Book Bldg.

Mich., Detroit—School—Aug. 9, by Bd. Educ., 1354 Bway. Ave., 3 story, 168 x 334 ft., rein.-con., brick and steel, plain foundation, Selden and Hamilton Sts. Malcolmson, Higginbotham & Palmer, 405 Moffat Bldg., archts. Noted June 22.

Mich., Saginaw—School—Aug. 8, by Secretary Bd. Educ., Manual Training Bldg., 2 story, 22 room, rein.-con., brick, steel and stone, plain foundation, also 1st unit of detached power house, Webber St. $250,000. J. F. Beckbissinger, 114 South Jefferson Ave., archt.

Ill., Chicago — Apartment — Rissman & Hirschfield, archts., 64 West Randolph St., receiving bids 3 story, 100 x 120 ft., rein.-con., brick and steel, Sacramento Blvd. and Augusta Ave., for H. Levine, 2708 West Division St. $160,000.

Ill., Chicago—Store—J. A. Armstrong, archt., 127 North Dearborn St., receiving bids 3 story, 100 x 120 ft., rein.-con., brick and steel, 862-72 East 63rd St. for L. & R. Steel Co., 323 Washington St., Buffalo, N. Y. $175,000.

Ill., Chicago—Store and Office—J. H. Bickley, 10 South La Salle St., receiving bids 3 story, 45 x 125 x 140 ft., rein.-con., brick and steel, California Ave. and George St. $150,000. Minchin, Spitz & Co., 19 West Jackson Blvd., archts.

Minn., Mankato—School—Aug. 8, by State Bd. Control, Capitol, St. Paul, for State Teachers College, here, 3 story, irregular shaped, rein.-con., brick, tile and stone. $250,000. D. F. Mullen, secy. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs. C. H. Johnston, 715 Capitol Bank Bldg., St. Paul, archts. Noted March 9.

N. D., Dickinson—School—Aug. 4 (change of date) by State Bd. of Administration, Bismarck, 3 story, 110 x 300 ft., rein.-con., brick, tile and stone, State Normal School Campus, here. $250,000. Keith & Kurks, Fargo, archts. Noted July 13.

Utah, Ogden—Gymnasium—Aug. 9, by Mormon Church, South Temple St., Salt Lake City, 80 x 240 ft., at Weber College, 2445 Jefferson Ave., here. $300,000. Woods & Jensen, Eccles Bldg., archts. Noted Dec. 8.

Ont., Owen Sound—School—Aug. 16, by Watt & Blackwell, archts., Bank Toronto Bldg., London, stone and tapestry brick, for Bd. Educ. $250,000. Prices wanted on all materials. Noted July 13.

BIDS RECEIVED

N. Y., Brooklyn—Schools—Bd. Educ., 500 Park Ave., New York, opened bids July 18, (1) P. S. 161, Crown St. near New York Ave., (2) P. S. 189, East New York Ave., both brick, steel and stone, plain foundations, here, from Frymier & Hanna Co., 25 West 45th St., New York, (1) $594,000; P. J. Brennan & Son, 624 Madison Ave., New York, (1) $594,300, (2) $577,500; G. F. Driscoll Co., 115 Schermerhorn St., (1) $604,000 (2) $589,000; T. A. Clarke Co., 122 Livingston St., (2) $573,000. Noted July 13.

CONTRACTS AWARDED

Conn., N w Britain—Trade School—School Comr., 3 story, 72 x 198 ft. brick and steel, plain foundation, South Main St., to Immick Co., State St., Meriden. Archts. est. $150,000. Noted July 6.

Conn., West Hartford—Office, etc.—See "Waterworks".

N. Y., Buffalo—School—Bd. Educ., 1401 Telephone Bldg., school on Case St., general contract, to W. W. Wade, 816 Ashland Ave., $299,137; heating work, to Power Efficiency Corp., White Bldg., $64,990.

N. Y., Buffalo—School—Bd. Educ., 1401 Telephone Bldg., general contract. P. S. 65, 2 story, 130 x 201 ft., rein.-con., brick and steel, Skillen St., to Eastern Concrete Steel Co., Morgan Bldg., $220,522. Noted June 29.

N. Y., Buffalo—Store—Hens & Kelly Co., 478 Main St., 5 story, 90 x 207 ft., rein.-con., brick and steel, Main St., to C. Berrick & Sons, 1151 Main St., $700,00. Noted May 4.

N. Y., New York—Store—Starrett & Van Vleck, archts. and engrs., 8 West 40th St., 9 story, brick, steel and stone, 5th Ave. and 50th St., to Cauldwell Wingate Co., 381 4th Ave., for Saks & Co., Bway. and 33rd St. Archts. est. $2,000,000. Noted July 6.

Pa., Dallas—Home—Sisters of Mercy, 161 South Washington St., Wilkes-Barre, 3 and 4 story, 50 x 152 ft. mother house, and 1 story, 43 x 59 ft. power-house, to F. V. Warren Co., 132 South 17th St., Phila. Archts. est. $500,000.

Pa., Leechburg—High School—Bd. Educ. 3 story, brick and steel, to Ley Constr. Co., Westinghouse Bldg., Pittsburgh. Archts. est. $250,000. Noted June 1.

Pa., McKeesport—High School—Bd. Educ. 2 story, 90 x 275 ft., brick, steel and terra cotta, to E. H. Canon, McKeesport. Archts. est. $300,000. Noted June 22.

Pa., Phila—Church House—First Presbyterian Church, Germantown, 2½ story, 32 x 32 and 60 x 70 ft., rein.-con., brick and steel, Chelten and Germantown Aves., to H. H. Wehmeyer, 519 West Cumberland St., $150,000.

Pa., Phila. — Office — Heyman Bros., Weidner Bldg., 8 story, 39 x 89 ft., rein.-con., brick and steel, plain foundation, 15th and Locust Sts., to F. V. Warren Co., 132 South 17th St., archts est. $170,000.

Pa., Phila—Office—Reformed Church of America, 15th and Race Sts., 13 story, 120 x 120 ft., brick steel and stone, plain foundation to Cramp & Co., Denckla Bldg., $650,000. Noted July 6.

Pa., Phila—School—Bd. Educ., 19th and Chestnut Sts., for school, Salmon and Auburn Sts., to McCloskey & Co., 1610 Thompson St., $171,000.

Va., Richmond—Theatre—A. L. Strause, et al., 5 Govenor St., 3 story, 7th and Broad Sts., to J. S. Wilson, Mutual Bldg., Engrs. est. $400,000.

W. Va., Huntington—Store and Office—Solof-Schonthal Interest, c/o A. Solof, Reliance Bldg., general contract 5 story, 70 x 200 ft., 4th Ave and 12th St. to American Eng. Co., Charleston. Archts. est. $150,000.

N. C., Charlotte—Hotel—Citizens Hotel Co., 12 story, 100 x 193 ft., brick, concrete and steel, to J. A. Jones Constr. Co., Realty Bldg., $713,480. Noted July 6.

N. C., Charlotte—Store—Effird Bros., 208 Fayetteville St., 5 story, brick, concrete and steel, to J. A. Jones Constr. Co., Realty Bldg., $236,000. Noted June 29.

Fla., Miami—Church and Sunday School —Church of Holy Name, 3 story, rein.-con., plain foundation, to St. John Constr. Co., Miami, $199,903. Noted May 25.

Miss., Vicksburg—Memorial—Y. M. C. A. 4 story, 95 x 140 ft., rein.-con., steel and brick, to Underwood Contg. Co., Louisiana Bldg., New Orleans, $150,000.

La., Baton Rouge—Bank—Central Savings Bank and Trust Co., 1 story, rein.-con. and steel, to Underwood Contg. Co., Louisiana Bldg. Archts. est. $200,000.

Ia., Ft. Madison—High School—Bd. Educ. general contract for 3 story, 150 x 178 ft., rein.-con., brick, tile and stone, to J. W. Hopp Co., 415 Granby Bldg., Cedar Rapids, $215,000. Noted June 22.

Ia., Maquoketa—High School—Bd. Educ. general contract 2 story, rein.-con., brick and tile, to Currie-Simpson Co., Waterloo, $162,480. Noted June 15.

Tenn., Knoxville — Apartment — E. S. Worsham, 13th St., 4 story, 85 x 125 ft., brick and steel, concrete pile foundation, Cumberland St. W., to Worsham Bros., Empire Bldg., $180,000.

O., Akron—Clubhouse—Portage Country Club, 45 x 120 ft., tile and stucco, Portage Path, to Carmichael Constr. Co., 524 Hamilton Bldg., $140,000. Noted April 20.

O., Bellaire—Bank—Natl. Bank, 8 story, 40 x 120 ft., brick and terra cotta, 32nd and Belmont Sts., to C. D. Keyser & Co., Bellaire. Archts. est. $400,000. Noted July 6.

O., Cleveland—Apartment—G. H. Tipling, 407 Rockwell Ave., masonry contract 3 story, 38 x 154 ft., brick and steel, plain foundation, 2033 East 77th St., to D. Lindhorst Constr. Co., 1602 Holmden Ave. Archts. est. $50,000. Noted June 1.

O., Cleveland Heights (Warrensville P. O.)—Apartment—A. Palevsky, 1450 East 105th St., masonry contract 4 story, 90 x 96 ft., brick and steel, Overlook Rd., to J. Miller, 2381 East 46th St., Cleveland. Archts. est. $150,000. Noted May 18.

O., Dayton—High School—Bd. Educ., Roosevelt High School, 3 story, rein.-con. and brick, plain foundation, incl. plumbing and heating work, to Walbridge-Adlinger Co., 2356 Penobscot Bldg., Detroit, Mich., $1,434,210. Noted July 20.

O., Zanesville—Hotel—W. M. Bateman, pres. Zane Hotel Co., 6 story, 133 room, rein.-con., brick and steel, concrete pile foundation, to Blanchard Building Co., 928 Lindsay Bldg., Dayton, $350,000.

Ind., Marion—High School—Bd. Educ., 2 story, 170 x 217 ft. brick, 36th and Washington Sts., to Morrow & Morrow, 1126 East Main St., Muncie, $239,500. Archts. est. $300,000.

Mich., Detroit—Church and Rectory—St. Hyacinthe Parish, McDougall Ave., 2 story, brick, steel and rein.-con., plain foundation, McDougall Ave., masonry to J. Nowakowski & Co., 400 Penobscot Bldg. Engrs. est. $150,000.

Ill., Chicago—Apartment—W. C. Krieg, archt., 105 North Clark St., 3 story, 125 x 155 ft., rein.-con., brick and steel, Gladys and Central Aves., to G. H. Cook Constr. Co., 105 North Clark St. Archts. est. $225,000. Owner's name withheld.

Ill., Chicago—Apartment—Parkway Plaza Building Corp. c/o Ronneberg, Pierce & Hauber, archts., 10 South La Salle St., 3 story, rein.-con., brick and steel, Clark St.

Buildings (Continued)

near Fullerton Parkway, to A. E. Johnson, 5356 Belle Plaine Ave. Archts. est. $175,000.

Ill., Chicago—Church—F. K. Byrne, archt., 104 South Michigan Ave., 1 story, 100 x 200 ft., rein.-con., brick and steel, Kimbark Ave. and East 55th St., to Byrne & Ryan, 104 South Michigan Ave. Archts. est. $150,000. Owner's name withheld.

Ill., Chicago—Office—G. E. Clements, c/o Clark & Walcott, archts., 86 Huron St., 5 story, 50 x 150 ft., rein.-con., brick and steel, 223-25 West Lake St., to J. Sheddon & Co., 106 North La Salle St. Archts. est. $150,000.

Ill., Chicago—Lowe & Bollenbacher, archts., 108 South La Salle St., 5 and 6 story, 125 x 125 ft., rein.-con., brick and steel, 53rd St. and Dorchester Ave. to C. B. Johnson & Son, 111 West Washington St., for Y. M. C. A. c/o architects. Archts. est. $400,000. Noted May 11.

Wis., Ashland—Bank—Ashland Natl. Bank, 1 story, 50 x 90 ft., brick, concrete and stone, plain foundation, to Tomlinson & Egan, Ashland, $109,500. Engrs. est. $150,000. Noted June 29.

Wis., Institute (Sturgeon Bay P. O.)—School Bd. Educ. 2 story, 75 x 110 ft., brick, rein.-con. and stone high and grade school, plain foundation, to Anschulz & Wulf, Sturgeon Bay. Engrs, est. $150,000. Noted Feb. 2.

Wis., Milwaukee—Store and Office—Zingen & Braun, 548 12th St., 2 story, 100 x 150 ft., brick and concrete, plain foundation, 6th and Sycamore Sts., concrete to E. Steingerwald & Sons, 2303 Galena St.; masonry, to A. Buchholz, 840½ 36th St.; structural steel, to Milwaukee Structural Steel Co., 19th St. and St. Paul Ave. Engrs. est. $150,000. Noted June 1.

Ia., Rock Rapids—High School—Bd. Educ. general contract 3 story, 61 x 200 ft., rein.-con., brick, tile and stone, to Spencer Constr. Co., Spencer, $134,108. Noted June 22.

N. D., Fargo—School—Bd. Educ., general contract 2 story, rein.-con., tile, brick and stone, 16th St. and 3rd Ave. S., to Meinecke-Johnson Co., Fargo, $110,880. Noted June 29.

Ark., Jonesboro—Hospital—Sisters of St. Benedict, 3 story, 50 x 128 ft., rein.-con. steel and brick, to Estes-Williams-Ragsdale, Madison Ave. Bldg., Memphis, Tenn. $104,000. Noted May 4.

Col., Colorado Springs—Auditorium—City, general contract for auditorium, to H. W. Baum & Co., Walker Bank Bldg., Salt Lake City, Utah, $269,300; plumbing, to A. E. Olsen, 1116 North Wahsatch St. $54, 600. Engrs. est. $325,000. Noted June 22.

Cal., Berkeley—Bank—Federal Land Bank, 2 story, rein.-con., Fulton St. opposite Kittredge St., to Lawton & Vezey, 357 12th St., Oakland, $109,900. Noted July 13.

Cal., Pasadena—School—Bd. Educ. 2 story, 16 room, brick, to Wopschall Bros., 360 South Raymond Ave., $152,523. Noted June 15.

Cal., Reedley—High School—Reedley Joint Union High School Dist., group of brick and concrete buildings, concrete, carpentry, mill work and floors, to P. F. Reilly, 180 Jessie St., San Francisco, $184,020; brick and tile to F. F. Smith, 984 Thorne St., Fresno, $40,825; plumbing and heating to Visalia Plumbing Co., Visalia, $30,564 and $29,243 respectively; lathing and plastering to J. B. Rickert, Los Angeles, $36,489. Noted June 15.

Cal., San Bernardino—Auditorium—City Council 2 story, 100 x 126 ft., rein.-con. and steel, concrete foundation, to F. Hudson, Higgins Bldg., Los Angeles, $152,781. Noted June 15.

Cal., San Diego—Theatre and Office—Cuyamaca Building Co., 7 story, B St. between 5th and 6th Sts., to Lange & Bergstrom, Tinker Bldg., $1,054,000.

Cal., San Francisco—Store and Office—A. F. Rousseau, 110 Sutter St., will build 2 story, brick and concrete, Market St. near 7th St., by day labor. To exceed $200,000. Application filed with City Building Bureau to erect steel frame (only) cost $110,000. Permit for balance of work to be secured later. D. C. Coleman, 110 Sutter St., archt. Noted April 13.

Cal., San Pedro—Hotel—J. D. Finley will build 4 story, 100 x 130 ft., rein.-con., 6th and Mesa Sts., by day labor. $200,000. W. F. Bowen, 813 Union League Bldg., Los Angeles, archt.

N. B., St. John—School—School Trustees, 2 story, 130 x 142 ft. brick, West St. John, to H. O. Clark, St. John, $151,585. Noted July 13.

Federal Government Work

PROPOSED WORK

N. Y., Buffalo—Repairing Breakwall—U. S. Government, Federal Bldg., plans repairing breakwall, here. J. G. Warren, Federal Bldg., dist. engr,

BIDS DESIRED

Mass., Chelsea—Mortuary—Spec. 4635—Aug. 2 by Bureau Yards & Docks, Navy Dept., Wash., D. C., mortuary at Naval Hospital, here. Noted May 18.

N. Y., Staten Island—Riprap—Aug. 2, by Supt. Lighthouses, Staten Island, furnishing and placing 24,000 long ton riprap stone around light dolphins in Raritan Bay, New Jersey.

Md., Annapolis—Refrigerating Plant—Aug. 2 by Bureau Yards & Docks, Navy Dept., Wash., D. C., refrigerating plant at U. S. Naval Academy, here.

Md., Baltimore—Dredging—Aug. 21 at Office U. S. Engineer, dredging in Baltimore Harbor and channels; adv. this issue.

D. C., Wash.—Lighthouse Tender—Aug. 15 by Comr. Lighthouses, 19th St. and Pennsylvania Ave. N. W., for construction and equipment, stern-wheel, steel, steam stem-propelled lighthouse tender Greenbrier for use in Ohio River.

Va., Norfolk—Dredging—Aug. 23 at Office U. S. Engineer, dredging in Norfolk Harbor; adv. this issue.

Va., Quantico—Retaining Walls—Aug. 23 by Bureau Yards & Docks, Navy Dept., Wash., D. C., retaining walls at Marine Flying Field, here.

Tenn., Memphis—Cement—Aug. 1, at Office Mississippi River Comn., 1st and 2nd Dists., Custom House, furnishing portland cement; adv. this issue.

Ill., Chicago—Pools—Aug. 1, by Treas. Dept., Wash., D. C., pools in U. S. Veterans Hospital, here. J. A. Wetmore, acting superv. archt.

Wis., Fond du Lac—Post Office—Aug. 22, by Treas. Dept., Wash., D. C., U. S. Post Office, here.

Mo., St. Louis—Electric Pump—Aug. 15. by Treas. Dept., Wash., D. C., electric pump for turbine in U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

Tex., Houston—Oil Burning Apparatus—Aug. 12, by Treas. Dept., Wash., D. C., oil burning apparatus in U. S. Post Office and Court House, here. J. A. Wetmore, acting superv. archt.

Utah, Spanish Fork—Post Office—Aug. 22 by Treas. Dept., Wash., D. C., for U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Ariz., Yuma—Motors, etc.—Sept. 6 at Office U. S. Recl. Serv., Denver, Col., furnishing motors, transformers, etc., for Valley Drainage pumping plant, Yuma Project. A. P. Davis, dir.; adv. this issue.

Ore., Klamath Falls—Canal—Aug. 31 at Office U. S. Recl. Serv., Klamath Falls, 11 mi. main canal, Langell Valley Division, Klamath Project, Oregon-California. A. P. Davis, dir.; adv. this issue.

Ore., Klamath Falls—Timber Turnout, etc.—Aug. 12 at office Recl. Serv., Klamath Falls, timber turnout, etc., on laterals of Tule Lake Div., Klamath Project; adv. this issue.

Cal., Mare Island—Circulating Loop—Spec. 4684—Aug. 30, by Bureau Yards & Docks, Navy Dept., Wash., D. C., circulating loop for central power plant, here. Noted July 13.

Cal., San Diego—Wire Partitions—Spec. 4696—Aug. 16, by Bureau Yards & Docks, Navy Dept., Wash., D. C., wire partitions at naval base, here.

Cuba, Guantanamo—Chimney and Flue—Spec. 4695—Aug. 9, by Bureau Yards & Docks, Navy Dept., Wash., D. C., chimney and flue, here.

RIDS RECEIVED

Ala., Tuskegee—Fire Alarm System—Treas. Dept., Wash., D. C., fire alarm system at U. S. Veterans Hospital, here, from Michigan Auxiliary Fire Alarm Co., 4108 Woodward St., Detroit, Mich., $3,984; Michaels & Co., Inc., Norfolk, Va., $4,987; Crocker Natl. Fire Prevention & Eng. Co., New York City, $5,212. Noted June 29.

CONTRACTS AWARDED

R. I., Providence—Dredging—U. S. Engineer, Providence, dredging in Harbor here to J. S. Packard Dredging Co., 1054 Turks Head Bldg., $11,400.

N. Y., Buffalo—Remodeling—Treas. Dept., Wash., D. C., remodeling and repairing U. S. Post Office and Custom House, here, to Mosier & Summers, 1266 Seneca St., $78,000. Noted May 4.

N. Y., Oswego—Cornice, etc.—Treas. Dept., Wash., D. C., restoring cornice, replacing roof construction, etc., on U. S. Post Office, here, to Garber & Cissel, Bethlehem, Pa., $60,000. Noted June 29.

Md., Baltimore—Dredging—U. S. Engineer, Baltimore, dredging Wicomico River to Arundel Corp., Pier 2, Pratt St., $7,542. Noted June 8.

D. C., Wash.—Conduit—U. S. Engineer Office, 250 Old Land Office Bldg., various sections water supply conduit, to Arundel Corp., Pier 2, Pratt St., Baltimore, Md., $2,058,726. Noted June 22.

Ga., Augusta — Grilles — Treas. Dept., Wash., D. C., grilles in U. S. Veterans Hospital, here, to G. E. Wright, Monadnock Blk., Chicago, $12,540. Noted June 22.

Fla., Apalachicola—Post Office, etc.—Treas. Dept., Wash., D. C., for U. S. Post Office and Custom House, here, to Devault & Deitrick, Massilon Rd., Canton, O., $59,817. Noted July 20.

La., New Orleans—Steel Ladder, etc.—U. S. Engineer Office, 329 Custom House, steel ladder, pipe gears, etc., for U. S. Dredge Gulfport, to Ellicott Machine Corp., Bush and Severn Sts., Baltimore, Md., $23,365. Noted June 22.

Ky., Vanceburg—Dam—U. S. Engineer, 2nd Dist., Cincinnati, O., Dam 32, Ohio River, near here, to Dravo Contg. Co., Diamond Bldg., Pittsburgh, Pa., $1,224,867. Noted July 13.

O., Chilo—Dam—U. S. Engineer, 405 Customhouse, Cincinnati, Dam 34, Ohio River, near here, to Natl. Contg. Co., Citizens Bank Bldg., Evansville, Ind., $1,385,147. Noted July 13.

Mich., Detroit—Gate Engines—U. S. Engineer, 337 Federal Bldg., furnishing and installing 6 operating engines for gates of Poe Lock, Saulte Ste. Marie, incl. motors, controllers resistances, etc. to Green Bay Dry Dock Co., Green Bay, Wis., $20,410. Noted July 20.

H. T., Pearl Harbor—Machine Shop—Spec. 4518—Bureau Yards & Docks, Navy Dept., Wash., D. C., machine shop at Naval operating base, here, to W. F. Martens, 112 Cutler Bldg., Rochester, N. Y., $185,366. Noted June 15.

FEDERAL POWER COMMISSION

Applications for Licenses and Permits

Applications

304—Winchester Water Wks. Co., 14 Beacon St., Boston, Mass.—Wants permit to develop power at U. S. Lock and Dam 10, in Kentucky River, power to pump water about 4 mi. to companys existing reservoir, supplying water to Winchester, Ky.

305—C. M. Eye, 1006 Hobart Bldg., San Francisco, Cal.—Wants license for 2 mi. transmission line from existing power house to mine in Tuolumne Co.

306—J. Wittmann, 469 5th Ave., New York—Wants permit for irrigation and power project on Hassayampa River, in Yavapai and Maricopa Counties, Ariz. Project includes large reservoir at Walnut Grove and another near Wickenburg.

307—Thebo, Starr & Anderton, Inc., San Francisco, Cal.—Wants permit for dam 300 ft. high and power house in American River, 15 mi. northwest of Placerville, in El Dorado National Forest, El Dorado Co.

308—Enterprise Electric Co., 521 1st Ave., Spokane, Wash.—Wants license for diversion dam in East Fork of Wallowa River, Wallowa Co., Ore. Project includes 1 mi. pipe line to power house and transmission line to nearby communities.

309—Clarion River Power Co., 14 Wall St., New York—Wants license for dam and power house in Clarion River between Beaver and Paint Twps., Clarion Co., Pa.

310—Northern States Power Co., 208 South La Salle St., Chicago, Ill.—Wants preliminary permit for reservoir and 2 power dams on St. Croix River, lower dam located at present Nevers Dam, middle one below Kettle Falls, upper one above Kettle Falls. This project was originally part of Project 250.

311—F. A. Bryan, c/o Indiana and Michigan Electric Co., 220 West Colfax Ave., South Bend, Ind.—Wants preliminary permit for dam and power house in St. Joseph River, 6 mi. above mouth in Berrien Co., Mich.

312—Molybdenum Co. of America, 1008 Empire Bldg., Pittsburgh, Pa.—Wants license for 3 dams, conduits and power houses on Red River and Columbine Creek, Taos Co., N. M.

313—Murtagh Irrigation Dist., c/o Porter & Witham, Twin Falls, Idaho—Wants permit for diversion dam in Snake River, near Auger Falls, another in Rock Creek 1½ mi. above its mouth, and conduits to common power house at mouth Rock Creek.

314—Mutual Power Assn., Weiser, Idaho—Wants permit for diversion dam in Crane

Federal Power Commission (Continued)

Creek, Washington Co., 3 mi. conduit to power house and 25 mi. transmission line to 3 pumping stations on Snake River.

315—Carolina Power and Textile Co., c/o G. G. Reiniger, Asheville, N. C.—Wants permit for 5 power projects in Pisgah National Forest, Henderson and Transylvania Counties, 3 on South Fork and 1 on Rocky Fork of Mills River, and 1 on Davidson River. Project includes transmission line to Asheville.

316—Clarion River Power Co., c/o C. B. Hawley, 450 Munsey Trust Bldg., Wash., D. C.—Wants permit for power house and dam 240 ft. high, in Clarion River, near Mill Creek. Project to create slack water to Ridgway, Pa.

317—Clarion River Power Co., c/o C. B. Hawley, 450 Munsey Trust Bldg., Wash., D. C.—Wants permit for power house and dam 150 ft. high, in Clarion River, near Foxburg, Pa.

318—American Super-Power Corp., c/o E. C. Randell, pres., 504 Iroquois Bldg., Buffalo, N. Y.—Wants permit to divert 12,000 cu.ft. per second from Niagara River, at point near Cayuga Island, La Salle, N. Y. Project includes 6½ mi. canal to power house in Lewiston.

319—Louisville, Ky.—City wants permit to develop power at proposed reconstructed U. S. Lock and Dam, Louisville Falls, Ohio River, Louisville, Ky.

320 — Nevada-California Power Co., Riverside, Cal.—Wants permit for 4 storage reservoirs on headwaters of Bishop Creek, a tributary of Owens River, Inyo Co., Cal.

321—Colorado Power Co., Symes Bldg., Denver, Col.—Wants license for 4 transmission line extensions as follows: 14.16 mi. Cocomonga to Saguache; 3.29 mi. Bonanza to Eagle Mine; 1.69 mi. Bonanza to Express Mine; 1.84 mi. Bonanza to Queen City Mine.

Miscellaneous

PROPOSED WORK

Dock Wall, Buffalo, N. Y.—Making preliminary plans constructing dock wall in harbor at Buffalo Yacht Club, foot of Porter Ave. $100,000. G. H. Norton, Municipal Bldg., engr.

Swimming Pool—Buffalo, N. Y.—Dept. Parks and Pub. Bldgs., Municipal Bldg., plans swimming pool and other improvements at Riverside Park. $30,000. F. V. Tyler, city clk.

Street Lighting System—Phillipsburg, N. J.—Dept. Pub. Wks. Plans ornamental lighting system consisting of 96 iron standards installed 100 ft. apart. $25,000-$36,000.

Fair Grounds—Allentown, Pa.—Lehigh Co. Agricultural Society, Stiles Bldg., purchased 200 acres and is having surveys made for fair grounds. Bascom & Sieger. Allentown Natl. Bank Bldg., engrs.

Drilling—Bradford, Pa.—Forest Oil Co., 78 Main St., plans drilling 84 wells in Bradford Field. $500,000. F. D. Dorn, pres.

Retaining Wall—Mauch Chunk, Pa.—Making surveys for retaining wall along or near tracks of Jersey Central R. R. $75,000. M. Biery, Allentown, engr.

Suburban Development—Raleigh, N. C., —Allen Bros. Realty Co., 8 West Martin St., having surveys made developing 80 acres on North Person St. Work includes grading, paving and extending water and sewer lines. $100,000. D. Allen, pres.

Park Development—Salisbury, N. C.—City plans to convert urban property into park and residential section. Work includes grading, paving, water and sewer mains. $100,000. E. H. Harrison, Salisbury, in charge.

Transmission Line—Wilmington, N. C.—Tide Water Power Co., plans extending transmission line 53 mi. from here to Warsaw and possibly from Warsaw to Clinton. F. A. Matthes, vice-pres.

Wells—Bowling Green, Ky.—E. T. L. Sutton, Titusville, Pa., plans drilling 8 wells for oil and gas, near here. $30,000.

Ice Skating Rink—Cleveland, O.—B. J. La Vetter, 102 Engineers Bldg., having plans prepared by M. Weis, archt., 618 Union Bldg., 1 story ice skating rink, brick and steel, West 76th St. and Lake Ave. $150,000.

Elimination of Grade Crossings—Columbus, O.—City, Cleveland, Cincinnati, Chicago & St. Louis, R.R., La Salle St. Sta., Chicago, Pennsylvania R.R., Pennsylvania Sta., Pittsburgh, and Hocking Valley R.R., Spahr Bldg., Columbus, plan eliminating grade crossing on Dennison Ave., here. City sold $250,000 bonds (its share toward cost). R. H. Simpsom, city engr.

Transmission Lines—Logan, O.—Ohio Power Co., plans 30 mi. high tension transmission lines from here to Lancaster, also from here to Nelsonville.

ROAD WORK—AKRON, OHIO

Following are lowest bids opened July 5 by M. P. Tucker, dir. Pub. Serv., for grading and paving East Tallmadge Ave. from Columbia Ave. to east corporation line, (A) McAlonan Bros., 506 Woodland Ave., (awarded contract for sheet asphalt pavement); (B) T. E. McShaffrey Constr. Co., 171 South Forge St.; (C) V. Olson Contg. Co., Herberich Bldg. The unit bids were as follows:

	A	B	C
23,000 cu.yd. grading	$0.55	$0.60	$0.50
250 cu.yd. trench excavation	2.00	1.25	2.00
12,400 lin.ft. under drains 4-in. pipe	.15	.12	.15
1 manhole readjusted	2.00	5.00	3.00
7 manholes readjusted, new frame and cover	15.00	20.00	15.00
20 cu.yd. concrete, class 1	12.00	12.00	15.00
250 cu.yd. concrete, class 2	10.00	12.00	12.00
10,965 lin.ft. sandstone curb hand dressed	1.35	1.35	1.35
50 lin.ft. sandstone circular curb	2.00	2.00	2.50
1,410 lin.ft. granite circular curb	3.50	3.50	3.75
10 lin.ft. sandstone curb redressed	.35	.35	.20
10 lin.ft. curb reset	.35	.35	.20
400 lin.ft. granite stone headers	2.50	3.00	3.50
600 lin.ft. sand stone headers	1.00	1.00	1.00
20,400 sq.yd. concrete base 6-in. thick	1.20	1.40	1.23
20,400 sq.yd. concrete base 7-in. thick	1.50	1.65	1.60
20,400 sq.yd. concrete base, 8-in. thick	1.80	1.90	1.90
20,400 sq.yd. standard brick pavement (cement filler)	2.10	2.10	2.00
20,400 sq.yd. standard brick pavement (asphalt filler)	2.20	2.20	2.10
2,200 sq.yd. standard brick gutter (cement filler)	2.50	2.20	....
18,200 sq.yd. sheet asphalt pavement, plan B (Trinidad)	2.00	1.77	....
18,200 sq.yd. sheet asphalt pavement, plan B (Texaco)	1.80	1.65	....
18,200 sq.yd. sheet asphalt pavement, plan B (Mexican)	1.80	....	....
10 sq.yd. brick pavement relaid	2.00	2.50	3.00
63,700 sq.ft. cement walk two-course	.19	.20	.165
6,120 sq.ft. cement driveway	.26	.25	.26
1,500 lb. reinforcing steel	.05	.05	.10
60 lin.ft. galvanized iron railing	2.50	1.00	2.00
14 concrete monuments	10.00	10.00	10.00
18 street signs acc. 5383	25.00	25.00	25.00
280 shade trees	5.00	5.00	6.00
400 lin.ft. 4-in. w.i. pipe drain	.60	.60	.60
Extended totals for standard brick pavement (cement filler), 7-in. concrete base	$128,911	$133,790	$127,839
Extended totals for standard brick pavement (asphalt filler), 7-in. concrete base	130,951	135,830	129,879
Extended totals for sheet asphalt pavement (Trinidad), 7-in. concrete base	127,971	128,004	......
Extended totals for sheet asphalt pavement (Texaco), 7-in. concrete base	124,331	125,820	......
Extended totals for sheet asphalt pavement (Mexican), 7-in. concrete base	124,331	......	......

Electric Lighting and Power Distribution System—Muncey, Ont.—Caradoc Twp. having surveys made 11 mi. line between Delaware and Melbourne. $33,000. J. Brodie, clk. Work will commence early in August under supervision of J. N. Wilson, engr., 190 University Ave., Toronto.

BIDS DESIRED

Portland Cement—New York, N. Y.—Aug. 3, by H. Bruckner, pres. Bronx Boro., Municipal Bldg., Crotona Park, for 3,500 bags Portland cement.

Retaining Wall—Trenton, N. J.—Aug. 4, rein.-con. retaining wall along Delaware River. $25,000. A. Swan, City Hall, engr.

Transmission Line, etc.—Hobgood, N. C. —Aug. 15, by Mayor and Bd. Comrs., furnishing material for 7 mi. transmission line from here to Scotland Neck, also material for distribution of electricity in Hobgood. E. L. Bradley, clk.

Heating Oil Distributor—Ft. Myers, Fla. —Aug. 9, by Bd. Comrs. Lee Co., one 800 gal. heating oil distributor on 3 ton F. W. D. County truck. R. P. Ransome, Ft. Myers, engr.

Seawall—Port Tampa, Fla.—Aug. 1, 260 lin.ft. concrete seawall, 35,000 cu.yd. dredging. $25,000. McElroy Eng. Co., 32-34 Giddens Bldg., Tampa, engrs.

Ash Handling Equipment—Madison, Wis. —Mead & Seastone, engrs., State Journal Bldg., taking bids ash handling equipment for power house, at Madison Gas Co., 120 East Main St.

Brick and Asphalt Filler—Waukesha, Wis.—A. P. Kuranz, engr., City Hall, taking bids 50,000 sq.yd. brick and asphalt filler. $30,000 bond issue voted for above.

Power Plant Equipment—Detroit, Minn. —July 31, by city, 1 generating unit, steam engine driven, 300 kva. capacity; one 250 hp. water tube boiler; stokers for boiler in foregoing. $32,000. E. J. Bastick, clk. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engr.

Wood Blocks and C.I. Specials—St. Paul, Minn.—July 31, by H. W. Austin, city purch. agt., 496 sq.yd. 3½ creosoted wood blocks for Dept. Pub. Wks.; 11.55 ton c.i. water pipe specials for Water Dept.

Granite Facing Stone—Lincoln, Neb.—Aug. 2, by S. E. McKelvie, chn., and E. Johnson, secy. State Capitol Comn., 335,280 cu.ft. granite facing stone in rough blocks. B. A. Goodhue, 3 West 47th St., New York City, archt.

Crane—Aberdeen, Wash.—Aug. 6, by Port of Grays Harbor, at office of Commission, 206 East Wishkah St., mill type traveling crane. F. H. Lamb, pres.; adv. this issue.

Cement—Napa, Cal.—Aug. 8, by Supervs. Napa Co., furnishing and delivering in carload lots 10,000 bbl. cement.

Electric Light Equipment—Hanna, Alta. —Aug. 7, by C. N. Tingle, member of City Council, installation of 100 kw. generator and exciter direct connected to compound steam engine, one 50 kw. unit similar to above, two 150 hp. return tubular or water tube boilers and accessories, incl. mechanical stokers, switchboard and street lighting equipemnt, transformers and copper wire. $29,000. Haddin & Miles, Calgary, engrs.

Strain and Pin Type Insulators—Melbourne, Australia—Sept. 16, by R. Liddelow, secy. State Electricity Comn. of Victoria, Melbourne, Victoria, Australia, strain and pin type insulators, Specification 261; adv. this issue.

BIDS RECEIVED

Asphaltic Paving Cement — New York, N. Y.—J. Miller, pres. Manhattan Boro, opened bids July 20, furnishing and delivering 500 ton asphaltic paving cement, from Standard Oil Co., 26 Bway., $18.40 per ton; Warner Quinlan Co., 79 Wall St., $20.50. Noted July 13.

Lumber, etc.—New York, N. Y.—Bd. Purch., Municipal Bldg., opened bids July 21, furnishing and delivering creosoted and plain yellow pine lumber, also granite and wood paving blocks to Dept. Plant & Structures, from G. Elias & Bro., 22 East 17th St., $43,505, alternate $42,793; Eppinger & Russell Co., 165 Bway., $725; H. J. Fitzgerald, $25,027. Noted July 13.

Stadium—Madison, Wis.—University of Wisconsin opened bids July 17, concrete and steel addition to stadium, from W. F. Tubesing, 373 Bway., Milwaukee, $28,952; J. H. Findorff Son Co., 601 West Wilson St., $30,028; C. B. Fritz Co., 138 North Frances St., $30,082. Noted July 6.

CONTRACTS AWARDED

Elimination of Grade Crossings—Buffalo, N. Y.—Grade Crossing Comn., 436 Ellicott Sq., constructing road bed and tracks of Erie R.R. in connection with grade crossing elimination on East Ferry St., Delevan and Kensington Aves., to Miller Constr. Co., Lock Haven, Pa., $209,334. Noted June 1.

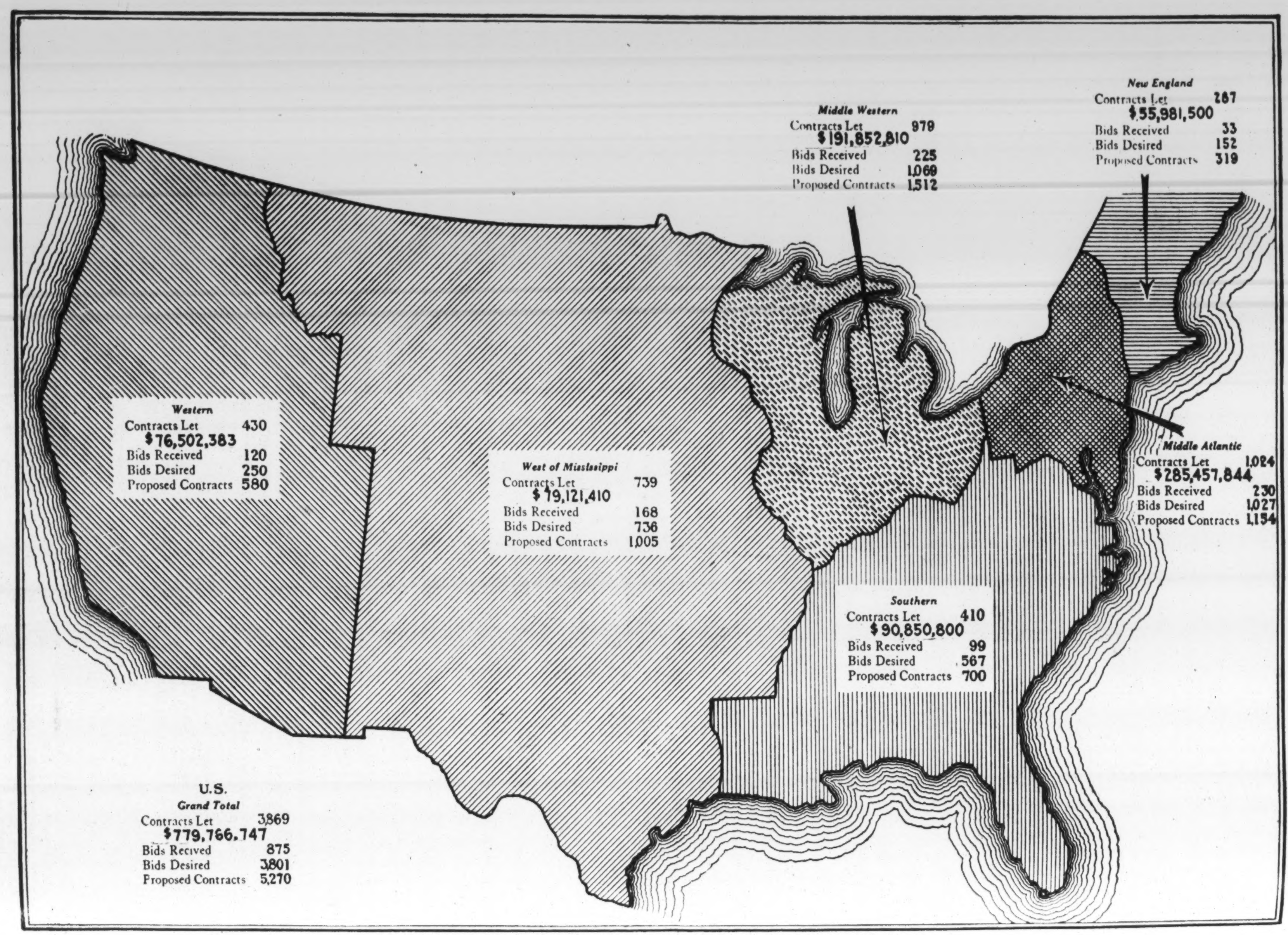
Tunnel—Moosic, Pa.—See "Waterworks."

Asphalt, etc.—Phila., Pa.—F. H. Caven, dir. pub. wks., for 13,000 ton asphalt mixtures, to Union Paving Co., 34th and Spruce Sts., $44,740; mixed concrete, to West Jersey Sand and Supply Co., Beach and Marlboro St., $8,250; 7,500 ton gravel to De Frain Sand Co., Finance Bldg., $12,208. Noted July 20.

Circuit—Warren, Pa.—Bell Telephone Co., Savings Bank Bldg., will replace present 50 pair circuit in Pennsylvania Ave., with modern 200 pair circuit, by day labor. $100,000.

Turbine and Accessories—New Orleans, La.—Sewerage and Water Bd., one 6,000 hp. turbine engine and accessories, to Westinghouse Electric Mfg. Co., Maison Blanche Bldg., $117,000. Noted May 18.

Piles—Los Angeles, Cal.—Furnishing and driving rein.-con. piles for 4 piers, to E. Cykler, Alexandria Hotel, $165,000.


New England
Contracts Let 287
$55,981,500
Bids Received 33
Bids Desired 152
Proposed Contracts 319
Middle Western
Contracts Let 979
$191,852,810
Bids Received 225
Bids Desired 1,069
Proposed Contracts 1,512
Middle Atlantic
Contracts Let 1,024
$285,457,844
Bids Received 230
Bids Desired 1,027
Proposed Contracts 1,154
Western
Contracts Let 430
$76,502,383
Bids Received 120
Bids Desired 250
Proposed Contracts 580
West of Mississippi
Contracts Let 739
$79,121,410
Bids Received 168
Bids Desired 736
Proposed Contracts 1,005
Southern
Contracts Let 410
$90,850,800
Bids Received 99
Bids Desired 567
Proposed Contracts 700
U.S.
Grand Total
Contracts Let 3,869
$779,766.747
Bids Recived 875
Bids Desired 3,801
Proposed Contracts 5,270

CONSTRUCTION NEWS FIGURES FOR FIRST HALF OF 1922

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Aug. 1.

State Highway Work

Baltimore, Md.

Sealed proposals for building eight sections of State Highway, as follows:

Frederick County, Cont. F-52. One section of State highway along the Buckeystown Pike from end of Cont. F-31 Extd. to Furnace Branch Bridge, a distance of 1.35 miles. (Concrete.)

Howard County, Cont. Ho-23. One section of State highway from the end of Cont. 453 at Benson Branch to the Triadelphia Pike, a distance of 1.5 miles. (Concrete.)

Hartford County, Cont. H-29. One section of State highway from Whiteford toward Dublin, a distance of 1.0 miles. (Concrete.)

Charles County, Cont. Ch-23. One section of State highway from Mason Springs to Marbury, a distance of 2.6 miles. (Gravel.)

Cecil County, Cont. Ce-41. One section of State highway from Calvert toward Fair Hill, for a distance of 2.0 miles. (Concrete.)

Queen Anne's County, Cont. Q-22. One section of State highway from Sudlersville toward Millington, for a distance of 2.0 miles. (Concrete.)

Dorchester County, Cont. D-25. One section of State highway from Eldorado toward Federalsburg, for a distance of 1.0 miles. (Concrete.)

Wicomico County, Cont. Wi-21. One section of State highway from Salisbury toward Snow Hill, for a distance of 2.0 miles. (Concrcete.)

Will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., standard time, on the 1st day of August, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans, will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 13th day of July, 1922.

JOHN N. MACKALL,
Chairman.
L. H. STEUART, Secretary.

Bids: Aug. 7.

Street Improvement

White Plains, N. Y.

Sealed bids or proposals for the construction of North Broadway, City of White Plains, with cement concrete and asphaltic concrete surface on a cement concrete foundation will be received at the office of the Clerk of the Board of Supervisors, Court House, White Plains, N. Y., until 10 a.m. (Standard Time), August 7th, 1922.

Specifications, proposal sheets and all information relative to same may be procured at the office of the County Superintendent of Highways, Court House, White Plains, N. Y., upon making a deposit of four dollars ($4.00).

BOARD OF SUPERVISORS.
FRED L. MERRITT, Clerk.

OFFICIAL PROPOSALS

Bids: Aug. 9.

Road Work

Hackensack, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders for the construction of Section 3, Route No. 10, from the Borough of Little Ferry to the Borough of Ridgefield, in the County of Bergen, with an 8-in. one course reinforced concrete pavement; estimated amount of surface pavement required is 17,680 sq. yds.; and opened and read in public at Court House, Hackensack, N. J. on Wednesday, August 9th, 1922, at 1.30 P. M. (daylight savings time).

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by the County Engineer, and approved by the State Highway Commission, have been filed in the office of the said Engineer at the Court House, Hackensack, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to the Board of Chosen Freeholders of the County of Bergen and must be accompanied by a certificate from the Bonding Company and a certified check for not less than 10 per cent of the bid and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

Work to be performed under County Reimbursement Act Chapter 183 Laws of 1918, and amended by Chapter 317, Laws of 1920.

By Order of Board of Chosen Freeholders, Bergen County, N. J.

JAS. M. HARKNESS,
Clerk.

Bids: July 31.

Paving

Washington, Pa.

Sealed proposals will be received by the Town Council of the Borough of Washington, Penna., at the Council Chamber until 7:30 p.m., July 31st, 1922, for the construction of about eighteen thousand (18,000 square yards of brick pavement (brick furnished by the borough) and for the resurfacing of about five thousand (5,000) square yards with bituminous pavement.

Each bid must be accompanied by a certified check in the amount of five per cent (5 per cent) of the contract price.

Plans and specifications may be obtained at the office of the Borough Engineer, and the right is reserved to reject any or all bids.

J. F. CURRAN,
President of Council.
JOHN GRIFFITHS,
Secretary of Council.

OFFICIAL PROPOSALS

Bids: Aug. 4.

Concrete Highway and Appurtenances

Hallstead, Pa.

Sealed proposals will be received by the Council of the Borough of Hallstead, County of Susquehanna, State of Pennsylvania, on August 4th, 1922; until 8 o'clock p.m., at their office at Municipal Building, at which time and place proposals will be opened and read for the construction of concrete highway and appurtenances on Franklin Street, Pine Street, Susquehanna Avenue, and Main Street.

Proposals must be on forms provided and must be accompanied by a certified check for 5 per cent of the total amount bid.

Proposal forms, specifications, maps and other information may be obtained at the office of the Secretary of the Borough of Hallstead, Pa., or at the office of Hoadley & Giles, Civil Engineers, 415 Phelps Bldg., Binghamton, N. Y.

A deposit of ten dollars will be required for each set of plans and specifications, which will be refunded upon return of plans and specifications.

The Borough Council reserves the right to reject any or all bids.

F. C. BROWN,
President, Hallstead
Borough Council.
W. J. KIRBY,
Secretary.

Bids: Aug. 17.

Street Improvement

Henderson, N. C.

Sealed proposals will be received for the materials and labor in connection with the improvements of certain streets of the City of Henderson, N. C., by the Mayor and Board of Commissioners of said city until three o'clock P.M., of August seventeenth, when they will be opened and publicly read.

The specifications cover sheet asphalt and bituminous concrete pavements, and in addition to the above, proposals will be considered upon Warrenite-Bitulithic and other special forms of pavement. Work contemplated includes grading, furnishing placing and constructing concrete curb and gutters and the installation of storm drains.

Bids are asked upon approximately 60,000 square yards of pavement. Pavement will be constructed from one or more of the above classes as may be selected by the city, and the entire work to be done will be awarded under one or more contracts as the city may elect.

Plans and specifications may be examined at the office of the City Clerk or at the office of the Engineer. Specifications will be ready for delivery on or about July 20, and prospective bidders may obtain same by addressing direct to the Engineer at Henderson, N. C., and making a deposit of $10.00, which deposit will be refunded upon the return of the specifications in good condition.

Each proposal must be accompanied by a certified check in the sum of five (5) per cent of the amount bid as evidence of good faith upon the part of the bidder.

The City reserves the right to reject any or all bids or accept any which may seem to be to the best interest of the City of Henderson.

A. A. BUNN, Mayor.
S. B. BURWELL, Clerk.
R. D. GLADDING, Engineer.

Bids: Aug. 10.

Highway Route No. 6, Section No. 14

Woodbury, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the County of Gloucester for the construction of State Highway Route No. 6, Section No. 14, in the city of Woodbury, estimated amount of reinforced cement concrete pavement is 19,373 square yards and furnishing materials necessary and laying 3,575 lineal feet of double street railway track.

Work is to be performed under County Reimbursement Act, Chapter 183, laws of 1918, and amended by Chapter 317, laws of 1920 and Chapter 61, laws of 1922.

Bids will be received at the Court House at Woodbury, N. J., on Thursday, August 10th, 1922, at 10.00 A. M., Eastern Standard Time, and immediately opened and publicly read thereafter.

Drawings, specifications and form of contract and bond for the proposed work are on file in the office of William C. Cattell, County Engineer, at Woodbury, N. J., and in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of ten ($10.00) dollars upon application to William C. Cattell, County Engineer. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, enclosed in sealed envelopes, addresses to the Board of Chosen Freeholders of the County of Gloucester and bearing the name and address of the bidder and the name and section of the route on the outside. Bid must be accompanied by a certified check drawn to the order of Charles N. Bell, County Treasurer, for not less than ten per cent (10 per cent) of amount of the bid, provided that said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form will be furnished on application to William C. Cattell, County Engineer.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a statement of equipment properly filled out.

By order of a resolution of the Board of Chosen Freeholders of the County of Gloucester passed at a meeting held on May 24th, 1922.

CHESTER N. STEELMAN,
Clerk.

Bid: Aug. 7.

Curbing and Paving

Leechburg, Pa.

The Council of Leechburg Borough will receive bids for grading, curbing and paving Linden Avenue and portions of First Street, Center Avenue and Floral Avenue in the Borough of Leechburg, Pa.

Approximate amount of work to be done:

8000 lin.ft. of Curbing
3000 cu.yd. of Grading
200 cu.yd. of Filling
11000 sq.yd. of Paving

Bids will be taken for reinforced concrete curbing; also for Cleveland sand stone curbing, for reinforced concrete paving; also for Trinidad asphalt paving; also for a couple of short sections of Hillside brick.

Specifications can be secured from Borough Engineer C. A. Ehrenfeld, or from John A. Hill, Borough Secretary, Leechburg, Pa.

A certified check in amount of $500.00 must accompany each bid as a guarantee, that if awarded contract, bidder will file bond, to properly execute the work. The right to reject any or all bids is reserved.

Bids must be in hands of Borough Secretary on or before 8.00 p.m., Monday, Aug. 7, 1922, at which time bids will be opened.

Bids: Aug. 15.

Street Improvement

Wadsworth, Ohio.

Notice is hereby given by direction of the Council of the Village of Wadsworth, Ohio, that sealed proposals will be received by the council of said village at the office of the Village Clerk until 12 o'clock noon on August 15, 1922, for the improvement of Highland Avenue, from Prospect Street northerly one block including intersection by construction of vitrified brick pavement on concrete base, curbs and storm sewers.

The following items relating to work and material for said improvement are from engineer's estimate:

1,840 cubic yards excavation; 2,700 square yards paving; 1,700 lineal feet curbing; 1,700 lineal feet drain; 1,000 lineal feet storm sewer.

The plans, profiles, estimates and specifications are on file in the office of the Village Clerk.

Each bid must be accompanied by a certified check for $500.00 conditioned for the proper entering into contract for construction of said improvement.

The council reserves the right to reject any and all bids.

R. W. SIMESTER,
Dated: July 7, 1922. Village Clerk.

Engineering News-Record Reaches Your Local Contractors

Its distribution among the contractors of any one state is in proportion to the number of contractors situated in that state. The Official Proposal Colums of *Engineering News-Record* offer precisely the same efficient service to municipalities, counties, and state and government departments in eyery section of the United States.

Bids: Aug. 18.

Channel Work

Bloomington, Ill.

Sealed bids will be received by the Trustees of the Bloomington and Normal Sanitary District, at 404 Unity Building, Bloomington, Illinois, up to 2 o'clock p. m., August 18, 1922, for construction of the open channel work of the District as follows:

71,300 cubic yards excavation in open channel.
76,200 square yards hand dressed spoil bank.
150 lineal feet retaining wall requiring 56 cu. yd. concrete.
75 lineal feet reinforced concrete sewer crossing under channel.
1 manhole on 33-inch sewer.
1 manhole on 48-inch sewer to be repaired.
Supports for two sewers crossing proposed channel.

Open channel has bottom widths from 8 feet to 26 feet, with side slopes 1½ to 1, average depth 7 feet.

Separate bids will be received on the dredging and spoil bank work and on the incidental work above listed.

All bids must be on forms prescribed by the Trustees and bidding blanks may be obtained from Taylor & Woltmann, 428 Unity Bldg., Bloomington, Illinois, Engineers for the District.

Plans, profiles and specifications for the work may be obtained from the Engineers.

All bids must be accompanied by a check for 10 per cent of the amount of the bid, certified by a responsible bank, payable to John W. Harber, President of Board of Trustees.

The Trustees reserve the right to reject any and all bids.

Dated Bloomington, Illinois, July 8, 1922.

JOHN W. HARBER,
FRED D. BARBER,
JOHN J. CONDON,
Trustees, Bloomington and Normal Sanitary District.

Bids: Aug. 8.

State Highway Route No. 15

Bridgeton, N. J.

NOTICE IS HERBY GIVEN that sealed **bids** will be received by the County of Cumberland for the following: Construction of State Highway Route No. 15, Section No. 4, West Main Street, Millville, New Jersey, estimated amount of Warrenite-Bitulithic surface on a Portland cement concrete foundation is 10,992 square yards.

Work is to be performed under County Reimbursement Act, Chapter 183, Laws of 1918, and amended by Chapter 317, Laws of 1920.

Bids will be received at the Court House, at Bridgeton, Cumberland County, New Jersey, on Tuesday, August 8th, 1922, at two o'clock p.m., Standard Time.

Drawings specifications and form of contract and bond for the proposed work are on file in the office of Walter M. Sharp, County Engineer, at Bridgeton, N. J., and in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars ($10.00) upon application to Walter M. Sharp, County Engineer. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, enclosed in sealed envelops, addressed to The Board of Chosen Freeholders of the County of Cumberland, and bearing the name and address of the bidder and the name and section of the route on the outside. Bid must be accompanied by a certified check drawn to the order of Edward P. Bacon, County Treasurer, for not less than ten per cent (10 per cent) of amount of the bid, provided that said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form will be furnished on application to Walter M. Sharp, County Engineer.

Each bidder must accompany his bid with a certificate from a Surety Company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a statement of equipment properly filled out.

By order of a resolution of The Board of Chosen Freeholders of the County of Cumberland passed at a meetng held on July 12th, 1922.

HOWARD L. TYLER,
July 21, 1922. Clerk.

Bids: Aug. 1.

Street Improvements

Saranac Lake, N. Y.

Sealed bids for the improvement of **streets, namely**: Park Ave., Shepard Ave., South St., and Helen St., will be received by the Village Clerk of the Village of Saranac Lake, N. Y., until 7:30 P.M. (Daylight Saving Time), Tuesday, August 1st, 1922.

Plans, details, profiles, specifications, approximate quantities, and instructions to bidders will be on file at the Village Engineer's Office after July 18th and copies may be procured from Engineer on deposit of $10.00.

The Village Board of Trustees reserves the right to reject any or all bids.

(Signed)
DAN S. FOSTER,
Village President.
SEAVER A. MILLER,
Village Clerk.
HARRY HULL, Engineer.

Bids: Aug. 6.

Mill Type Crane

Aberdeen, Wash.

Sealed proposals will be received by the **Port of Grays Harbor** at the office of the Commission, 206 E. Wishkah St., Aberdeen, **Wash.**, until 10 o'clock a.m., August 6, 1922, for one 5 Ton, or 7½ Ton, 78-foot span, Mill Type Traveling Crane.

Further information on application.

PORT OF GRAYS HARBOR.
FRANK H. LAMB, President.
J. A. VANCE, Secretary.

Bids: Aug. 10.

Spring Street Viaduct

Atlanta, Ga.

Sealed proposals to be addressed to and filed with J. N. Landers, Purchasing Agent, City of Atlanta, will be received up to two p. m. Thursday, August 10, 1922, for the construction of the Spring Street Viaduct. The work will be let under two contracts to one or two bidders. Contract No. 1 will be for the manufacture and delivery of superstructure metal work; contract No. 2, for the erection of the superstructure metal work and for the construction complete of the viaduct, approaches and incidental work. The viaduct and approaches include about 1,700 lin. ft. of elevated viaduct structures in part of structural steel and in part of reinforced concrete, and about 600 lin. ft. of approaches between the retaining walls, together with regrading and repavement of certain roadways, and alterations to certain incidental structures, and attendant construction. About 1,200 tons structural steel, 10,000 cu. yds. reinforced concrete.

Each bid shall be accompanied by certified check payable to J. N. Landers, Purchasing Agent, in an amount not less than 2 per cent of the gross amount of the bid, to be forfeited as liquidated damages by any bidder who is awarded a contract and who fails promptly to execute contract and bond. Certified checks will be returned to bidders, upon execution of contract and bond or sooner upon action of the Viaduct Committee.

Contracts will be awarded to the lowest responsible and competent bidders, but the City reserves the right to reject any and all bids and to waive informalities. Bids shall be based upon plans and specifications now on file in the office of J. N. Landers, Purchasing Agent, and in the offices of Harrington, Howard & Ash, Kansas City, and of Robert & Co., Inc., Atlanta, Associated Consulting Engineers. Copies of the plans and specifications may be secured from either of these engineers' offices by depositing $35.00. These plans and specifications shall be returned and $20.00 will be refunded.

A bond satisfactory to the City of Atlanta equal to the total gross amount of the bid will be required.

J. N. LANDERS,
Purchasing Agent, City of Atlanta.
(2nd floor City Hall.)

Bids: Aug. 10.

Drainage and Ditch Improvement

Wooster, Ohio.

Notice is hereby given that sealed proposals for the construction of the JOINT WAYNE-HOLMES COUNTY DITCH IMPROVEMENT will be received up until twelve o'clock noon Eastern Standard Time on Thursday, August 10, 1922, at the office of the Secretary of the Joint Board of County Commissioners of Wayne and Holmes Counties at the Court House at Wooster, Ohio.

The work to be done consists of the draining and dredging of Killbuck Creek in Wayne and Holmes Counties, in all, the distance of One Hundred and Fifty-Six Thousand (156,000) feet.

The yardage of earth to be moved is estimated at about 1,780,000 cubic yards, consisting principally of Hydraulic dredge work. The date of completion will be eighteen months from the date of awarding of contract.

A certified check in the amount of $10,000.00, payable to the Joint Board of County Commissioners of Wayne and Holmes Counties, Ohio, must accompany each proposal. Checks of unsuccessful bidders will be returned within ten days of the awarding of the contract.

The said board reserves the right to reject any or all bids. Plans, specifications and proposals are on file at the Secretary's office at the Court House, Wooster, Ohio, or same will be mailed upon application when same is accompanied by a deposit of $20, which will be refunded if plans are returned in good condition.

By order of the Joint Board of County Commissioners of Wayne and Holmes Counties.
CHAS. F. SCHOPF,
Secretary.

Bids: Aug. 15.

Road Work

Wadsworth, Ohio.

Notice is hereby given by direction of the Council of the Village of Wadsworth, Ohio, that sealed proposals will be received by the Council of said village at the office of the Village Clerk until 12 o'clock noon on Aug. 15, 1922, for the improvement of North Lyman Street to Akron-Wadsworth road by construction of bituminous macadam pavement, curbs and storm sewers; also construction of water and sewer mains northerly from North Street.

The following items relating to work and material for said improvement are from engineer's estimate:

7,300 cubic yards excavation; 11,000 square yards paving; 6,000 lineal feet curbing; 8,000 lineal feet drain; 5,000 lineal feet storm sewer.

The plans, profiles, estimates and specifications are on file in the office of the Village Clerk.

Each bid must be accompanied by a certified check for $500.00 conditioned for the proper entering into contract for construction of said improvement.

The council reserves the right to reject any and all bids.

Dated: July 7, 1922.
R. W. SIMESTER,
Village Clerk.

Make Plans Accessible to Distant Bidders

Plans and specifications for inspection by distant bidders may be filed at any of *Engineering News-Record* offices (without charge). Or a sufficient supply may be deposited at such of our offices as seem desirable, subject to your usual requirements in the matter of deposits, etc. (We assume full responsibility for return of plans or deposits). Therefore, Contractors in all parts of the country can bid with equal convenience on contracts advertised in *Engineering News-Record*.

Bids: Aug. 4.

Road Reconstruction

Mount Holly, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders for the reconstruction of the Medford-Mount Holly Road No. 27 in the Townships of Medford and Lumberton in the County of Burlington with a sheet asphalt surface upon a macadam foundation; estimated amount of surface pavement required is 67,000 square yards; and opened and read in public at the Collector's Office, Mount Holly, N. J., on the 4th day of August, at 10:30 a.m. Eastern Standard Time.

Drawings and specifications and forms, of bid contract and bond for the proposed work, prepared by B. H. Wills, County Engineer, has been filed in the office of the said engineer at Kelsey & Killie Building, Mount Holly, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue print of the drawings by the engineer on proper notice and payment of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Alfonza Adams, Clerk, Mount Holly, N. J., and must be accompanied by a certificate from a surety company and a certified check for not less than 10 per cent of the amount of bid and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished upon application to engineer.

The Board reserves the right to reject any or all bids.

By order of the Board of Chosen Freeholders of the County of Burlington, N. J.
ALFONZA ADAMS, Clerk.

Bids: Aug. 24.

Pumping and Filtration Works
Contract No. 24,
Filtration Division

Sacramento, Cal.

Sealed proposals for constructing the rapid sand filtration plant and appurtenances, being the Filtration Plant portion of the Pumping and Filtration, Works of the City of Sacramento, endorsed, "Proposals for Constructing the Rapid Sand Filtration Plant and Appurtenances, Filtration Division, City of Sacramento, Cal., Contract No. 24," addressed to the City Clerk, will be received at the office of the City Clerk, City Hall, Sacramento, Cal., until 9 p.m., Pacific Standard Time, on the 24th day of August, 1922, and will be publicly opened and read in the Council Chamber, City Hall, Sacramento, on the 24th day of August, 1922, after 9 p.m.

The Rapid Sand Filtration Plant and Appurtenances comprises the construction, complete, of sedimentation and coagulation basins having an aggregate capacity of approximately 10,500,000 gallons; eight rapid sand filters of concrete, having a nominal capacity of 32 million gallons per day; a super-structure over the operating gallery of the filters; a head house for administration purposes in which there is also a 200,000 gallon elevated steel water tank for filter washing purposes; a concrete sump having a capacity of approximately 200,000 gallons; a coagulant building and outside piping, excavation and embankment, and roadways and paths.

The following roughly approximate quantities are involved in the work:

14,500 cu.yd. of concrete.
477 concrete piles.
870 tons of reinforcing material.
17,500 cu.yd. of excavation.
6,000 cu.yd. of rolled fill.
300,000 cu.yd. of general fill or embankment.

In addition to these features, a considerable amount of building construction and mechanical equipment, including cast iron pipe and fittings, gate valves, sluice gates, hydraulic and electrical controlling devices, guages, conveyors, pulverizers, etc., are involved.

The above statement of quantities is presented merely for the purpose of giving a general impression of the nature and magnitude of the work to be done, and is not to be considered as exact or complete.

Each proposal must be accompanied by a certified check made payable to the order of the City Controller, City of Sacramento, Cal., in the sum of six (6) per cent of the aggregate of the proposal.

A faithful performance bond, amounting to ten (10) per cent of the contract price, and a material and labor bond amounting to fifty (50) per cent of the contract price will be required of the successful bidder, in accordance with the provisions of the City Charter and ordinances and of the State Laws.

Prior to the acceptance of the completed work a defective material and workmanship bond amounting to five (5) per cent of the amount of the contract must be furnished.

The complete contract documents may be examined at the office of the City Clerk, or at the office of the Filtration Division, or printed copies thereof, including reduced scale drawings only, will be furnished to intending bidders upon request and upon the payment of a deposit of twenty-five dollars ($25). All deposits for pamphlets will be refunded upon their return, in good condition, or if they are used in filing a proposal. Bidders desiring full scale blueprints of the Contract Drawings may obtain them by purchase at the price of twenty-five ($0.25) cents each.

No informal or irregular proposals or propositions for doing the work will be considered by the City at this time. It is the desire of the City Council to let the Contract for the work as a whole. However, the City reserves the right to receive and accept separate proposals for Items Nos. 2, 3, 4, 7 and 8, these items providing for the furnishing and installing of equipment for the Sedimentation basins, the head house, and filters and the coagulant building and for general fill and should the City receive and accept such separate proposals for these items, the successful general contractor shall be prepared to enter into a contract omitting these items. The City reserves the right to reject any or all proposals and to increase or decrease the amount of any class or portion of the work.

H. G. DENTON, City Clerk.

OFFICIAL PROPOSALS

Bids: Aug. 16.

Water Works System

Sayreville, N. J.

Sealed proposals will be received by the Mayor and Borough Council of the Borough of Sayreville, N. J., at the Borough Council Chambers, Borough Hall, in the Borough of Sayreville, on the 16th day of August, 1922, at the hour of 8 o'clock p.m., Daylight Saving Time and 7 o'clock p.m. Standard Time, for the construction of a Water Works System in the Borough of Sayreville. The work, will, in general, consist of:

Laying about 13,402 lin.ft. of 4 inch Cast Iron Pipe,

Laying about 30,715 lin.ft. of 6 inch Cast Iron Pipe,

Laying about 10,215 lin.ft. of 8 inch Cast Iron Pipe,

Laying about 14,780 lin.ft. of 10 inch Cast Iron Pipe

together with other and appertaining construction.

All of said work to be done in accordance with the plans and specifications prepared **by Waldo S. Coulter, Consulting** Engineer, 114 Liberty Street, New York, N. Y., which said plans **and specifications** were adopted by the **Borough Council** of the Borough of **Sayreville at the meeting** held Wednesday, March 15th, 1922, and which said plans and specifications are now on file in the office of the Borough Clerk, Borough Hall, Sayreville, N. J., where they may be seen by bidders or a set of the said plans and specifications can be secured from Waldo S. Coulter, Consulting 'Engineer, by depositing ten dollars ($10.00), one half of which will be refunded upon the return of the plans and specifications in good condition within seven (7) days after the award of the contract. All bids must be on the form of proposal to be obtained from the Consulting Engineer.

Each bidder must accompany his bid by a certified check of five thousand dollars ($5,000), payable unconditionally to the Treasurer of the Borough of Sayreville, which said check must be presented with the bid as a guarantee that the bidder will within ten (10) **days after receiving** the award enter into and execute a contract for the faithful performance of the work to be done under said contract, and said bid must be in a sealed envelope and marked "Proposal for a Water Works System." The successful bidder will also be required to furnish a Surety Company bond to the **Borough of Sayreville** in the amount of **Fifty Thousand Dollars** ($50,000), for the faithful performance of the work to be **done** under said contract, said bond to be **approved by the Borough Attorney.**

In case of failure to execute the contract and furnish the required Surety Company **bond** within ten (10) days after due notice **that** the contract has been awarded to him, the successful bidder shall forfeit his deposit to the Borough of Sayreville as liquidated damages.

The right to reject any or all bids is reserved by the Mayor and Borough Council.

All of said work must be completed on or before December 1, 1923.

EDWARD E. CLARK,
Mayor.

Attest:
FRANK P. KOLB,
Borough Clerk.
Approved:
THOMAS H. HAGERTY,
Borough Attorney.

Bids: Aug. 12.

Drainage Work

Kokomo, Ind.

Bids will be received by me for the construction of an improvement of Kokomo Creek by dredging upon petition of George W. Charles and others at my office in Kokomo, Indiana, on August 12, 1922, work to be completed by January 1, 1924.

ELLSWORTH HUNT,
County Surveyor.
Howard County, Indiana.
B. C. MOON, Kokomo, Indiana,
Attorney for Petitioners.

OFFICIAL PROPOSALS

Bids: Aug. ·10.

Covered Reservoir

Poughkeepsie, N. Y.

Sealed proposals will be received by the Board of Public Works at its offices in Eastman Park Mansion on or before 4 p.m. (Daylight Saving Time), Thursday, August 10th, 1922, for the construction of a Pure Water Reservoir.

Plans, specifications, form of proposal, bond and contract may be obtained at the office of the Superintendent of Public Works, Poughkeepsie, N. Y., and at the office of Hazen, Whipple and Fuller, Consulting Engineers, 30 East 42nd Street, New York City, upon the deposit of Twenty-five ($25.00) Dollars, which amount will be refunded upon the return of the plans and specifications in good condition.

Quantities of work to be done are approximately:

Item 1.	1,490	cubic yards of stripping.
Item 2.	24,500	cubic yards of general excavation.
Item 3.	125	cubic yards of trench excavation.
Item 4.	16,350	cubic yards of rolled embankment.
Item 5.	4,600	cubic yards of general fill.
Item 6.	81	cubic yards of concrete for filling.
Item 7.	1,217	cubic yards of piers and vaulting.
Item 8.	958	cubic yards of floors.
Item 9.	1,120	cubic yards of walls.
Item 10.	85,000	pounds of reinforcing steel.
Item 11.		Entrance building. Lump sum.
Item 12.		Placing cast iron pipes and gates. Lump sum.

The proposal shall be accompanied by a certified check drawn upon an incorporated **State or National Bank or Trust Company** in good credit, within this State, payable to the order of the City of Poughkeepsie for five per cent of the amount of the bid. The successful bidder will be required to give a satisfactory bond for the faithful performance of the agreement in amount equal to fifty per cent of the value of the contract.

The Board of Public Works reserves the right to reject any or all bids.

By order of the Board of Public Works.
THOMAS F. LAWLOR, Supt.
HAZEN, WHIPPLE & FULLER,
Consulting Engineers,
30 East 42nd Street,
New York City.

Bids: August 17.

Intake Pier, Screens, Mains, Storage Tanks

Wheeling, W. Va.

Sealed Proposals for the construction of an intake pier, 48-inch intake line, traveling screens with building, 17,000 feet of 30-inch steel force mains and 3,000 feet of 36-inch steel reservoir main, and 5 one-million-gallon steel storage tanks will be received by the City Clerk of Wheeling, W. Va., until twelve o'clock noon, Eastern Standard Time, on August 17th, 1922, and will then be opened and read publicly.

All bids shall be made upon the official proposal blanks attached to the Instructions to Bidders, Specifications, and Form of Contract and Bond, which may be seen at the office of the City Clerk, Wheeling, W. Va., or may be obtained by bona fide bidders upon application to The J. N. Chester Engineers, Union Bank Building, Pittsburgh, Pennsylvania, or W. M. Evans, City Clerk, upon deposit of Twenty-five Dollars ($25.00), which amount will be refunded to bidders upon return of plans and specifications in good order.

Each proposal shall be accompanied by a certified check made payable to the order of W. M. Evans, City Clerk, of not less than 5% of the total amount of the bid. This check is to be conditions that if bid is accepted, a contract will be entered into and performance of same secured within ten (10) days after notification of the acceptance of the bid. In case bid is rejected or contract entered into, check will be returned. Successful bidders will be required to furnish a corporate surety bond in an acceptable Surety Company, in the full amount of the contract.

The right is reserved to reject any or all bids.

C. H. DOWLER,
City Manager.
ATTEST:
W. M. EVANS,
City Clerk.

OFFICIAL PROPOSALS

Bids: Aug. 10.

State Road Work

Trenton, N. J.

NOTICE IS HEREBY GIVEN that **sealed bids will be received by** the State **Highway Commission of New Jersey** for **the construction of the following:**

Bituminous Concrete Shoulders two feet **wide on each side of present concrete** pavement, **Route No. 4, Job 445,** Broadway **from Main Street to Scott Avenue** in South **Amboy, in the County of Middlesex.** Estimated **1,950 square yards of** bituminous **concrete FABC-1 (Topeka) including** scarifying, **re-shaping, etc., where** necessary.

Bids will be received by the State Highway **Commission at the offices of** the Commission, **Broad Street Bank Bldg.,** Trenton, **N. J., on Thursday, August 10th,** 1922, at **11:00 A.M. STANDARD TIME** and opened **and read immediately thereafter.**

Specifications, form of bid, special addressed **envelopes and conditions** under **which bids will be accepted for** the above **are on file in the office of Mr. A.** W. Muir, **Superintendent of Maintenance,** 517 Broad **Street Bank Building, Trenton,** N. J., and **may be obtained upon request.** Bids must **be made upon the proposal forms** furnished, **in the manner designated therein,** and as **required by the specifications, same** to be **enclosed in sealed special address**ed envelopes **which will be furnished each** bidder **with the bid blank, bearing the** name and **address of the bidder and work** bid upon **on the outside, and must be accompanied** **by a certified check drawn to the** order of **the Treasurer of the State of** New Jersey **for not less than ten per cent** (10%) of **the amount of the bid, provided that** the **said certified check shall not be** less than **$500.00 nor more than $20,000.00** and be **delivered at the above place on** or before **the hour named. Bids** not submitted on **the standard proposal form** or enclosed in **other than the special** envelope will be **considered informal and will** be rejected.

Each bidder must accompany his bid **with a certificate from a surety** company **duly authorized to do business in** this State, **stating that such surety company** will provide **said bidder with a bond in** such sum **as is required in and in accordance** with **the provisions of said specifications,** conditioned **for the faithful performance** of **the provisions of the contract** and specifications.

The State Highway Commission reserves **the right to reject any or all bids.** By **order of the State Highway** Commission.

A. LEE GROVER,
Chief Clerk.

Bids: **Aug. 1.** ***(Change in Date)***

Sewers

Wheeling, W. Va.

Sealed proposals will be received by the city of Wheeling, W. Va., until 5 p.m. of the 1st day of August, 1922, for the furnishing of all material including manholes, catch basins and labor required in the construction of new sewers on the following streets:

MARKET STREET (14TH TO CREEK)—1,200 lin.ft. 42-in. reinforced concrete culvert pipe. Average cut 17 ft.

MARKET STREET (ALLEY 9 TO 14TH ST.)—275 lin.ft. 15-in. D. S. vitrified pipe. Average cut 12 ft.

MAIN STREET—1,200 lin.ft. 42-in. reinforced concrete culvert pipe. Average cut 18 ft.

12TH STREET (MAIN ST. TO RIVER)—475 lin.ft. 24-in. vitrified sewer. Average cut 12 ft.

SOUTH MARKET STREET (SOUTH OF 27TH ST.)—225 lin.ft. 36-in. reinforced concrete culvert pipe. Laid in open drain.

Contract is to be let for total amount of work and not by separate streets.

Plans and specifications and proposal forms on file in office of the City Engineer, City Building.

Individual copies of the plans and specifications will be prepared by request, for a nominal fee of $5.00.

All bids must be accompanied by a certified check of 5 per cent of the amount bid, and addressed to the City Council, care of W. M. Evans, City Clerk.

The city reserves the right to reject any or all bids.

C. H. DOWLER,
City Manager.
H. A. CONRAD,
City Engineer.

OFFICIAL PROPOSALS

Bids: Aug. 16.

Highway Bridge

Ballston, Spa, N. Y.

Pursuant to the provisions of section 262A of the Highway Law of the State of New York, being chapter 30 of the laws of 1909, as amended, sealed proposals will be received by the undersigned at the rooms of said Board in the County Courthouse at Ballston Spa, N. Y., on Wednesday the 16th day of August, 1922, at 2 P. M. advanced standard time, which is 1 o'clock P. M. Eastern standard time, for the construction of a steel highway bridge over the narrows at the north end of Saratoga Lake, Saratoga County, New York, to be known as the Saratoga Lake Bridge.

The bridge consists of three two-hundred-foot steel truss spans, with a concrete deck. The piers are concrete, resting on timber piles. The principal items are as follows:

Concrete in Substructure	760 cu.yds.
Timber Piles	5,000 lin.ft.
Structural Metal	940,000 lbs.
Concrete in Deck	390 cu.yds.

Maps, plans and specifications may be seen, and proposal forms obtained, on and after August 1st, 1922, at the office of the Saratoga County Clerk, Ballston Spa, N. Y., and the office of the County Superintendent of Highways, room 11 Starbuck Building 412½ Broadway, Saratoga Springs, N. Y.; and in the office of the Consulting Engineer, J. A. L. Waddell, 35 Nassau Street, New York City. Complete plans and specifications can be obtained upon deposit of Five Dollars ($5.00), which deposit will be refunded upon return of the plans and specifications in good condition within one week after the date of the letting.

The especial attention of bidders is called to the "Information for Contractors", and, "Instructions to Bidders" in the Specifications.

Each proposal must be accompanied by cash, draft, or certified check, payable to the order of the County Treasurer of Saratoga County, for an amount equal to at least 3% of the amount of the proposal. The retention and disposal of such cash, draft or check by the Board of Supervisors shall conform with subdivision 2, section 130 of the Highway Law as amended by chapter 623, laws of 1919, so far as the same may be applicable.

The successful bidder will be required to execute a bond in an amount equal to the contract price, with sufficient sureties, to be approved by the chairman of the Board of Supervisors, and to execute the contract within 7 days after the award thereof.

The right is reserved to reject any or all bids.

J. RICHARD WHITNEY
Clerk of the Board of Supervisors,
Ballston Spa, New York.

Bids: Aug. 15.

Miami River Bridge

Miami, Florida.

Sealed proposals, to be filed with the City Manager, will be received by the City of Miami, Florida, up to nine o'clock a.m., August 15, 1922, at the regular meeting of the Commission, for the construction of a bridge over the Miami River at Southwest Second Avenue. The bridge is a double leaf steel bascule span with concrete piers and embankment approaches; clear span 115 ft., total length of improvement about 500 ft.; one 30-ft. roadway, two 6-ft. walks. Approximate structural metal and machinery 170 tons; concrete 2,700 cubic yards; reinforcing steel 26 tons.

The work will be let to one contractor on a unit price contract. With each bid there shall be a certified check for not less than ten per cent of the gross bid, made payable to the City of Miami, to be forfeited as liquidated damages by any bidder who is awarded the contract, who fails to promptly execute the contract and bond. Checks of unsuccessful bidders will be returned upon execution of contract, or sooner, upon action of the Commission of the City of Miami. The contract will be awarded to the lowest responsible bidder, but the City Manager shall have the power to reject all bids and advertise again.

Plans and specifications may be examined in the office of Chas. W. Murray, Director of Public Service and Welfare, Miami, Florida, and in the office of Harrington, Howard and Ash, Consulting Engineers, Kansas City, Missouri. Copies may be secured from the Consulting Engineers by depositing $25.00. Such copies shall be returned and a refund of $15.00 made.

F. H. WHARTON,
City Manager.

OFFICIAL PROPOSALS

Bids: July 31.

Concrete Paving

Eastwood, N. Y.

Sealed bids will be received by the Board of Trustees of the Incorporated Village of Eastwood, N. Y., at the Village Hall, South Midler Av., until 8 p.m. July 31, 1922 for the construction of a concrete pavement with concrete curbs, on certain streets of the Village of Eastwood. Also an 8-inch Vitrified Pipe Sanitary Sewer, in Lamson St., an 8-inch Vitrified Pipe Sanitary sewer in Homecraft Road, an 8-inch Vitrified Pipe, Sanitary sewer in Glencove Road, with the necessary Man Holes and connections according to Plans and Specifications prepared by George E. Higgins, Engineer.

Plans and specifications may be seen at the office of the Engineer, 317 Wieting Block, Syracuse, N. Y. A certified check for 5% of the amount of the proposal made payable to Elmer M. Koon, Clerk.

The Board of Trustees reserve the right to reject any or all bids and to waive any defect or any informality in any bids should it be deemed to the best interests of the Village so to do.

By order of the Board of Trustees.

P. J. LOUGHREY,
President.
ELMER M. KOON,
Clerk.

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Bids: Aug. 15.

Inlet Construction

Ft. Lauderdale, Fla.

Notice is hereby given that the Board of County Commissioners, Broward County, Florida, will receive bids until 11.00 A.M., on Tuesday, August 15, 1922, for the construction of an inlet from New River Sound to the Atlantic Ocean, near Ft. Lauderdale, as per plans and specifications on file in the Clerk's Office, Courthouse Bldg., Ft. Lauderdale, Fla.

Such work shall be let in two contracts, being as follows:

(a) The dredging of 81,000 cubic yards more or less of earth; and the dredging of 5,000 cubic yards more or less of rock;

(b) The furnishing and placing of 6,200 cubic yards more or less of riprap and jetty hearting and of 2,500 tons more or less of jetty capping, all in riprap and jetty construction.

Separate bids will be received and separate contracts let for each of the two classes of work mentioned. Copy of plans and specifications may be secured from the Clerk upon payment of $1.00 to cover cost of printing the same.

Each bid shall be accompanied by a certified check in the amount of 3% of the bid, guaranteeing that the bidder will make contract and bond within ten days of notice of award.

Bond on each contract will be required in the sum of 50% of the amount bid.

Address all bids to the Board of County Commissioners, in care of Frank A. Bryan, Clerk, Ft. Lauderdale, Fla.

The Board reserves the right to reject any and all bids.

By order of the Board.

H. G. WHEELER,
Chairman.

Attest:—
Frank A. Bryan, Clerk.
Geo. B. Hills Company, Engineers,
Jacksonville, Florida.
Dated July 10, 1922.

OFFICIAL PROPOSALS

Bids: Aug. 15.

Road and Bridges

Charleston, W. Va.

Sealed Proposals will be received by the State Road Commission of West Virginia at its office in Charleston, West Virginia, until 10 o'clock a.m., on the 15th day of August, 1922, and at that time and place publicly opened and read for the construction of the following bridges and section of state road.

ROAD

Project 3126—Brooke County—0.2 mile grading and paving with Water Bound Macadam. Certified check for $700.00.

BRIDGES

Witcher Bridge No. 772, Project 116, Kanawha County, over Witchers Creek. 65 ft. steel span superstructure. Certified check for $500.00.

Cedar Grove Bridge No. 773, Project 3179 Kanawha County, over Kelly's Creek, 85 ft. steel span superstructure, concrete substructure. Separate proposals will be received for superstructure, certified check for $500.00 and substructure certified check for $500.00.

Hugheston Bridge No. 783, Project 3135-B Kanawha County, over Hughes Creek. 80 ft. steel span superstructure only, certified check for $500.00.

Hartland Bridge No. 805, Clay County, over Elk River. Concrete substructure only. Certified check for $1,100.00.

Bartow Bridge No. 829, Project 3185, Pocahontas County, over East Fork of Greenbrier River. Concrete arch, 2-56 ft. spans. Certified check for $500.00.

Poca Bridge No. 619, Putnam County, over Pocatalico River. 180 ft. span, steel truss superstructure, Ashlar masonry substructure. Separate proposals will be received for substructure, certified check for $1,400.00 and superstructure, certified check for $600.00.

East Keystone Bridge No. 727, Project 3096, McDowell County, over Elkhorn Creek. 65 ft. span steel with 5 ft. sidewalk, Ashlar masonry substructure. Substructure and superstructure to be let in one contract. Certified check for $500.00.

Clothier Bridge No. 810, Project 3059, Logan County, over Spruce Fork. 130 ft. steel span superstructure, Ashlar masonry substructure. Substructure to be let on separate contract. Certified check for $500.00.

Sharpless Bridge No. 826, Project 3059, Logan County, over Spruce Fork. 130 ft. steel span superstructure, Ashlar masonry substructure. Substructure to be let on separate contract. Certified check for $500.00.

Note: Superstructures for Bridges No. 810 and No. 826 to be let in one contract. Certified check $800.00.

Seng Camp Bridge No. 830, Project 3059, Logan County, over Seng Camp Creek. Concrete thru girder, 45 ft. span. Ashlar masonry substructure. Certified check for $500.00.

Allen Creek Bridge No. 730, Project 3062, Wyoming County, over Guyandotte River. Concrete arch, 2-75 ft. spans. Certified check for $1,000.00.

Cross Creek Bridge No. 819, Project 3126, Brooke County, over Cross Creek, concrete arch, 90 ft. span. Certified check for $1,200.00.

Granny Creek Bridge No. 807, Project 3110, Braxton County, over Granny Creek. Concrete deck girder, 50 ft. span, concrete substructure, pile foundation. Certified check for $750.00.

Junction Bridge No. 802, Project 3011-B, Hampshire County, over Mill Creek. Concrete slab, 6-20 ft. spans, concrete substructure. Certified check for $500.00.

Reynolds' Gap Bridge No. 808, Project 3013, Hardy County, over Mud Lick Run. Concrete thru girder, 2-40 ft. spans, concrete substructure. Certified check for $500.00.

Judy Bridge No. 809, Project 3014, Pendleton County, over N. Mill Creek. Concrete thru girder, 2-40 ft. spans, concrete substructure. Certified check for $500.00.

Reeds Creek Bridge No. 828, Project 3105, Pendleton County, over Reeds Creek. Concrete slab, 2-22 ft. spans, concrete substructure. Certified check for $500.00.

Proposals will be received only upon State Standard Forms in accordance with plans, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates may be obtained from the office of the State Road Commission at Charleston, West Virginia.

Each proposal must be accompanied by a certified check in the amount noted for each proposal.

The right is reserved to reject any and all proposals.

STATE ROAD COMMISSION
E. B. CARSKADON, Secretary.

OFFICIAL PROPOSALS

Bids: Aug. 16.

Sewerage System

Sayreville, N. J.

Sealed proposals will be received by the Mayor and Borough Council of the Borough of Sayreville, N. J., at the Borough Council Chambers, Borough Hall in the Borough of Sayreville on the 16th day of August, 1922 at the hour of 8 o'clock P. M., Daylight Saving Time and 7 o'clock P. M., Standard Time, for the construction of a system of sewers and appurtenances in the Borough of Sayreville. The work will in general consist of about

49,700 lin.ft. of 8 Inch Sewers
7,900 lin.ft. of 10 Inch Sewers
1,736 lin.ft. of 8 Inch c.i. outfall sewer on piles
3,700 lin.ft. of 6 Inch c.i. force main
1,470 lin.ft. of 10 Inch force main

together with sewage pumping stations and various appurtenances.

All of said work to be done in accordance with the plans, profiles and specifications prepared by Waldo S. Coulter, Consulting Engineer, 114 Liberty Street, New York, N. Y., which said plans, profiles and specifications were adopted by the Borough Council of the Borough of Sayreville at the meeting held Wednesday, March 15, 1922, and which said plans, profiles and specifications are now on file in the office of the Borough Clerk, Borough Hall, Sayreville, N. J., where they may be seen by bidders or a set of the said plans, profiles and specifications can be secured from Waldo S. Coulter, Consulting Engineer, by depositing fifteen dollars ($15.00) one-half of which will be refunded upon the return of the plans, profiles and specifications in good condition within seven (7) days after the award of the contract. All bids must be on the form of proposal to be obtained from the Consulting Engineer.

Each bidder must accompany his bid by a certified check of five thousand dollars ($5,000) payable unconditionally to the Treasurer of the Borough of Sayreville, which said check must be presented with the bid as a guarantee that the bidder will within ten (10) days after receiving the award enter into and execute a contract for the faithful performance of the work to be done under said contract, and said bid must be in a sealed envelope and marked "Proposal for a Sewerage System." The successful bidder will also be required to furnish a Surety Company bond to the Borough of Sayreville in the amount of Fifty thousand dollars ($50,000) for the faithful performance of the work to be done under said contract, said bond to be approved by the Borough Attorney.

In case of failure to execute the contract and furnish the required Surety Company bond within ten (10) days after due notice that the contract has been awarded to him, the successful bidder shall forfeit his deposit to the Borough of Sayreville as liquidated damages.

The right to reject any or all bids is reserved by the Mayor and Borough Council.

All of said work must be completed on or before December 1, 1923.

EDWARD E. CLARK,
Mayor.

Attest:
FRANK P. KOLB,
Borough Clerk.
Approved:
THOMAS H. HAGERTY,
Borough Attorney.

Bids: Aug. 7.

Water Works Improvements

Altamont, Ill.

The City of Altamont, Illinois, will open bids August seventh, 1922, for material and labor for water works improvements as follows:

One Mile of 6" low head wood stave pipe.

One Mile of 2,300 volt, 3 phase Transmission line, poles on hand, to be furnished by city.

Two motor driven centrifugal pumps and connections.

One concrete storage reservoir, and one concrete pump pit and sump.

Plans for the above can be seen at the office of H. E. Will, Commissioner of Public Property, Altamont, Illinois, and Fuller and Beard, Engineers, Railway Exchange Bldg., St. Louis, Mo. Certified check for five per cent of bid must accompany all bids.

OFFICIAL PROPOSALS

Bids: Aug. 14.

Drainage Work

Benton, Mo.

Sealed proposals for the construction of about two hundred sixty-nine thousand three hundred cubic yards of earth excavation from the existing ditch and the new ditches to be dug in Drainage District No. 15 of Scott County, Missouri, will be received by the County Court of Scott County, Missouri, at the Court House of said County at Benton, Missouri, until one o'clock (1:00) P.M., August 14, 1922. This work consists of new work and clean-out work with very little clearing, and through an improved community, with bottom width of ditch ranging from fourteen to twenty feet. Bidders will be required to state specifically:

(1) Type and manufacture of equipment to be installed.

(2) Whether new or old equipment will be installed.

(3) Capacity of dipper, bucket and cram.

(4) Length of boom.

This work is suitable for drag line or floating dredge.

The right is reserved to reject any and all bids and to waive informalities in the notices and bids when the bids are received.

No proposals will be considered unless accompanied by certified check for $1,000.00 or a proposal bond. The bidder, or bidders, to whom awards are made will be required to enter into written contracts with the District in the form approved by the District, with good and approved security for the full amount of the contract, using the form of bond approved by the District, within fifteen days after notified of his or its proposal.

Payment for the work will be made in cash.

All requests for information should be addressed to C. E. Swank, Engineer, Charleston, Missouri. Plans and specifications of the work may be seen in the office of the County Clerk at Benton, Missouri, and copies of same may be obtained from the District Engineer for a deposit of $10.00.

(Signed)

GEO. W. PEARMAN,
County Clerk of Scott County,
Missouri, Benton, Missouri.

RAY B. LUCAS, Attorney,
Benton, Mo.

C. E. SWANK, Engineer,
Charleston, Mo.

Bids: Aug. 7.

Remodelling Water Treatment Plant

Falls Creek, Pa.

Will be received by the Borough of Falls Creek, Jefferson County, Pennsylvania, at the Council Chamber, until 7 p. m. on the 7th day of August, 1922, for the construction work and other incidental work to the remodelling of the Borough Water Treatment Plant.

Plans and specifications can be seen and proposal sheets obtained from the secretary of the borough or at the office of Banks & Craig, engineers, Telegraph Building, Harrisburg, Pennsylvania. The estimated cost of the work is $7,000.00.

A set of plans and sepcifications can be obtained by placing a deposit drawn to the Borough Treasury in the amount of $5.00; $3.00 of which will be returned if the plans are returned in good condition and $2.00 of which will be returned if the specifications are returned in good condition, within thirty days (30) after the award of the contract.

Each bid must be accompanied by a certified check, payable to the order of the Borough of Falls Creek, in the amount of $100.00 as a guarantee that the bidder will enter into contract with the Borough of Falls Creek within ten days from the award of the bid.

The Borough Council reserves the right to reject any and all bids.

A L LUKEHART,
President of Council
C. E. SLAYTON,
Secretary of Council

OFFICIAL PROPOSALS

Bids: Aug. 10.

Asphaltic Concrete Fine Aggregate Mix

Burlington, Vt.

Sealed proposals will be received by the City of Burlington on Thursday, August 10th, at one o'clock p.m. *Standard time*, at the City Hall, Burlington, Vermont, for the improvement of South Union Street and Shelburne Road. The work will consist of approximately 15,800 square yards of asphaltic concrete on macadam with 570 cubic yards concrete foundation in car track area. Or an alternate consisting of 14,300 square yards of asphaltic concrete on macadam with 340 cubic yards concrete pavement and 450 cubic yards concrete foundation.

All bids must be upon blanks provided in the proposal furnished to bidders.

Bids must be accompanied by a certified check for three per cent (3%), of the amount of the bid. Plans and specifications will be on file at the City Clerk's office, City Hall, Burlington, Vermont, and at the office of the Engineer, H. Eltinge Breed, Room 600, 507 Fifth Avenue, New York City.

Copies of the plans and specifications may be obtained for three dollars ($3.00) per set. No refund for blanks returned. Bidding blanks will be furnished free.

The right is reserved to reject any or all bids.

EDWARD CORLEY,
City Clerk.

Bids: Sept. 16.

Tenders for Plant

Melbourne, Australia.

Tenders are hereby invited for the supply, delivery, etc., of the following for the Morwell Power Scheme.

Copies of Tender Form and Specification will be available upon application to: Office of the Bureau of Foreign & Domestic Commerce, United States Department of Commerce, First National Bank Building, CHICAGO, and Office of the Bureau of Foreign & Domestic Commerce, United States Department of Commerce, 734 Customs House, NEW YORK CITY.

SPECIFICATION NO. 261—STRAIN & PIN TYPE INSULATORS

CHARGE: £2:2:0 for the first three copies of Tender Form, Conditions of Contract, Specification and Drawing complete. These charges will be returned on receipt of a bona fide tender. A fourth copy and any further copies will be supplied for the sum of 10/6 each.

PRELIMINARY DEPOSIT: A preliminary deposit of £100:0:0 is to lodged with Tender.

The Specification may be inspected at the above mentioned Offices, and also at the office of: The Commissioner for Australia in U. S. A., Room 3012, 61 Broadway, NEW YORK.

The Commission does not bind itself to accept the lowest or any tender.

Tenders on prescribed form, properly endorsed and addressed, must be delivered to the undersigned in Melbourne not later than Noon, 16th September, 1922.

R. LIDDELOW, Secretary,
State Electricity Commission of Victoria,
Melbourne,
Victoria, Australia.

Bids: Aug. 10.

Boring Test Wells

New Orleans, La.

Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans at their office, Suite 200, New Court Building, until 3 P.M., August 10th, 1922, and then publicly opened for boring the following test wells:

One at Toulouse and Dumaine Sts., 150 ft. deep
One at Foot of Barracks Street, 200 ft. deep
One at Foot of Port Street, 150 ft. deep

A deposit of $250.00 in cash or certified check is required with each proposal.

A bond to the amount of 50 per cent of the sum bid in each proposal is required with notarial contract.

Specifications and proposal forms are on file in the office of the Supervisor of Purchases at No. 1 Canal St., New Orleans, Louisiana, and will be furnished to prospective bidders upon application.

The right is reserved to reject any and all bids and to waive informalities.

J. H. WALSH,
General Manager.

OFFICIAL PROPOSALS

Bids: Aug. 9.

Reconstruction: Sec. 6, Route 14

Atlantic City, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Atlantic County, N. J., at 12 o'clock noon on August 9th, 1922, (Daylight Saving Time), during a regular meeting of the Board at its meeting room in the Guarantee Trust Building, Atlantic City, N. J., for the reconstruction of section No. 6 of Route No. 14 in Hamilton Township, County of Atlantic, and State of New Jersey, with a Warrenite-Bitulithic pavement on a six inch (6 in.) 1-3-5 concrete base. The estimated amount of pavement and of base is 8,123.51 square yards together with excavation, extra embankment, gravel shoulders, drainage provisions and various other details required in the work. The aforesaid bids will be opened and read in public at the time and place stated for receiving them.

Plans, specifications, and forms of bid, certificate of surety, contract and bond, as prepared by A. H. Nelson, County Engineer and approved by the State Highway Commission, have been filed at the office of the County Engineer at 636 Guarantee Trust Building, Atlantic City, N. J., and at the office of the State Highway Commission in Broad Street Bank Building, Trenton, N. J., at which places they may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of said plans and specifications by the County Engineer on consideration of a deposit of $10 (Ten Dollars), which deposit will be refunded if the plans and specifications are returned to him in good condition by noon of August 9th, 1922. Each bid must be made on the standard proposal form, in the manner designated therein and required by the specifications, must be enclosed in a sealed envelope bearing on the outside the name and address of the bidder and the name of the road and the envelope must be addressed to the Board of Chosen Freeholders, Atlantic County, N. J. Each bid must be accompanied by a certificate of surety and by a certified check in an amount not less than Ten (10%) per cent of the bid and must be delivered at the place and on the hour above stated for receiving bids. A contract will be awarded, if awarded at all, subject to the sale and delivery of bonds which will be issued for the purpose of paying for the proposed work.

By order of the Board of Chosen Freeholders of Atlantic County.

F. W. WILLETTS,
Clerk.

Bids: Aug. 8.

Concrete Road

Trenton, N. J.

The Board of Freeholders of Mercer County will receive bids on Tuesday, Aug. 8th, 1922, at 2:30 o'clock daylight saving time, in the afternoon, at their regular place of meeting, Court House, Trenton, New Jersey, for constructing 8 inch reinforced concrete road $2\frac{4}{10}$ miles in length parallel to D. & R. Canal Feeder from Scudder's Falls to Washington's Crossing.

Work will be carried out under a bonus and penalty contract.

The estimated quantities of the principal items of construction are as follows:

Unclassified Excavation, 8,000 cu.yds.
Concrete Pavement, 29,000 sq.yds.
Macadam Shoulders, 8,400 sq.yds.
Cable Guard Rail, 10,525 lin.ft., together with drainage structures, walls, sodding, etc.

Prospective bidders are referred to plans and specifications covering the above work prepared by Harry F. Harris, Mercer County Engineer, which plans and specifications are on file in his office at the Court House, Trenton, New Jersey. Copies of said plans and specifications may be obtained upon deposit of the sum of $10.00, which will be refunded if the plans and specifications are returned in good condition within 48 hours after the bids are opened.

Each bid must be accompanied by a certified check in the amount of five thousand dollars ($5,000.00) payable to Edgar G. Weart, County Treasurer, also by a proposition from a surety company fulfilling the requirements of Section 507, Chapter 185, P. L., 1918.

The right is reserved to reject any or all bids and to waive any immaterial defect or informality in any bid should it be in the interest of the County to do so.

WM. M. PETTIT,
Director of Department of New Roads.

OFFICIAL PROPOSALS

Bids: Aug. 14.

Sanitary Sewerage System

Pensauken, N. J.

Sealed proposals will be received by the Township Committee of the township of Pensauken, N. J., at the Township Hall, Cove Road and Center Street, on the 14th day of August, 1922, until 8:00 o'clock p.m. (Daylight saving time) for the construction of a sanitary sewerage system consisting of approximately 20 miles of 5-inch to 15-inch T. C. pipe sewer, 262 manholes, 17 flush tanks (Contract No. 1) and the two motor-driven, sewage pumping stations (Contract No. 2).

Each proposal must be accompanied by a certified check, made payable to the Township of Pensauken, for a sum equal to 5% of the amount bid.

Plans and specifications are on file and may be seen at the office of the Township Clerk or at the office of the Engineers, Remington & Vosbury, 601 Market Street, Camden, N. J. Complete sets of plans and specifications may be obtained from the Engineers upon deposit of $20.00, of which $15.00 will be refunded upon their return in good condition by August 16th, 1922.

The Township reserves the right to reject any or all bids.

ROBERT V. PEABODY,
Township Clerk.

Largest Circulation
of Any
Technical Paper

Engineering News-Record's circulation—over 30,000 weekly—is the largest of any technical paper printed. It includes among its readers practically every contractor, dealer, and manufacturer in the country who is interested in bidding on public works contracts—either local or outside of his immediate vicinity.

Bids: Aug. 10.

Cast Iron Water Pipe or Steel Water Pipe

Poughkeepsie, N. Y.

Sealed proposals will be received by the Board of Public Works at its offices in Eastman Park Mansion on or before 4 p.m. (Daylight Saving Time), Thursday, August 10th, 1922, for furnishing Cast Iron Water Pipe and Specials, or Steel Water Pipe and Specials.

Specifications, form of proposal, bond and contract may be obtained at the office of the Superintendent of Public Works, Poughkeepsie, N. Y., and at the office of Hazen, Whipple and Fuller, Consulting Engineers, 30 East 42nd Street, New York City, upon the deposit of Ten ($10.00) Dollars, which amount will be refunded upon he return of the specifications in good condition.

The materials to be furnished are as follows:

Approximately 2,589 Tons of 20"-24" and 30" Cast Iron Bell and Spigot Pipe.

Approximately 165,000 lb. Bell and Spigot Standard Specials.

AND AS AN ALTERNATE TO THE ABOVE

Approximately 20,680 lineal feet of 24" Steel Pipe $\frac{5}{16}$" thick.

Approximately 250 lineal feet of 30" Steel Pipe $\frac{5}{16}$" thick.

Approximately 9,000 lbs. of Cast Steel Saddles and Fittings.

The proposal shall be accompanied by a certified check drawn upon an incorporated State or National Bank or Trust Company in good credit, within this State, payable to the order of the City of Poughkeepsie for five per cent of the amount of the bid. The successful bidder will be required to give a satisfactory bond for the faithful performance of the agreement in amount equal to fifty per cent of the value of the contract.

The Board of Public Works reserves the right to reject any or all bids.

By order of the Board of Public Works.

THOMAS F. LAWLOR, Supt.

HAZEN, WHIPPLE & FULLER,
Consulting Engineers,
30 East 42nd Street,
New York City.

OFFICIAL PROPOSALS

Bids: Aug. 15.

Hydro-Electric Project

Dotham, Ala.

Sealed proposals will be received by the Mayor and City Council of the City of Dothan, Alabama, until 2 o'clock p.m., Tuesday, August 15th, 1922, for constructing a Hydro-Electric Project with appurtenances, and furnishing materials and equipment, at High Bluff on the Choctawhatchee River about eight (8) miles from Hartford, Ala., in sections 9 and 4 of township 2N, Range 23E, Geneva County, Alabama. The work consists of the construction of an earth dam, a concrete spillway, abutments and power house, and the furnishing and placing of machinery.

The principal approximate quantities involved are the following:

51,000 cu.yds. of excavation.
380,000 cu.yds. of embankment.
18,500 cu.yds. of concrete of different classes.
1,900,000 pounds of reinforcing steel.
354,000 pounds of structural steel work.

Turbines, generators, transformers and auxiliary power house equipment for a present installation of approximately 3,000 bhp. capacity in two units.

A transmission line twenty-one and one-half ($21\frac{1}{2}$) miles long at 44,000 volts pressure.

Plans and specifications are on file at the office of the City Clerk at Dothan, Alabama, and at the office of The Ludlow Engineers at Winston-Salem, N. C., where they may be examined by prospective bidders.

Copies of the plans covering the construction details of this project and two copies of the specifications attached to the form of proposal and contract will be furnished by The Ludlow Engineers, Winston-Salem, N. C., upon application by prospective bidders accompanied by a check for twenty-five ($25.00) dollars to cover the cost, or, separate prints, and extra copies of specifications and form of proposal, etc., at one ($1.00) dollar each.

Each bid must be accompanied by a certified check for approximately five (5%) per cent of the bid.

Proposals will be received at the City Hall, Dothan, Alabama, and opened publicly wih the right reserved to accept any bid or to reject any or all bids as the best interests of the City may appear.

Plans and supervision by THE LUDLOW ENGINEERS, INC. Winston-Salem, N. C.

E. O. JONES, Mayor.
R. W. LISENBY, City Clerk.

Bids: Aug. 23.

Pipe Sewers and Disposal Works

Rye, N. Y.

Sealed proposals will be received and opened publicly by the Trustees of the Village of Rye, N. Y., at the Village Municipal Hall, at 8.15 p.m., August 23rd, 1922.

Said proposals to cover construction (both materials and labor included) of certain pipe sewers and disposal works, according to plans and specifications filed with the Village Clerk.

Copies of plans and specifications may be seen also at office of City-Wastes Disposal Co., 45 Seventh Ave., New York City. Sets may be borrowed upon deposit of $15 of which $10 will be refunded if papers are returned in good condition before Sept. 1st., 1922.

Approximately the proposed work consists of:

About 29,000 feet of 8-inch and 600 feet of 15-inch vitrified pipe sewers, with manholes and flushtanks, much of it in rock excavation;
About 6,600 feet of iron pipe sewers, siphons and force-mains, 8-inch to 16-inch;
An indeterminate amount of drain-tile laid in sewer trench;
Sewage tanks, sprinkling filters and sand-beds, with appurtenances.

Each bid must be made on blank forms obtained from the Village Clerk or the Engineer, and must be accompanied by a certified check for $10,000 as a guarantee of good faith.

The Village reserves the right to reject any or all bids.

WILLIAM H. SELZER,
Village Clerk,
Rye, Westchester Co., N. Y.

G. EVERETT HILL,
Engineer,
45 Seventh Ave., New York.

Bids: Aug. 16.

Steel Tower Tank

Sayreville, N. J.

Sealed proposals will be received by the Mayor and Borough Council of the Borough of Sayreville, N. J., at the Borough Council Chambers, Borough Hall. in the Borough of Sayreville on the 16th day of August, 1922 at the hour of 8 o'clock P. M., Daylight Saving Time and 7 o'clock P. M., Standard Time, for furnishing of 100,000 gallon steel tank on a tower sixty (60) feet high to the balcony, and erecting on foundations to be provided by the Borough of Sayreville.

All of said work to be done in accordance with the specifications prepared by Waldo S. Coulter, Consulting Engineer, 114 Liberty Street, New York, N. Y., and which said specifications were adopted by the Borough Council of the Borough of Sayreville, the meeting held Wednesday, March 15, 1922, which said specifications are now on file in the office of the Borough Clerk, Borough Hall, Sayreville, N. J., where they may be seen by bidders or a set of said specifications can be obtained from Waldo S. Coulter, Consulting Engineer upon the payment of two dollars ($2.00), which sai dsum of two dollars ($2.00) will not be refunded.

Each bidder shall submit with his proposal a drawing showing the sizes of the various members and the dimensions of the structure he proposes to furnish under this contract.

Each proposal must be in a sealed envelope and marked, "Proposal for Steel Tower Tank." Each bid must be accompanied by a certified check for five hundred dollars ($500) made payable unconditionally to the Treasurer of the Borough of Sayreville, which check must be presented with the bid as a guarantee that the bidder will within ten (10) days after receiving the award, enter into contract with the Borough of Sayreville for the performance of the work, and will also provide a Surety Company bond to be approved by the Borough Attorney in the sum of five thousand dollars ($5,000) for the faithful performance of the said contract.

The Mayor and Borough Council reserve the right to reject any and all bids.

The erection and construction of said steel tower tank must be completed within 150 consecutive working days from the date of the signing of the contract.

EDWARD E. CLARK,
Mayor.

Attest:
FRANK P. KOLB,
Borough Clerk.
Approved:
THOMAS H. HAGERTY,
Borough Attorney.

Bids: Aug. 7.

Village Hall

Pelham Manor, N. Y.

NOTICE is hereby given that the Board of Trustees of the Village of Pelham Manor will receive sealed proposals up to 8.30 p.m., Aug. 7, 1922, for the construction of an extension to the Village Hall, in said Village, at which time bids will be opened, at the said Village Hall and the contract awarded. Copies of the Plans, Specifications and Bid Sheet may be had from Electus D. Litchfield & Rodgers, Architects, 477 5th Avenue, New York City or from the undersigned Village Clerk. Estimated cost of work $45,000.

All bids must be on the form attached to the Specifications and must be accompanied by a certified check to the order of the Village of Pelham Manor for 5 per cent of the amount of the bid, said check to be retained by the Village in the event of the bidder failing to enter into a contract within 10 days after acceptance of bid. The Board reserves the right to reject any and all bids.

LIVINGSTON LEEDS,
Village Clerk,
Pelham Manor, N. Y.
Dated: July 6th, 1922.

Bids: Aug. 16.

Cast Iron Water Pipes

Sayreville, N. J.

Sealed proposals will be received by the Mayor and Borough Council of the Borough of Sayreville, N. J., at the Borough Council Chambers, Borough Hall, in the Borough of Sayreville on the 16th day of August, 1922 at the hour of 8 o'clock, P. M., Daylight Saving Time and 7 o'clock, P. M., Standard Time for the furnishing of one hundred forty-six (146) tons 4 Inch cast iron pipe, hub and spigot ends, Class "B"; twelve hundred ninety-three (1293) tons 6 Inch to 18 Inch Cast Iron Pipe, hub and spigot ends, classes "B" and "C", and twenty-four (24) tons special iron castings. All pipe and special castings to be manufactured in accordance with Am. W. W. Assn. specifications. All proposals shall state the price per ton of 2,000 pounds, Sayreville, N. J.

All of said bids shall be in accordance with the specifications prepared by Waldo S. Coulter, Consulting Engineer, 114 Liberty Street, New York, N. Y., which said specifications were adopted by the Borough Council of the Borough of Sayreville at the meeting held on Wednesday, March 15, 1922, which said specifications are now on file in the office of the Borough Clerk, Borough Hall, Sayreville, N. J., where they may be seen by bidders, or a set of said specifications can be obtained from Waldo S. Coulter, Consulting Engineer, upon the payment of two dollars ($2.00), which said sum of two dollars ($2.00) will not be refunded.

Each proposal must be in a sealed envelope and marked "Proposal for Cast Iron Pipe." Each bid must be accompanied by a certified check for four thousand dollars ($4,000) made payable unconditionally to the Treasurer of the Borough of Sayreville, which check must be presented with the bid as a guarantee that the bidder will within ten (10) days after receiving the award, enter into contract with the Borough of Sayreville for the furnishing of the said cast iron pipe and special castings, and will also provide a Surety Company Bond to be approved by the Borough Attorney in the sum of Thirty thousand dollars ($30,000) for the faithful performance of the contract.

The furnishing of said cast iron pipe and special castings shall be completed within 150 days from the date of the signing of the contract.

The Mayor and Borough Council reserve the right to reject and and all bids.

EDWARD E. CLARK,
Mayor.

Attest:
FRANK P. KOLB,
Borough Clerk.

Approved:
THOMAS H. HAGERTY,
Borough Attorney.

Bids: Aug. 4.

Bridge Superstructure, Machinery and Electrical Equipment

Seattle, Wash.

Sealed proposals will be received by the Board of Public Works of the City of Seattle, up to 10 o'clock a.m., Friday, August 4th, 1922, in room 234, County-City Building, for the fabrication and erection of the Super-structure, Machinery and Electrical Equipment of a Steel Bascule Bridge and two Side Spans over the West Waterway at West Spokane Street, under authority of Ordinance No. 43397.

The structure will comprise a double-leaf bascule span 288 feet center to center of trunnions, 2 approach spans each about 140 feet long and a steel girder span about 136 feet long. The width of the bascule span will be 45 feet center to center of trusses and of the side spans 52 feet center to center of trusses, and of the girder span about 40 feet.

No proposal will be considered except as same is made strictly in conformity with the advertisement therefor and upon the forms of proposals furnished by the Board of Public Works, bound together with the specifications, general clauses and form of contract which must be submitted unbroken and unaltered in every particular.

This improvement shall be made in accordance with the respective plans and specifications now on file in the offices of the Secretary of the Board of Public Works and the City Engineer, respectively.

The successful bidder will be required to file with the City Comptroller a bond in the sum specified in the specifications.

Each bid must be accompanied by money, a satisfactory surety company bid bond approved by the Mayor and City Comptroller as to sufficiency and the Corporation Counsel as to form, or a certified check payable to the order of the City Comptroller of the City of Seattle for a sum not less than five (5) per cent of the total amount of bid, and no bid will be considered unless so accompanied.

A deposit of Ten Dollars ($10.00) will be required for each set of plans and specifications, which will be returned upon return of the plans in good order.

Special attention of bidders is called to the State Law and City Charter regarding the number of hours constituting a day's work, minimum wage scale, American citizenship and heads of families.

The Board of Public Works reserves the right to reject any or all bids.

By order of the Board of Public Works.

C. B. BAGLEY,
Secretary.

First publication June 20, 1922.

WHY CALL A PIANO TUNER
WHEN A DOCTOR IS WHAT YOU WANT?

¶The daughter of a neighbor of mine seriously injured her leg. False pride kept her from calling a physician. ¶Finally the mother's pleadings prevailed and she agreed to be administered to by a very gentlemanly-looking chap who daily passed the house, kit in hand. ¶A vigil was kept and on his next appearance he was called--literally dragged—into the house. ¶Telling him nothing about the case, the injured limb was brought to view and he was asked what he would do about it. He replied: "I think I should call a doctor." "But aren't you a doctor?" he was asked. "No, I'm a piano tuner." ¶Just because a man has a general insurance man's kit is no sign he can handle a Contract Bond properly. ¶Why call a piano tuner when a doctor is what you want? Swart Contract Bond Service is highly specialized—and costs no more.

Swart Service Really Serves!
HARMON V. SWART
Contract Bonds *Compensation Insurance*
92 William Street, New York

CONTRACT BONDS FOR RESPONSIBLE CONTRACTORS
The contractor who seeks to save a small fee by asking a friend to sign his bond sacrifices his independence.
ÆTNA CASUALTY AND SURETY COMPANY
HARTFORD, CONN. AGENTS EVERYWHERE

OFFICIAL PROPOSALS

Bids: Aug. 8.

State Highway Work

Baltimore, Md.

Sealed proposals for building nine sections of State Highway, as follows:

ALLEGANY CO. Cont. A-21—One section of State Highway from Cumberland towards Oldtown, for a distance of 3.0 miles. Concrete.

FREDERICK CO. Cont. F-51—One section of State Highway from Libertytown toward New Windsor for a distance of 2.0 miles. Concrete.

HOWARD CO. Cont. HO-24—One section of State Highway from West Elkridge toward Pfeiffer's Corner for a distance of 2.0 miles. Alternate bids concrete and gravel.

ANNE ARUNDEL CO. Cont. AA-20—One section of State Highway from Jacobsville toward Lakeshore for a distance of 1.0 mile. Concrete.

PRINCE GEORGE CO. Cont. P-38—One section of State Highway from Riggs School toward Hyattsville, a distance of 1.0 mile. Concrete.

PRINCE GEORGE CO. Cont. P-33—One section of State Highway from end of Contract P-24 toward Ashton, for a distance of 1.0 mile. Concrete.

CHARLES CO. Cont. CH-20—One section of State Highway from end of Contract CH-17 toward Lyons Corner, a distance of 2.0 miles. Gravel.

ST. MARYS CO. Cont. SM-18—One section of State Highway from Harpers Corner toward Laurel Grove, a distance of 2.5 miles. Gravel.

DORCHESTER CO. Cont. D-26—One section of State Highway from end of Contract D-24 toward Lloyds, a distance of 1.0 mile. Concrete.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., Standard Time, on the 8th day of August, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 20th day of July, 1922.

JOHN N. MACKALL,
Chairman.

L. H. STEUART, Secretary.

Bids: Aug. 14.

Dam Construction

Newburgh, N. Y.

Sealed proposals will be received by the City Manager of Newburgh, N. Y., for the construction of dams at Silver Stream until 12 o'clock, noon, Monday, August 14.

The work comprises the construction of two adjoining dams, the total length of which is about 1,200 feet. The easterly dam is to be of earth with a concrete core wall, concrete spillway, small gate house and superstructure with a 48-inch blow-off pipe. Alternate bids are asked for the west dam, for earth embankment, with concrete core wall and also with a reinforced concrete center section to take the place of the earth embankment in the dam.

A certified check of $5,000 is required with each bid. A deposit of $15 is required for each set of plans and specifications, $10 of which will be returned upon the return of the plans and specifications.

Information regarding plans and specifications, etc., may be obtained at the offices of George W. Fuller and James C. Harding, 170 Broadway, New York City, and at the office of the City Engineer, at the City Hall, Newburgh, N. Y.

W. JOHNSTON McKAY,
City Manager.

WANTED—TO SUBLET

40,000 square yards of Waterbound Macadam. State Highway work—Western North Carolina. Equipment installed and operating. May be bought or sold to responsible parties only.

**W-653, Engineering News-Record,
509 Real Estate Trust Bldg., Phila.**

OFFICIAL PROPOSALS

Bids: Aug. 10.

Filter Equipment and Superstructure

Benton Harbor, Mich.

Sealed proposals will be received on Aug. 10, 1922, at 1:30 p.m. (Central Standard Time) at the City Hall, Benton Harbor, Mich., for (a) piping and equipment for a two million gallon per day water softening and purification plant and also for (b) a two-story brick and concrete superstructure. Independent proposals may be made for A and B but no further subdivision will be permitted. Plans and specifications may be obtained on and after July 26, 1922, upon deposit of fifteen dollars ($15) from Pearse, Greeley & Hansen, 39 W. Adams Street, Chicago, Ill. They may also be examined at the office of City Manager, in Benton Harbor.

GUY TYLER, City Manager.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, BALTIMORE, MD., Sealed proposals will be received here until 1 p.m., daylight saving time, August 21, 1922, and then opened for dredging in Baltimore Harbor and Channels, Md. Further information on application.

DEPARTMENT OF THE INTERIOR UNITED STATES RECLAMATION SERVICE, Denver, Colo., Sealed proposals will be received at the office of the United State Reclamation Service, Klamath Falls, Oregon, until 2 o'clock p.m., August 12, 1922, and will at that hour be opened, for erecting timber turnout and check structures on the laterals of the Tule Lake Division, Klamath project, involving about 3,000 cubic yards of excavation, the erection of about 151,000 feet B.M. of lumber, the placing of about 3,700 linear feet of 18-inch diameter metal pipe, and the installation in the structures of about 29,000 pounds of gates and other metal work. The work is situated about twenty-two miles southeast of Klamath Falls, Oregon, in Township 48 North, Ranges 4 and 5 East, M.D.M. For particulars address the United States Reclamation Service, Denver, Colorado, or Klamath Falls, Oregon. R. F. Walter, Acting Chief Engineer.

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y. Sealed proposals will be received here until 12 m., August 7, 1922 (daylight saving time), and then opened, for dredging and rock removal in Bronx River, N. Y. Further information on application.

DEPARTMENT OF THE INTERIOR, UNITED STATES RECLAMATION SERVICE, Washington, D. C., July 18, 1922. Sealed proposals for furnishing motors, transformers and switching apparatus for the Valley Drainage Pumping Plant, Yuma Project, Arizona, will be received at the office of the United States Reclamation Service, Denver, Colorado, until 2 o'clock p.m., September 6, 1922, and will then be opened.

For particulars address the United States Reclamation Service, Washington, D. C., Denver, Colorado, or Yuma, Ariz. A. P. Davis, Director.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., July 18, 1922.—SEALED PROPOSALS will be opened in this office at 3 p.m., August 22, 1922, for construction of the United States Post Office at Spanish Fork, Utah. Drawings and specifications may be obtained from the custodian of the site at Spanish Fork, Utah, or at this office in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.

UNITED STATES ENGINEER OFFICE, NORFOLK, VA.—Sealed proposals will be received here until 12 m., August 23, 1922, and then opened, for dredging on the 40-foot channel, Norfolk Harbor, Va. Further information on application.

PROPOSALS FOR CEMENT.—Office, Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn.—Sealed proposals for furnishing and delivering about 7,000 sacks of Portland Cement will be received at this office until 11 a.m., Aug. 1, 1922, and then opened. Further information on application.

U. S. GOVERNMENT

UNITED STATES ENGINEER OFFICE, Duluth, Minn., July 14, 1922. Sealed proposals will be received here until 10 o'clock a.m., August 14, 1922, and then opened, for constructing and delivering a steel derrick scow, complete with machinery and equipment. Further information on application.

U. S. ENGR. OFFICE, WILMINGTON, Del. Sealed proposals will be received here until 11 a.m., standard time, Aug. 15, 1922, and then opened, for excavating Inland Waterway from Delaware River to Chesapeake Bay, Del. and Md. (Chesapeake and Delaware Canal). Further information on application.

U. S. ENGINEER OFFICE, Providence, R. I. Sealed proposals will be received here until 11 o'clock a.m., Eastern Standard Time, August 15, 1922, and then opened, for rock removal in Stamford Harbor, Conn. Further information on application.

U. S. ENGINEER OFFICE, Galveston, Tex. Sealed proposals will be received here until 12 M., Aug. 15th, 1922, and then opened, for dredging the Houston Ship Channel, Texas. Further information on application.

PROPOSALS FOR PONTOON CATAMARANS.—U. S. Engineer Office, 2d District, Portland, Ore.—Sealed proposals for 80 all steel pontoon catamarans will be received here unti 11 a.m., August 21, 1922, and then opened. Further information on application.

U. S. VETERANS' BUREAU, Office of the Director, Washington, D. C., July 15, 1922. Sealed proposals will be received at this office until 3 o'clock p.m., on September 1, 1922, and then opened, for the purchase of 2 complete York 100-ton refrigerating plants in U. S. Veterans' Hospital No. 42, Perryville, Md. The sealed envelope must be plainly marked "Proposal for purchase of refrigerating machinery to be opened at 3 p.m., September 1, 1922," and addressed to U. S. Veterans' Bureau, Room 1027, Arlington Building, Washington, D. C. A description of the equipment to be sold, conditions, etc., can be had on application to the Medical Officer in Charge, U. S. Veterans' Hospital No. 42, Perryville, Md. L. B. Rogers, Acting Director.

PROPOSALS FOR STEEL HULL.—U. S. Engineer Office, Montgomery, Ala. Sealed proposals will be received here until 11 A. M., July 31, 1922, and then opened, for furnishing one steel hull for dipper dredge Upatoi. Further information on application.

PROPOSALS FOR STONE.—U. S. ENGINEER OFFICE, 329 Custom House, New Orleans, La.—SEALED PROPOSALS will be received here until 11 a.m., August 15, 1922, and then opened, for furnishing and delivering stone for Southwest Pass, Head of Passes and South Pass, Mississippi River. Further information on application.

U. S. ENGINEER OFFICE, 616 Army Building, New York City.—SEALED PROPOSALS will be received here until 11 a.m., Eastern Standard Time, August 19, 1922, and then opened, for dredging in Passaic River, N. J. Further information on application.

U. S. ENGINEER OFFICE, 815 Witherspoon Bldg., Philadelphia, Pa. Bids are wanted until Aug. 7, 1922, for dredging in Delaware River in front of Camden, N. J. Further information on application.

DEPARTMENT OF THE INTERIOR, UNITED STATES RECLAMATION SERVICE, Washington, D. C., July 18, 1922.—Sealed proposals for the construction of about 11 miles of main canal, Langell Valley Division, on the Klamath Project, Oregon-California, involving about 190,000 cubic yard of excavation, will be received at the office of the United States Reclamation Service, Klamath Falls, Oregon, until 2 o'clock p.m., August 31, 1922, and will at that hour be opened. The work is located about 25 miles east of Klamath Falls, Oregon, in Townships 40 and 41 South, Range 13 East, W. M. For particulars address the United States Reclamation Service, Washington, D. C., Denver, Colorado, or Klamath Falls, Oregon. A. P. Davis, Director.

SEARCHLIGHT SECTION

EMPLOYMENT—BUSINESS OPPORTUNITIES

Positions Wanted, 4 cents a word, minimum charge 75 cents an insertion.
Positions Vacant and all other classifications, 8 cents a word, minimum $2.

Box Numbers in care of any of our offices count as 5 words in addition to advertising copy.

Replies are forwarded each day as received at all of our offices without additional charge.

Discount of 10% is allowed if one payment is made in advance for 4 consecutive insertions.

THE ABOVE RATES ARE FOR ADVERTISEMENTS SET UNDISPLAYED. FOR DISPLAY RATES SEE "EQUIPMENT" HEADING.

E. N. R.

POSITIONS VACANT

BRIDGE designer wanted for highway work; desirable age, 30-45; technical graduate preferred; experience, 5 years in responsible charge, or **as** designer. P-729, Eng. News-Record.

DRAFTSMEN, at least two years' structural, mechanical, topographical or electrical drafting experience required; $1,800 per annum to start; preference to technical graduates; give full particulars as to experience, age and nationality in first letter. P-675, Eng. News-Record.

DRAFTSMEN, structural steel, wanted for detailing and checking steel work for buildings, conveyors, tanks and general steel work. Permanent position for men who can make good. Submarine Boat Corporation, Box 456, Newark, New Jersey. Phone Mulberry 4300.

DRAFTSMAN, civil engineering, with experience on structural steel and concrete design, general maintenance work for public utilities; give full details of education and experience, together with salary required in first letter. P-722, Eng. News-Record.

DRAFTSMAN, ornamental; stairway work a specialty. Roanoke Iron Works, Roanoke, Va.

DRAFTSMEN—Experienced structural steel detailers wanted. Apply to the Boston Structural Steel Co., Cambridge, Mass.

FIRST-CLASS structural steel detailers and checkers with experience on mill buildings, office buildings, etc. Position in Pittsburgh district. State experience and salary desired. P-525, Eng. News-Record, Leader-News Bldg., Cleveland, O.

FIRST-class structural steel detailer, all around man, experienced only. Apply Room 1946, Grand Central Terminal, New York City.

Norway's Technical Institute

A Professorship

in Wood, Stone and Iron-Concrete Bridges and in Iron-Concrete is to be filled as soon as possible. The salary is 10,000 kroner with 3 pay-increases of 1,000 kroner after 3, 6 and 9 years service. For the pension fund of the state is deducted 10% of 10,000 kroner.

The professor is obligated to accept the regulations which may be adopted with reference to the arrangement of pensions and age limit, and to accept without compensation such changes in the location of his chair as may be prescribed by law or by the King with the consent of the Storting. More detailed information with reference to his curriculum and duties, etc., may be had upon application to the Institute.

It is desired to fill the professorship with a Norwegian.

Applications for this position may be addressed to the King and sent to Kirke-og undervisnigs-departementet *until August 16th, 1922.*

POSITIONS VACANT

GRADUATE assistant in civil engineering, to assist in hydraulics and materials laboratory, surveying and mechanics. Opportunity graduate work. Salary $900.00, ten months. Box 67, New York University, Bronx, New York.

POSITION open for four expert structural draftsmen. Apply to McClintic-Marshall Co., Oliver Bldg., Pittsburgh, Pa., stating in detail experience and salary acceptable

STRUCTURAL steel draftsmen and checkers, experienced in making shop details for structural work as applied to buildings; state age, experience; nationality, salary expected, and when you could report for work here; permanent positions for experienced men. Barber & Ross, Washington, D. C.

WANTED

HUSTLING YOUNG MAN

By well-known investment house, with technical training, capable of investigating and reporting on all kinds of public utilities and their financing. He must show distinct capability in ferreting out and originating new propositions and must state in detail his ability along these lines. Salary and future limited only by result.

P-732, Engineering News-Record,
10th Ave. at 36th St., New York City

We have good opportunity for man

28 to 35 years of age in our Contract Bond Department. Requirements: Engineering education, at least 5 years active experience in construction work (the more varied the better), good personality, and ability to talk convincingly. This position involves much traveling and preference will therefore be given single man. Not a high-salaried position at start but opportunity for advancement is good. In replying state age, education, whether married or single, complete experience giving account of actual duties performed each job or organization, salary received in each position, and references. Interview can be arranged in any large city. Address,

E. W. BUSH, Engineer,
The Ætna Casualty and Surety Company,
Hartford, Connecticut.

POSITIONS VACANT

WANTED draftsman, two men with one to three years' experience in drafting room, to make structural steel shop details and one experiencd tracer. Apply St. Paul Foundry Co., Mr. Goetz, St. Paul, Minn.

WANTED, by Hollinger Consolidated Gold Mines, Ltd., Timmins, Ont., 2 first class mechanical draughtsmen; must be experienced and competent in mine or mill design. Apply direct, giving full particulars and references.

WANTED—First class detailer and checker of structural steel for buildings and bridges. Apply Richmond Structural Steel Co., Richmond, Va.

STRUCTURAL ENGINEER

Graduate in Structural Engineering or man with experience on designing steel and reinforced concrete buildings. Chicago concern.

State clearly qualifications.

P-691, Engineering News-Record
1570 Old Colony Bldg., Chicago, Ill.

Construction Men

Learn "Line" and "Grade" by Actual Practice.

Level, Transit, and Plane Table Work.
"Running" of Farm, Stadia, Highway and Railroad Surveys.

Estimating

Day and evening courses. Booklet.

The Pan-American Engineering School

39 West 17th St., New York City

WILSON ENGINEERING COURSES

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BY MAIL

Thousands of men owe their advancement to us. With the new graduate who has no experience in actual work, progress is slow and discouraging, and valuable years are lost in getting experience in a haphazard way. A WILSON course and two or three evenings a week for less than a year will give the ordinary man just the amount of training he needs to meet the everyday problems of the busy office.

Reinforced Concrete Engineering
Structural Steel Designing—Drafting in Steel or Concrete
BRIDGE ENGINEERING

Our courses are thorough and up-to-date. Easy terms of payment.

Educational requirements: Technical education, high school mathematics or their equivalent

Write for Literature

WILSON ENGINEERING CORPORATION

10 Broadway, Hanover, Mass.

POSITIONS VACANT

WANTED: A general superintendent for building construction in Western Massachusetts. One capable of organizing and handling all classes of building. Must be a good executive, capable of meeting and dealing with owners and architects. Unless able to give A-1 references, do not apply. J. R. Hampson & Co., Inc., Pittsfield, Mass.

WANTED—Young man with engineering experience to act as purchasing agent, keep time and run grades for small steam shovel work on state highway; state salary wanted, experience and when you can report; work in northern Pennsylvania. P-728, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

WANTED — District manager, mechanical engineer, for Pittsburgh district; one having experience with air washer field preferred; preference will be given to man living in Pittsburgh with good acquaintance with trade; salary and bonus arrangement; this is an opening for a live wire, and must be willing to travel hard; give your complete history and state salary to start, also when available. P-721, Eng. News-Record.

WANTED—Young man with training and experience in setting piece work rates on handling heavy materials in open yard by common labor. Position offers opportunity to right man for permanent connection with large manufacturing concern. Answer by letter and give complete record of education, experience, references and starting salary. P-714, Eng. News-Record.

WANTED—Engineer designer and draftsman on municipal work; capable of designing and making complete plans for improvements and utilities, especially for town under ten thousand; only a man of age, qualifications and salary expected thorough experience considered; state in first letter; location in Southern States. P-730, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

In Replying to "Blind" Ads

be careful to put on envelope the key number in the ad and also local address of office to which reply is sent.

10th Ave. at 36th St., New York.
509 Real Estate Trust Bldg., Phila.
533 Leader-News Bldg., Cleveland.
1570 Old Colony Bldg., Chicago.
531 Rialto Bldg., San Francisco.

Important

Original letters of recommendation or other papers of value should not be enclosed to unknown correspondents — send copies.

0195

POSITIONS VACANT

WANTED—First class detailer and checker of ornamental and miscellaneous iron works. Apply Richmond Structural Steel Co., Richmond, Va.

WANTED—General foreman, familiar with wet excavation and concrete foundation work. P-739, Eng. News-Record.

WANTED—Detailers and checkers wanted for office building work; experienced men on fabricated shop drawings only. New England Structural Co., Everett, Mass.

EMPLOYMENT AGENCIES

GENERAL ENGINEERING AGENCY, Pittsburgh serving employers everywhere overnight, gratis, requires executives and assistant, plant engineers, machinery and structural designers, checkers, detailers, architectural, industrial, municipal, railway engineers, draftsmen, transitmen, advertising, sales, appraisal engineers-accountants, instructors, professors; service commission 2½ per cent.

The Erie Employment & Supply Co.

8701 Union Ave., Cleveland, Ohio

Boarding Camps, and Commissaries, operated for Railroads, Manufacturers, Contractors, Coal Mines, etc. We furnish laborers, mechanics and all classes of skilled help. Employment offices at Cleveland, O., Cincinnati, O., Toledo, O., Columbus, O., St. Louis, Mo., Indianapolis, Ind., Chicago, Ill., Danville, Ill., and Buffalo, N. Y.

Construction News Correspondents
for Engineering News-Record

If you are a resident in one of the cities named below;

If you can spare an hour or two a day *during business hours* for calling upon architects, contractors, engineers, and city departments;

If you are conscientious and energetic;

If you want to earn some extra money;

Then write me concerning your qualifications and present connection, if you live in

Mobile, Ala.
Bisbee, Ariz.
Globe, Ariz.
Tucson, Ariz.
Pine Bluff, Ark.
Sacramento, Cal.
Trinidad, Colo.
Hartford, Conn.
Savannah, Ga.
Council Bluffs, Iowa
Dubuque, Iowa
Owensboro, Ky.
Paducah, Ky.
Carson City, Nev.
Newark, N. J.
Roswell, N. M.
Santa Fe, N. M.
Amsterdam, N. Y.
Binghamton, N. Y.
Cohoes, N. Y.
Gloversville, N. Y.
Poughkeepsie, N. Y.
Schenectady, N. Y.
Bismarck, N. D.
Grand Forks, N. D.
Cincinnati, O.
Ardmore, Okla.
Tulsa, Okla.
Astoria, Ore.
Medford, Ore.
Providence, R. I.
Aiken, S. C.
Charleston, S. C.
Greenville, S. C.
Sioux Falls, S. D.
Walla Walla, Wash.
Calgary, Alta.

Alden W. Welch
Engineering News-Record, 10th Ave. at 36th St., New York

EMPLOYMENT SERVICE

A LEADING organization desiring to fill an important position, for obvious ethical and other reasons, cannot invite directly the candidacy of any particular man. Similarly, no well-connected man will exploit personally his own qualifications, no matter how receptive he may be to overtures. The undersigned has been retained by a national clientele for many years, as a medium for negotiating preliminaries in such cases. Your permission to send booklet discussing this problem and describing the service, will in no degree obligate or compromise you. Strictly confidential. R. W. Bixby, Inc., 304 Lockwood Building, Buffalo, N. Y.

PROFESSORS, assistant professors and instructors of technical and engineering subjects wanted immediately for colleges and universities; write fully; no advance charges. Educators' Department, H. H. Harrison & Co., Employment Service, 19 S. La Salle St., Chicago, Ill.

POSITIONS WANTED

Civil Engineers

B. S. 1918, C. E. 1922, age 26, Christian, American; two years' experience field, office; anything anywhere. PW-720, Eng. News-Record.

CIVIL engineer, American, technical graduate, 32, 8 years' Latin American experience, 2 years in the States, irrigation, railway surveys, and construction, roads, harbor improvements, sugar central erection and maintenance, capable executive, speaks Spanish, French. Box 215, Ridgewood, New Jersey.

CIVIL engineer, specialized in port and waterway construction and operation, operation boats, barges, steamships, qualified in technical and executive capacities; speaks English, French and Spanish; member American Society of Civil Engineers. Address 2411 Main St., Apartment 8, Houston, Texas.

CIVIL and mechanical engineer, technical education, Harvard and M. I. T., practical experience in construction and operation of heavy crushing machinery. A practical millwright and labor foreman. Three years' experience as assistant superintendent of manufacturing concern, also traveled in dormant seasons to obtain business. Will go anywhere. Salary $250 per month. PW-659, Eng. News-Record, Leader News Bldg., Cleveland, O.

CIVIL and sanitary engineer, graduate, 33, married, ten years' experience design and construction of municipal improvements and utilities; water supply, sewage disposal, land drainage and reclamation, town site and industrial plant layouts, and building construction, desires connection with contracting, engineering or industrial organization in which executive and sales ability will be of value. Excellent references. PW-680, Eng. News-Record, Old Colony Bldg., Chicago.

CIVIL engineer, M. I. T. graduate, age 30, five years' railroad, highway, building construction experience, desires position; any location. PW-708, Eng. News-Record.

CIVIL engineer, technical graduate, 17 years' experience design and supervision of construction steel and reinforced concrete bridges and buildings, railroads, municipal work, and as engineer, bridges and buildings for 400-mile electric railroad in charge maintenance and construction, desires position as chief engineer, general superintendent, manager or similar connection. PW-735, Eng. News-Record.

EXECUTIVES

Engineers and men of proven ability seeking positions, find our service extremely satisfactory. Our Mr. H. H. Harrison can confidentially negotiate for you suitable connections, as he has successfully done for thousands of others since 1909. Inquiries invited.

The National Business Bourse, Inc.
Confidential Negotiators
Association Bldg., Chicago

POSITIONS WANTED

CIVIL engineer, graduate, 4 years' experience covering highway and reinforced concrete construction; available on short notice. PW-740, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

CIVIL engineer, 18 years' experience in design and construction of large works, will consider teaching mathematics, mechanics, hydraulics, or physics. PW-731, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

GRADUATE civil engineer of high calibre, ten years' broad experience, desires a connection with an industrial firm or contractor leading to an executive position; initial salary no object; prefer Eastern location; references exchanged. PW-717, Eng. News-Record.

GRADUATE civil engineer, 11 years' experience, desires position with industrial concern on new plant construction with prospect of becoming permanently connected with productive organization. Address Box 91, Narberth, Pa.

POSITION wanted by civil engineer, with 12 years' experience highway, railroad and building work; report immediately. Wire or write 671 Kilbourne St., Elkhart, Ind.

Designers and Estimators

DESIGN, estimate, sales. Graduate engineer, 31, experienced with structural steel fabricators, available immediately. New York interview requested. PW-684, Eng. News-Record.

ESTIMATOR, graduate C. E., 40 years of age, 18 years' experience in monumental, residential and industrial structures, A1 estimator of general building construction in all branches, including reinforced concrete, steel, carpentry and masonry, with knowledge of design and supervision, good correspondent, analyst and contract man, is open for engagement with responsible concern in Metropolitan district. PW-725, Eng. News-Record.

EXPERIENCED estimator and superintendent of large construction will accept position of responsibility at once; age 38, live organizer. Address XYZ, General Delivery, Winston-Salem, N. C.

CONSTRUCTION draftsman, graduate engineer, eleven years' experience, steel, concrete, surveying, factory construction. Take charge of work. PW-661, Eng. News-Record.

DRAFTSMAN-engineer, graduate, eight years' field and office experience. General construction, industrial, structural. Northern location. PW-677, Eng. News-Record.

DRAFTSMAN, Track, steam or street railway; 17 years' experience in track shops; will go anywhere; good mathematician; salary $110. PW-723, Eng. News-Record, Old Colony Bldg., Chicago.

Mechanical

MECHANICAL electrical engineer, technical graduate; wide experience design and installation electrical, mechanical and chemical apparatus, also plant efficiency and economical generation of power. PW-626, Eng. News-Record.

MECHANICAL engineer, 13 years' experience in factory equipment, layout installation and maintenance, familiar with boiler economy power generation and distribution in large manufacturing plants. PW-647, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

MECHANICAL engineer, 12 years' experience in construction and operation of public utility plants and factories; wide experience in organizing men, time and production study, and equipment development. PW-719, Eng. News-Record.

In Replying to "Blind" Ads

be careful to put on envelope the key number in tne ad and also local address of office to which reply is sent.

10th Ave. at 36th St., New York.
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533 Leader-News Bldg., Cleveland.
1570 Old Colony Bldg., Chicago.
531 Rialto Bldg., San Francisco.

Important

Original letters of recommendations or other papers of value should not be enclosed to unknown correspondents — send copies.

0195

POSITIONS WANTED

Structural

GRADUATE civil engineer; 10 years' experience designing, estimating and detailing reinforced concrete for contractors and bar companies; can take responsible charge of work. PW-634, Eng. News-Record.

STRUCTURAL engineer and designer, 18 years' experience, steel and reinforced concrete structures, industrial and commercial buildings. Engineer, 108 West Harris St., Savannah, Ga.

STRUCTURAL steel checker desires evening work; thoroughly experienced, office, loft, mill buildings and apartments. PW-701, Eng. News-Record.

STRUCTURAL engineer, tecchnical graduate, extensive experience in design, steel and reinforced concrete, industrial and commercial buildings, seeks position with engineering firm or consulting engineer. PW-697, Eng. News Record.

Superintendents

A CAPABLE young executive, with the broadest of experience covering all classes of construction work, specialized in building construction and difficult reinforced concrete work, seeks an opening with a reliable firm as general superintendent, or construction superintendent or engineer. Available on short notice; location immaterial. Phone Barclay 2645. Address Superintendent, c/o Kantor, 43 Murray Street, New York, N. Y.

ARCHITECT'S superintendent, experienced in all classes of public buildings and other high grade construction. PW-678, Eng. News-Record.

CONTRACTOR'S superintendent, fifteen years' experience all classes construction work, ballast, rubble, dimension stone quarries, masonry, earth dams, roads, filters, sewers. PW-686, Eng. News-Record.

ENGINEER and superintendent of construction. 16 years' experience. Railroad and highway location and construction, drainage, sewers, paving, industrial. To take responsible charge of engineering and supervision of construction. Broad experience. Go anywhere. Central America preferred. PW-681, Eng. News-Record, Real Estate Trust Bldg., Phila.

EXECUTIVE

I AM AN ENGINEER EXPERIENCED IN PLANNING AND EXECUTING LARGE INDUSTRIAL BUILDING PROJECTS.

MY EXPERIENCE HAS BEEN GAINED THROUGH NINE YEARS' ASSOCIATION WITH A FIRM WIDELY KNOWN FOR ITS EXCELLENT WORKMANSHIP AND EFFICIENT METHODS AND I HAVE HAD CHARGE OF OPERATIONS FROM CANADA TO TEXAS.

I DESIRE A PERMANENT CONNECTION WHERE ABILITY WILL BE RECOGNIZED.

PW-733, ENGINEERING NEWS-RECORD,
10TH AVE. at 36TH ST., NEW YORK CITY

POSITIONS WANTED

ENGINEER-SUPERINTENDENT, eighteen years' experience, 10 on eastern railroads, covering design, supervision and inspection on grade crossing elimination, third tracking, yards and docks, and m. of w.; three years private practice engineering and surveying, five years design supervision and construction highway bridges, foundations, open caissons, piling, etc. Not afraid of work and will go anywhere under the sun. Furnish engineering equipment. Present salary $3,600. Say something. PW-615, Eng. News-Record.

GENERAL building construction superintendent, at present in full charge of a large apartment development in New York City, open for a proposition with first class firm. Advertiser is high grade man who can successfully and profitably handle either field or office. Experience covers 20 years on all kinds of high class buildings; can work anywhere in United States. PW-641, Eng. News-Record.

GENERAL superintendent, construction manager; broad experience in general building construction; specialize in reinforced concrete construction, particularly in theatre, church and like intricate work; have practically completed the largest, unique and most complicated piece of reinforced concrete construction in the United States, "the three million dollar Grauman Theatre," Los Angeles, Cal.; reinforced concrete trusses of various designs are used; have had 2 years' field experience in hydro-electric construction, which includes both dam and power house work; familiar with costs, estimating, purchasing, contracts and organization; have an organization available; either domestic or foreign position considered; available on two weeks' notice. PW-630, Eng. News-Record, Rialto Bldg., San Francisco, Cal.

SUPERINTENDENT or carpenter foreman, 15 years' practical experience in building construction; pile driving; coffer dams; excavations, foundations; reinforced concrete, etc. PW-613, Eng. News-Record.

SUPERINTENDENT of asphalt pavements, 25 years' experience, wishes position. PW-738, Eng. News-Record.

Notice to Advertisers

We enlist your cooperation

—TUESDAY, AUGUST 1st—

is the date of the ANNUAL OUTING for employees of the McGRAW-HILL COMPANY, Inc.

To enable everyone to take part, both our office and print shop will be closed on this day.

Our papers must, however, come out on time and we accordingly ask your cooperation in furnishing copy earlier than usual. It should reach us as follows for the August 3rd issue of ENGINEERING NEWS-RECORD:

DISPLAY ADS—Copy required by 5 P.M. Friday, July 28th.

WANT ADS—Copy required by 10 A.M. Saturday, July 29th.

PROPOSAL ADS—Copy required by 5 P.M. Monday, July 31st.

POSITIONS WANTED

SUPERINTENDENT of construction will be open for position Aug. 15th; wide experience in all types of reinforcced concrete construction, office buildings and school work; can furnish complete organization; references from leading contractors in country. PW-698, Eng. News-Record, Leader-News Bldg., Cleveland, O.

SUPERINTENDENT, general foreman, road builder expert, concrete, macadam, brick paving. Now available; anywhere. Salary $200. Satisfaction assured. PW-676, Eng. News-Record, Leader-News Bldg., Cleveland, O.

SUPERINTENDENT fireproof building construction desires position; age forty; wide experience, north or south; good references; hustler; can report immediately. Address F., P. O. Box 99, Charlotte, N. C.

Miscellaneous

A GOOD carpenter foreman wishing connection with firm doing extensive reinforced concrete work; well experienced and good organizer; capable of taking full charge of job if necessary; age 29 and a hustler; best of references; will locate anywhere; available at once. PW-726 Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

To Employers Who Advertise for Men:

The letters you receive in answer to your advertisements are submitted by each of the applicants with the hope of securing the position offered.

When there are many applicants it frequently happens that the only letters acknowledged are those of promising candidates. Others do not receive the slightest indication that their letters have even been received, much less given any consideration. These men often become discouraged, will not respond to future advertisements, and sometimes even question if they are bona fide.

We can guarantee that *Every Advertisement Printed in the Searchlight Section Is Duly Authorized.* Now won't **you** help keep our readers interested in this advertising by acknowledging **every** application received, even if you only return the letters of unsuccessful applicants to them marked, say, "Position filled, thank you." If you don't care to reveal your identity, mail them in plain envelopes.

We suggest this in a spirit of helpful co-operation between employers and the men replying to Positions Vacant advertisements.

Searchlight Department
McGRAW-HILL CO., Inc.

Put Yourself in the Place of the Other Fellow"

6000

POSITIONS WANTED

A CAPABLE young executive with the broadest of experience covering all classes of construction work, specialized in industrial building construction, highway and municipal work, seeks a connection with a reliable firm as engineer or construction superintendent; available on short notice; location immaterial. PW-716, Eng. News-Record.

A SUCCESSFUL sales engineer and executive, now employed, desires connection where broad engineering experience combined with sales ability can be used to produce big results; thorough technical education and experience in steel, concrete, waterways, railroads, executive positions and sales. A producer not afraid of hard work. PW-636, Eng. News-Record.

BOSS rigger and erector, with 25 years' experience, 7 years with present firm, would like to make a change; go anywhere. PW-644, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

BUSINESS manager and chief estimator, formerly architectural engineer and superintendent of construction, shrewd buyer and cost-keeping accountant, seeks connections with reliable firm desiring the service of an executive of ability. PW-736, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

CHIEF accountant, office manager, American, age 33, desires position; 13 years' experience railway, highway, canal building and sugar mill construction in United States, Canada, France and Cuba; knowledge French and Spanish; thorough knowledge bookkeeping, office management, purchasing costs, etc. PW-642, Eng. News-Record.

CONTRACTORS' engineer for general work. Estimating, computing, accounting, and supervising work. Plans prepared. Fifteen years' experience. Graduate engineer. Prefer Eastern States. Highway and concrete work a specialty. PW-620, Eng. News-Record, Leader-News Bldg., Cleveland, O.

EXPERIENCED foreman looking for position, furnish large number of men necessary. James Greco, 159 Prince Street, New York City.

FOREMAN, experience street pavings, sewer work, foundations and building work. PW-689, Eng. News-Record.

LIVE general foreman highway construction, open position N. J., Penna., N. Y. State salary. PW-682, Eng. News-Record.

PRACTICAL man at railroad construction, installing of machinery, last 13 years government shipbuilding, want to make a change; good executive ability; tackle any kind of construction. Address G. J. M., 115 Ryerson St., Brooklyn, N. Y.

QUARRY or construction superintendent with a following of competent men wishes change. Familiar with the development and operation of large quarry operations and heavy construction. PW-700, Eng. News-Record.

REINFORCING steel and steel products manager. A sales engineer, with successful experience in above lines. Can take full charge for building material concern or bar company, marketing these goods. Past master in commercial design. PW-693, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

TECHNICAL graduate, 28, wants permanent position; five years' varied experience, civil and mechanical engineering; draftsman and computer; salary $175. PW-718, Eng. News-Record.

YOUNG MAN, 26, commercial and I. C. S. surveying graduate; five years' experience on surveying corps, railroad, city and building construction; two years engineer, A. E. F.; two years laborer and foreman; wants permanent position with reasonable chance of advancement; open to any proposition; location immaterial. PW-737, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

POSITIONS WANTED

SALESMAN and engineer, age 34, married, desires position as salesman with steel fabricating company or manufacturer of building specialties. Five years' contracting engineer and district sales manager for structural steel company and warehouse. Eleven years draughtsman, estimator and structural engineer structural steel, reinforced concrete and general construction. Location immaterial. Present location South. PW-702, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

YOUNG man with nine years' experience, railroad and highway surveys and map drafting, at present studying steel and concrete construction, desires position in architect's or engineer's office, with opportunity to advance. Salary of secondary importance. PW-710, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

EXTRA WORK WANTED

CIVIL engineering service, plans, surveys, design, computations, etc. H. F. Stimm, Snyder, N. Y.

EXTRA—Engineering work solicited; designing, planning, estimating; computations and drawings. Competently and promptly executed. Mazeau, 1203 Fulton Ave., New York City.

STRUCTURAL engineer, experienced designer and detailer; can take care of more work; competent, quick service. XWW-724, Eng. News-Record.

TUTORING

CIVIL engineer teaches arithmetic, algebra, geometry, trigonometry, draughting, mechanical, structural surveying, building construction; prepares engineering positions. Mondell, 50 E. 42d St., N. Y.

OFFICE SPACE FOR RENT

Wanted—Engineer

To share architect's office. Splendid light, complete services. Suite 1211, 105 West 40th St., New York. Tel. Bryant 3231.

Architect or Contractor

Can have space in engineer's suite—$35 monthly. OSR-715, Eng. News-Record.

BOOKS AND PERIODICALS

Periodicals for Sale

Bound volumes of *Engineering News*, January, 1907, to March, 1917, and unbound volumes *Engineering News-Record*, April, 1917, to date; first check for $30 takes them. Ralph Gibson, 21 Vanderheyden St., Glens Falls, N. Y.

PATENT ATTORNEYS

PATENTS—Send for form "Evidence of Conception" to be signed and witnessed. Form fee schedule, information, free. Lancaster and Allwine, 262 Ouray Bldg., Washington, D. C.

CHICAGO DEALER

With established office and calling on building and road contractors wants Chicago or Illinois territory agency for equipment used in building or road construction. Will carry stock if necessary.

AS-692, Engineering News-Record,
Old Colony Bldg., Chicago, Ill.

BUSINESS OPPORTUNITIES

Blue Print Company

at Laredo, Texas, for sale; cash or terms; good opportunity for engineer; party in charge now has to leave. Apply Alamo Blue Print Company, San Antonio, Texas.

Established Blue Print Business

in large Eastern city; modern equipment; reason for selling; sickness; will consider partner. BO-727, Eng. News-Record.

New Building Methods

One, "The Universal Monolithic Builder," a Machine Process for building hollow concrete walls at low cost also a Steel Panel Knock-Down Building Method for making warehouses, garages, at bottom cost; want licensees under patents, manufactuers and organization handling. BO-671, Eng. News-Record.

Splendid Opportunity

For a responsible firm to manufacture and place in Canada a patented concrete road finishing machine universally used in United States; in replying send references. Macon Concrete Roller Company, Macon, Ga.

FOR SALE

Five Baker Maney Wheelers

For sale; all in good condition. Wm. D. Kelly, R. R. 4, Frankfort, Ind.

NEW AND USED SURVEYING INSTRUMENTS AT FACTORY PRICES

Satisfaction guaranteed or money refunded. Write for complete list and catalogue of our high grade instruments and supplies for civil engineers, surveyors, mining, builders, contractors, etc.; 40 years' experience in repairing instruments of all makes at reasonable prices. Prompt service.

WISSLER INSTRUMENT CO.
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Guaranteed in Good Order and Adjustment
Write for New Bargain List
WILLIAMS, BROWN & EARLE, INC.
918 Chestnut St., Philadelphia, Pa.
Department D

FOR RENT

PAVER

1—Four Bag Lakewood, boom and bucket. Complete with Batch Meter and Batch Transfer Derrick.

Good Condition. Available July 15th.

75—Four Bag Lakewood Batch Boxes.
122,000 ft. Lakewood Heavy Duty Track.

Available Immediately.

MICHAEL STAUB
Pitman, N. J.

EXCAVATION

Steam Shovels for rent with crews or work taken by contract.
Dinkeys and cars or teams furnished.

H. C. AMBLER
3717 Old York Road, Philadelphia, Pa.

Steam Shovel for Rent

¾-yd. Thew Shovel in fine condition.
Located at Corning, N. Y.

JAS. S. BRADEN, 30 Church St., N. Y.

BUSINESS OPPORTUNITY

An opportunity is offered to men of proven ability to join the advertiser in the organization of a Construction Company and the reorganization of several Chartered Railroads; and a Water Power Plant, outside the State of New York. The mileage of the railroads are over 100 miles. To men qualified by past experience and possessing from $5,000 to $10,000 to invest, we can offer a most profitable opportunity. No replies considered unless accompanied by references that will stand investigation.

BO-665, Engineering News-Record, 10th Ave. at 36th St., New York City.

WANTED

WANTED

HYDRAULIC PRESS

1000-ton or larger; clearance about 4 ft. between uprights and 10 ft. between heads. Must be in good condition.

W-711, Engineering News-Record
1570 Old Colony Bldg., Chicago

WANTED

STEEL PILING

344 pieces 20 to 28 ft. long.
Can use longer lengths if condition permits cutting to approximate desired lengths.

W-712, Engineering News-Record
1570 Old Colony Bldg., Chicago

Wanted to Rent, or Buy, a Used

Keystone Excavator

No. 4, must be in good condition; give shop number and condition, where same can be inspected and price in first letter.

W-742, Engineering News-Record,
10th Ave. at 36th St., New York City.

WANTED

1—2-yd. **Orange Peel Bucket.**
1—1½-yd. full **Revolving Shovel.**
1—21-E Paver full length **Caterpillar Traction.**
1—36-in. Gage 11 x 16 **Locomotive.**
1—10-ton, 3-wheel **Road Roller.**
10—4-yd., 36-in. gage **Dump Cars.**
2—20 to 25-ton Std. **Gage Locomotives.**

J. T. WALSH,
514 Brisbane Bldg., Buffalo, N. Y.

WANTED—SECOND HAND

AIR COMPRESSOR

Cylinders 8 in. x 6 in., capacity 140 cu. ft. per minute.

AUNT JEMIMA MILLS COMPANY.
St. Joseph, Mo.

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G-4

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0170

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Aug. 7	Okeene, Okla.	July 27
Aug. 7	Altamont, Ill.	July 27
Aug. 7	Iron Bridge, Wis.	July 27
Aug. 7	Falls Creek, Pa.	July 27
	Adv. July 27 and Aug. 3.	
Aug. 7	West Concord, Minn.	Aug. 3
Aug. 7	Springfield, Minn.	Aug. 3
Aug. 7	St. Paul, Minn.	Aug. 3
Aug. 8	Walbridge, O.	July 20
Aug. 8	Buffalo, N. Y.	Aug. 3
Aug. 8	Manasquan, N. J.	Aug. 3
	Adv. Aug. 3.	
Aug. 10	Poughkeepsie, N. Y.	July 27
	Adv. July 27 and Aug. 3.	
Aug. 10	Benton Harbor, Mich.	July 27
Aug. 10	New Orleans, La.	July 27
Aug. 10	Rome (Hillards P. O.), O.	Aug. 3
Aug. 10	Martinsville, Ill.	Aug. 3
Aug. 14	Northville, Mich.	Aug. 3
Aug. 16	Sayreville, N. J.	July 27
	Adv. July 27 and Aug. 3.	
Aug. 16	Glendive, Mont.	July 27
Aug. 16	Wash., D. C.	Aug. 3
	Adv. Aug. 3.	
Aug. 24	Sacramento, Cal.	July 27
Aug. 24	Quincy, Fla.	Aug. 3
Aug. 26	Walhalla, N. D.	July 27
Aug. 30	Scituate, R. I.	Aug. 3
	Adv. Aug. 3.	
Sept. 15	Grants Pass, Ore.	July 27
Sept. 15	Plagnemine, La.	Aug. 3
Oct. 1	Ponchatoula, La.	Aug. 3

SEWERS

Bids Close		See Eng. News-Record
Aug. 7	Hamilton, Ont.	July 27
Aug. 7	New York, N. Y.	Aug. 3
Aug. 7	Akron, O.	Aug. 3
Aug. 10	Rome, O.	Aug. 3
Aug. 14	Northville, Mich.	Aug. 3
Aug. 14	Hondo, Tex.	July 27
Aug. 14	Pensauken, N. J.	July 27
Aug. 15	Springwells, Mich.	Aug. 3
	Adv. Aug. 3.	
Aug. 16	Sayreville, N. J.	July 27
	Adv. July 27 and Aug. 3.	
Aug. 16	Nashville, Tenn.	Aug. 3
Aug. 18	Erie, Pa.	Aug. 3
Aug. 22	Newark, N. J.	July 27
Aug. 23	Rye, N. Y.	July 27
	Adv. July 27 and Aug. 3.	

BRIDGES

Bids Close		See Eng. News-Record
Aug. 8	Stockton, Cal.	July 20
Aug. 8	Indiana	July 27
Aug. 10	Atlanta, Ga.	July 20
Aug. 10	Columbus, O.	July 20
Aug. 10	Tipton, Ia.	Aug. 3
Aug. 11	Madison, Wis.	July 27
Aug. 11	Columbus, O.	Aug. 3
Aug. 11	Missouri	Aug. 3
Aug. 14	California	July 27
Aug. 14	Missouri	Aug. 3
Aug. 15	Miami, Fla.	July 27
Aug. 15	West Virginia	July 27
	Adv. July 27 and Aug. 3.	
Aug. 15	Bennettsville, S. C.	Aug. 3
	Adv. Aug. 3.	
Aug. 16	Ballston Spa, N. Y.	July 27
Aug. 18	Virginia	Aug. 3
	Adv. Aug. 3.	
Aug. 18	Illinois	Aug. 3
Aug. 29	Wellington, New Zealand	July 13
Sept. 1	Knoxville Tenn.	July 27
Sept. 1, 1923	Sydney, New South Wales, Australia	Aug. 3
Sept. 7	Nashville, Tenn.	Aug. 3
Oct. 1	Siam	July 13
Oct. 31	Sydney, Australia	Jan. 12

DAMS

Bids Close		See Eng. News-Record
Aug. 14	Newburgh, N. Y.	Aug. 3
	Adv. July 27 and Aug. 3.	

RAILWAY

Bids Close		See Eng. News-Record
Aug. 15	New York	Aug. 3

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Aug. 7	New Madrid, Mo.	Aug. 3
Aug. 8	Grants Pass, Ore.	July 20
Aug. 10	Wooster, O.	July 13
	Adv. July 13 to Aug. 3.	
Aug. 12	Kokomo, Ind.	July 20
Aug. 14	Benton, Mo.	July 20
Aug. 15	Varner, Ark.	Aug. 3
Aug. 15	Ft. Lauderdale, Fla.	July 13
	Adv. July 13 to Aug. 3.	
Aug. 18	Bloomington, Ill.	July 20
	Adv. July 20 to Aug. 3.	

STREETS AND ROADS

Bids Close		See Eng. News-Record
Aug. 7	Elmira, N. Y.	Aug. 3
Aug. 7	Sacramento, Cal.	July 27
Aug. 7	California	July 20
Aug. 7	White Plains, N. Y.	July 27
Aug. 7	Leechburg, Pa.	July 27
Aug. 7	San Luis Obispo, Cal.	July 27
Aug. 7	Brownstown, Ind.	July 27
Aug. 7	Catasauqua, Pa.	July 27
Aug. 7	Paoli, Ind.	July 27
Aug. 7	Brazil, Ind.	July 27
Aug. 7	Jasper, Ind.	July 27
Aug. 7	Princeton, Ind.	Aug. 3
Aug. 7	Jeffersonville, Ind.	Aug. 3
Aug. 7	Casper, Wyo.	Aug. 3
Aug. 7	Franklin, Pa.	Aug. 3
Aug. 7	Columbia, Mo.	Aug. 3
	Adv. Aug. 3.	
Aug. 7	New York, N. Y.	Aug. 3
Aug. 7	Council Bluffs, Ia.	Aug. 3
Aug. 7	Freehold, N. J.	Aug. 3
	Adv. Aug. 3.	
Aug. 7	Dayton, O.	Aug. 3
Aug. 8	Indiana	Aug. 3
Aug. 8	San Rafael, Cal.	July 20
Aug. 8	Crown Point, Ind.	July 27
Aug. 8	Maryland	July 27
	Adv. July 27 and Aug. 3.	
Aug. 8	Monticello, Ind.	July 27
Aug. 8	Trenton, N. J.	July 27
Aug. 8	Millville, N. J.	July 27
Aug. 8	Louisiana	July 20
Aug. 8	Washington, Ind.	July 27
Aug. 8	Ontario	July 27
Aug. 8	Savannah, Ga.	July 27
Aug. 8	Napa, Cal.	July 27
Aug. 8	St. George, N. Y.	Aug. 3
Aug. 8	Milwaukee, Wis.	Aug. 3
Aug. 8	Colorado	Aug. 3
Aug. 8	Michigan	Aug. 3
Aug. 9	Valparaiso, Ind.	July 27
Aug. 9	Ft. Myers, Fla.	July 27
Aug. 9	Ft. Myers, Fla.	July 6
Aug. 9	Hackensack, N. J.	July 20
	Adv. July 20 to Aug. 3.	
Aug. 9	Mays Landing, N J.	July 27
	Adv. July 27 and Aug. 3.	
Aug. 9	Marysville, Cal.	Aug. 3
Aug. 9	Michigan	Aug. 3
Aug. 9	Sycamore, Ill.	Aug. 3
Aug. 10	Woodbury, N. J.	July 20
Aug. 10	Fredericktown, O.	July 20
Aug. 10	South Amboy, N. J.	July 27
	Adv. July 27 and Aug. 3.	
Aug. 10	Burlington, Vt.	July 27
	Adv. July 27 and Aug. 3.	
Aug. 10	Quebec	July 27
Aug. 10	Raeford, N. C.	Aug. 3
Aug. 10	Louisiana	Aug. 3
Aug. 10	Willmar, Minn.	Aug. 3
Aug. 10	Sonora, Tex.	Aug. 3
Aug. 10	Petersburg, Va.	Aug. 3
Aug. 10	St. George, N. Y.	Aug. 3
Aug. 11	Missouri	Aug. 3
Aug. 11	Columbus, O.	Aug. 3
Aug. 11	Johnson Creek, Wis.	Aug. 3
Aug. 12	Quebec	July 27
Aug. 12	Wheeling, W. Va.	July 27
Aug. 14	California	July 27
Aug. 14	Ebensburg, Pa.	Aug. 3
Aug. 14	Scalp Level, Pa.	Aug. 3
Aug. 14	Ashville, Pa.	Aug. 3
Aug. 14	Missouri	Aug. 3
Aug. 14	Grandview Heights (Columbus P. O.), O.	Aug. 3
Aug. 15	New York	Aug. 3
	Adv. Aug. 3.	
Aug. 15	Woodbury, N. J.	Aug. 3
	Adv. Aug. 3.	
Aug. 15	Pickens, S. C.	Aug. 3
Aug. 15	Santa Rosa, Cal.	July 27
Aug. 15	Beaumont, Tex.	July 27
Aug. 15	Wadsworth, O.	July 20
Aug. 15	Alabama	July 27
Aug. 15	Knoxville, Tenn.	July 20
Aug. 15	Columbus, O.	Aug. 3
Aug. 15	Maryland	Aug. 3
	Adv. Aug. 3.	
Aug. 15	Sequin, Tex.	Aug. 3
Aug. 15	Morris, Ill.	Aug. 3
Aug. 16	Nashville, Tenn.	Aug. 3
	Adv. Aug. 3.	
Aug. 16	Rhode Island	Aug. 3
	Adv. Aug. 3.	
Aug. 17	Henderson, N. C.	July 27
Aug. 17	Youngsville, Pa.	Aug. 3
Aug. 17	Halletsville, Tex.	Aug. 3
Aug. 18	Illinois	Aug. 3
Aug. 21	California	Aug. 3
Aug. 22	Orangeburg, S. C.	Aug. 3
Aug. 23	Two Harbors, Minn.	Aug. 3
Aug. 24	Charleston, S. C.	Aug. 3
Aug. 30	North Carolina	Aug. 3
Sept. 19	New Orleans, La.	July 6

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Aug. 8	Pittsburgh, Pa.	Aug. 3

BUILDINGS

Bids Close		See Eng. News-Record
Aug. 7	Pelham Manor, N. Y.	July 27
Aug. 7	Detroit, Mich.	Aug. 3
Aug. 8	Mankato, Minn.	July 27
Aug. 8	Saginaw, Mich.	July 27
Aug. 8	Detroit, Mich.	Aug. 3
Aug. 9	Detroit, Mich.	July 27
Aug. 9	Ogden, Utah	July 27
Aug. 10	Erie, Pa.	July 27
Aug. 10	Pittsburgh, Pa.	July 27
Aug. 10	Mt. Sterling, O.	July 20
Aug. 12	Akron, O.	July 27
Aug. 12	Louisville, O.	July 27
Aug. 14	Cleveland, O.	July 27
Aug. 14	Oakland, Cal.	July 20
Aug. 15	Grandview Heights (Columbus P. O.),	July 20
Aug. 16	Owen Sound, Ont.	July 27
Aug. 20	Erie, Pa.	July 13
Aug. 22	Stateville, Ill.	Aug. 3
Aug. 31	New York, N. Y.	Aug. 3
Sept. 1	Knoxville, Tenn.	July 20
Sept. 30	Duluth, Minn.	July 13
Oct. 1	Duluth, Minn.	Aug. 3

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Aug. 7	Dredging, etc. — New York, N. Y.	July 6
	Adv. July 6, 13, 27 and Aug. 3.	
Aug. 7	Dredging—Camden, N. J.	July 13
	Adv. July 13 to Aug. 3.	
Aug. 8	Earthwork — New Orleans, La.	Aug. 3
Aug. 9	Chimney and Flue—Guantanamo, Cuba	July 27
Aug. 9	Foundations — Tupper Lake, N. Y.	Aug. 3
Aug. 10	Tank — Ft. MacKenzie, Wyo.	July 20
Aug. 11	Piping — North Platte, Neb.	July 20
Aug. 12	Timber Turnout, etc.—Klamath Falls, Ore.	July 27
Aug. 12	Oil Burning Apparatus — Houston, Tex.	July 27
Aug. 14	Scow—Duluth, Minn.	July 20
	Adv. July 20 to Aug. 3.	
Aug. 14	Levee Work — Memphis, Tenn.	Aug. 3
	Adv. Aug. 3.	
Aug. 15	Excavation — Wilmington, Del.	July 20
	Adv. July 20 to Aug. 3.	
Aug. 15	Rock Removal — Providence, R. I.	July 20
	Adv. July 20 to Aug. 3.	
Aug. 15	Dredging—Galveston, Tex.	July 20
	Adv. July 20 to Aug. 3.	
Aug. 15	Stone—New Orleans, La.	July 20
	Adv. July 20 to Aug. 3.	
Aug. 15	Electric Pump — St. Louis, Mo.	July 27
Aug. 15	Lighthouse Tender — Wash., D. C.	July 27
Aug. 16	Wire Partition—San Diego, Cal.	July 27
Aug. 18	Radial Gates, etc.—Riverton, Wyo.	July 13
Aug. 19	Dredging—New York, N. Y.	July 20
	Adv. July 20 to Aug. 3.	
Aug. 21	Catamarans — Portland, Ore.	July 20
	Adv. July 20 to Aug. 3.	
Aug. 21	Dredging—Baltimore, Md.	July 27
	Adv. July 27 and Aug. 3.	
Aug. 22	Post Office—Spanish Fork, Utah	July 27
	Adv. July 27 and Aug. 3.	
Aug. 22	Post Office—Fond du Lac, Wis.	July 27
Aug. 23	Retaining Walls — Quantico, Va.	July 27
Aug. 23	Quarrywalls, etc.—Pearl Harbor, H. T.	July 20
Aug. 23	Dredging—Norfolk, Va.	July 27
Aug. 25	Extension to Workroom — Ft. Worth, Tex.	Aug. 3
Aug. 25	Office, Storehouse, etc.—Buffalo, N. Y.	Aug. 3
	Adv. Aug. 3.	
Aug. 28	Remodeling — Raleigh, N. C.	Aug. 3
	Adv. Aug. 3.	

Bids Close		See Eng. News-Record
Aug. 30	Circulating Loop — Mare Island, Cal.	July 27
Aug. 31	Canal—Klamath Falls, Ore.	July 27
Sept. 1	**Refrigerating Plants—Perryville, Md.** Adv. July 20 to Aug. 3.	July 20
Sept. 5	Dredging — New York, N. Y. Adv. Aug. 3.	Aug. 3
Sept. 5	Steel Gates — Nashville, Tenn. Adv. Aug. 3.	Aug. 3
Sept. 5	Dykes, etc.—New Orleans, La.	Aug. 3
Sept. 6	Motors, etc.—Yuma, Ariz.	July 27

MISCELLANEOUS

Bids Close		See Eng. News-Record
Aug. 7	Engines and D. C. Generators —Rome, N. Y.	July 13
Aug. 7	Scarifier Attachment—St. Paul, Minn.	July 20
Aug. 7	Electric Light Equipment — Hanna, Alta.	July 27
Aug. 7	Transmission Line—Pine Tops, Tops, N. C.	Aug. 3
Aug. 8	Cement—Napa, Cal.	July 27
Aug. 9	Heating Oil Distributor—Ft. Myers, Fla.	July 27
Aug. 9	Transformers, etc. — San Francisco, Cal.	July 20
Aug. 12	**Paving Block — Buffalo, N. Y.**	Aug. 3
Aug. 15	Hydro-electric Development—Dothan, Ala.	June 29
Aug. 15	Transmission Line, etc.—Hobgood, N. C.	July 27
Aug. 15	Foundation — Minneapolis, Minn.	July 13
Aug. 17	Intake Pier, Screens, etc.—Wheeling, W. Va. Adv. Aug. 3.	Aug. 3
Aug. 28	Mechanical Equipment—Sacramento, Cal.	Aug. 3
Sept. 16	Strain & Pin Type Insulators —Melbourne, Australia	July 27

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Mayfield—Making surveys distribution system, standpipe, pumping station, 4 mi. 6-8 in. c.i. pipe, etc. $50,000. M. Vrooman, 10 North Main St., engr.

Pa., Steelton—Authorized $25,000 bond issue to improve waterworks. A. Rupp, boro. secy.

D. C., Wash.—Dist. Comrs., 509 Dist. Bldg., plans sewers in various streets. $250,000 appropriated.

Va., Petersburg—Making plans and soon take bids for 3 mi. sewers. $75,000. L. Budd, city engr.

La., Alexandria—Soon takes bids water reservoir, equipment and mains. $95,000 bonds voted for project. V. M. Ake, clk.

O., Warren—Plans c.i. mains in Boulevard, Garden Ave., East Market St., Apple Pl., Trumbull and Central Parkways, $38,600.

Mich., Ecorse — Plans extensions to mains, 4, 6 and 8 in. c.i. pipe. To be supplied with water from Detroit waterworks system. $125,000. Engineer not selected.

Wis., Madison—Taking bids pumping machinery for new pumping station in Monona Park, also sewage disposal machinery. E. E. Parker, engr.

Ia., Rockwell City—Making plans 200,000 gal. rein.-con. reservoir incl. pumping machinery. $15,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Minn., Winona—Making plans pumping station. $250,000. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, engrs.

Tex., Ennis—Voted $35,000 bond issue for waterworks improvements and sewer extensions. R. A. McCulloch, city mgr. Noted June 8.

Tex., Lubbock—Voted $50,000 bonds for waterworks improvements. S. Sanders, city engr.

Okla., Tulsa—Water Comn. plans receiving bids during last half of September for Spavinaw Water Supply Project, for which $6,800,000 bonds have been voted. A. J. Rudd, chn. Trammell & Holway, 329 Kennedy Bldg., engrs.; adv. this issue.

BIDS DESIRED

R. I., Scituate—Aug. 30, by Water Supply Bd., Providence, building tunnel portion of Scituate Aqueduct, in Scituate and Cranston; adv. this issue.

N. Y., Buffalo—Aug. 8, by A. W. Kreinheder, comr. Pub. Wks., Municipal Bldg., 1,000 lengths 6 in. c.i. pipe, 100 ton lead, eighty 6-16 in. high pressure valves and 50 high pressure fire hydrants.

N. J., Manasquan — Aug. 8, by Boro Council installing water pumping equipment. Runyon & Carey, 845 Broad St., Newark, consult. engrs.; adv. this issue.

D. C., Wash.—Aug. 16, at office Washington Suburban Sanitary Comn., Evans Bldg., New York Ave., mains and sewers, Contrs. 32 W and S. R. B. Morse, Hyattsville, Md., dist. ch. engr.; adv. this issue.

Fla., Quincy—Aug. 24, by city, 1 uniflow engine, one 210 kva. or 312 kva. generator, 3 panel switch board, 2 centrifugal pumps, one 500 hp. feed pump and heater, 1 motor driven air compressor, condenser, 200 hp. 125 lb. return tubular boiler, 200,000 gal. concrete reservoir, 6,000 ft. 6-8 in. c.i. pipe, etc. J. P. Smith, clk. Noted June 22, under Industrial Works.

La, Plaquemine—Sept. 15, by F. Wilbert, mayor, and Bd. of Aldermen, remodeling waterworks and electric light plant. $150,000. Swanson-McGraw, Inc., 705 United Fruit Bldg., New Orleans, engrs. Noted May 11.

La., Pontchatoula—Oct. 1, by W. R. Haight, mayor, and Bd. of Aldermen, constructing waterworks and sewerage system. $130,000. Swanson-McGraw, Inc., 706 United Fruit Bldg., New Orleans, engrs. Noted May 11.

O., Rome (Hilliards, P. O.)—Aug. 10, by Franklin Co. (Columbus) laying 13,500 ft. c.i. mains in Sewer Dist. Prairie 1. E. G. Bradbury, 174 East Long St., Columbus, engr.

Mich., Northville—Aug. 14, by T. E. Murdock, village clk., laying 1,800 ft. 10 in. c.i. pipe and lowering 1,000 ft. existing pipe. A. Roth and C. W. Hubbell, 2348 Penobscot Bldg., Detroit, engrs.

Ill., Martinsville—Aug. 10, by Bd. Local Impvts. for 8 mi. 4, 6 and 8 in. c.i. mains, incl. valves, specials, and fire hydrants. W. B. Lynn, pres. W. R. Page, Rose Dispensary Bldg., Terre Haute, Ind., engr. Noted March 3, 1921.

Minn., St. Paul—Aug. 7, by H. W. Austin, city purch. agt., radial brick or rein.-con. tile chimney and one 15 ton hand-operated traveling type bridge crane for Water Dept. at McCarrons station.

Minn., Springfield—Aug. 7, by city, watermain extensions, 16,200 ft. 4-8 in. class B. c.i. pipe, thirty-six 4-8 in. gate valves, 22 hydrants, 12,000 lb. c.i. specials. $22,000. J. Schmelz, clk. Druar & Milinowski, 500 Globe Bldg., St. Paul, engrs. Noted June 2.

Minn., West Concord—Aug. 7, by city, waterworks extensions, incl. steel tank and tower, pump house, removing present building, shaft extension and pulley, etc. W. E. Glarner, clk. Toltz, King & Day, 1410 Pioneer Bldg., St. Paul, engrs. Noted June 29.

BIDS RECEIVED

S. C., Charleston—For 30,000 ft. rein.-con. and terra cotta pipe drains and appurtenances, from Bryan & Co., Jacksonville, Fla., $200,000. Noted June 22.

O., Cleveland—Constructing foundations at Fairmount Pumping Station, 2,200 cu. yd. concrete, 17,700 cu.yd. earth excav., 450 ton c.i. pipe and 96,011 lb. reinforcing, from Hunkin-Conkey Constr. Co., Century Bldg., $231,995; Lake Erie Constr. Co., Hickox Bldg., $257,932; Stange Constr. Co., Sixth-St. Clair Bldg., $257,984. Contract awarded to Hunkin-Conkey Constr. Co., $231,819.

CONTRACTS AWARDED

N. Y., Buffalo—Dept. Pub. Wks., Municipal Bldg., for filtration plant structures, Contr. 1, to Thompson-Starrett Co., 49 Wall St., New York, $1,800,480. Noted July 20.

Md., Cumberland—Laying water conduit, to Cumberland Contg. Co., 62-3rd Natl. Bank Bldg. Engrs. est. $100,000.

N. C., Kernersville—Constructing 100 ft. tower and tank, to R. D. Cole Mfg. Co., Union, Ga.; 2 deep wells, to Cummings & Williams, Kernersville; waterworks and sewerage system, to Boyd, Higgins & Goforth, Charlotte. Total $100,000.

O., Cleveland—Cuyahoga Co. 21,300 ft. 4-10 in. c.i. mains in Parma Dist. Impvt. 17, to Langahan Constr. Co., Marshall Bldg., $103,125; 6,500 ft. 4-8 in. c.i. mains in Parma Dist. Impvt. 18, to D. Pfahl & Co., Fisher Rd., $30,506. Noted July 27.

O., Columbus—See "Streets and Roads."

Mich., River Rouge—Submerged watermain across Rouge River about 40 ft. below water surface, 500 ft. 30 c.i. pipe to Greiling Bros. Co., East Walnut St., Green Bay, Wis., $46,000. Noted July 20.

Wis., Madison—Heavy duty air compressor for pumping station, to Nordburg Mfg. Co., Chicago and Oklahoma Sts., Milwaukee, $23,350. Engrs. est. $25,000. Noted March 16.

Wis., Milwaukee—Furnishing and erecting structural steel for Riverside Pumping Station, foot of Chambers St., from Worden-Allen Co., Port Washington Rd., $71,462; Wisconsin Bridge & Iron Co., North Milwaukee, $72,180; Wagner Architectural Iron Wks., 763 North Water St., $72,996.

Ia., Waterloo—For 2 rein.-con. reservoirs, to C. H. Werner, Waterloo, $43,000. City will buy c.i. pipe. Noted June 29.

Minn., Barnum — Waterworks system, 5,000 lin. ft. 6 in. c.i. mains, hydrants, specials, etc.; sewerage system, 5,000 lin. ft. 8-12 in. vitr. tile sewers, 15 manholes, 3 lampholes, 2 outfalls, to Pastoret Co., 308 Sellwood Bldg., Duluth, about $21,000.

Ont., Islington — Twp. of Etobicoke, waterworks system in Area 3, about 3 mi. 6 in. c.i. pipe; pipe laying to Grant Contg. Co., 50 Front St. E., Toronto; pipe to Natl. Iron Wks., foot of Cherry St., Toronto; valves to Drummond McCall Co., 373 Front St. E., Toronto; hydrants to J. T. Hepburn, 18 Van Horne St., Toronto. Engrs. est. $60,000. Noted July 13.

Ont., Oakville—Auxiliary gasoline driven pump, 1,000 g.p.m. to Goldie McCulloch Co., Galt, $32,000. Noted June 1.

Ont., Toronto—For 4,000,000 gal. per day electrically driven centrifugal pump, to J. Ingles Co., 14 Strachan Ave., $10,791. Noted June 1.

Sewers

PROPOSED WORK

Pa., Rochester — Making plans sewage disposal plant. $25,000. J. P. Leaf, boro. engr.

D. C., Wash.—Dist. Comrs., 509 Dist. Bldg., plan to extend water supply system. $100,000 appropriated.

Va., Petersburg—Making plans and soon takes bids repairing and extending mains. $25,000. L. Budd, city engr.

O., Warren — Authorized $63,500 bond issue sanitary and storm sewers in South Pine St. and River Ave.

Mich., Ecorse—Plans extending trunk and lateral sewers, brick, concrete, crock or segement block. $50,000 bonds sold. Architect not selected.

Wis., Waukesha—Making plans 2,000 ft. 42 in. rein.-con. pipe outfall sewer. $25,000. A. P. Kuranz, City Hall, engr.

Ia., New Vienna—Making plans sanitary sewers and sewage disposal plant. H. R. Green Co., Cedar Rapids Savings Bank Bldg., Cedar Rapids, engrs.

Tex., Ennis—See "Waterworks."

Tex., Houston—Soon receives bids 10,000 ft. storm sewers in Turner and Castle Court Addition, 12-57 in. vitr. clay, segment blocks or concrete pipe. $80,000. J. C. McVea, City engr.

Tex., Lubbock—Voted $100,000 bond issue for sewerage extensions and improvements. S. Sanders, city engr.

Cal., Crescent City—See "Streets and Roads."

Cal., Merced—Plan to vote on $70,000 bonds for sewers and $17,500 for improving Bear Creek Park site for camp grounds. C. D. Martin, city engr.

Ont., Hamilton—Plans sewage disposal system. $2,500,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

B. C., Chilliwack—Having plans prepared sewerage system. $30,000. Prices wanted on materials and equipment. C. Breckenridge, City Hall, engr.

BIDS DESIRED

N. Y., New York—Aug. 7, by J. Miller, pres. Manhattan Boro., Municipal Bldg., construction sanitary sewers and reconstruction existing sewers in Carmine St. from Varick St. to point 106 ft. east of east building line of Bleecker St.

Pa., Erie—Aug. 18, by M. J. Henry, city clk., constructing 4 sections Mill Creek Valley Relief Sewer. $40,000. F. Lynch, city engr.

D. C., Wash.—See "Waterworks."

La., Pontchatoula—See "Sewers."

Tenn., Nashville—Aug. 16, by S. H. McKay, secy. Bd. Pub. Wks., brick storm water culvert, incl. tailing ditches and catch basins, etc., in Hefferman St., private property, and alley west of 21st Ave. from point in private property, south of Jefferson St., thence southwardly through private property to Hefferman St., about 300 ft. west of 21st Ave., thence eastwardly in Hefferman St. to alley west of 21st Ave. and southwardly in said alley to point about 20 ft. south of Hefferman St. F. Z. Wilson, mayor.

O., Akron—Aug. 7, by M. P. Tucker, service dir., 2,595 ft. Gorge Blvd. Trunk Sewer 30 to 72-in. brick or segment block. $70,000. J. E. Root, Delaware Bldg., engr.

Mich., Northville—Aug. 14, by T. E. Murdock, clk., 4,315 ft. sanitary sewer, Sect. 4, 8 in. vitr. crock pipe. $25,000. A. Roth and C. W. Hubbell, 2348 Penobscot Bldg., Detroit, engrs.

Mich., Springwells—Aug. 15, by B. P. Esper, village clk., Village Hall, construct-

Sewers (Continued)

ing sewers, Sects. 10, 14 and 15. C. W. Hubbell, 2348 Penobscot Bldg., Detroit, consult. engr.; adv. this issue.

Wis., Madison—See "Waterworks."

Wyo., Casper—See "Streets and Roads."

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids July 26, sewers in (1) Rochester Ave., (2) Ashford St., (3) Van Sicklen St., (4) Ave. Q, (5) 57th St., (6) Union St., (7) East 28th St., (8) Nostrand Ave., etc., from F. Frey, 818 Ocean Parkway, (1) $23,157 (3) $4,170 (4) $3,859 (6) $2,667 (7) $2,258 (8) $2,006; Tomasetti & Co., Inc., 1133-60th St., (1) $24,650; Murphy Bros., 262 Bay 43rd St., (1) $25,090 (2) $6,570 (4) $4,153 (6) $2,689; D. Bonnacci, (2) $7,383 (5) $2,791 (8) $2,391; J. Jenings, Belle Harbor, (2) $8,029; J. J. Guinan Contg. Co., 2314 Gravesend Ave., (3) $3,761; Nazzarro & Querriero, 6712 11th Ave., (3) $3,925 (4) $3,749 (5) $2,326 (6) $2,385 (7) $2,024 (8) $2,183; Dady & Merrindino, (5) $2,693; Fozzi Bros., (7) $2,258. Noted July 20.

N. Y., Gloversville—Received low bid for 890 ft. 15 in., 1,640 ft. 12 in., 1,330 ft. 10 in. and 420 ft. 8 in. sewers and 1,300 ft. 4 in. laterals in Kingsboro Ave., Newman, Lawrence, Meadow and East State Sts., incl., from M. Vrooman, Inc., 10 North Main St., cheapest combination $27,242, using all vitr. pipe $27,247, concrete pipe $28,114.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., opened bids July 26, sewers in (1) Brown Pl. from Grand St. to Whitlock Ave., Whitlock Ave. from Brown Pl. to Bittman Ct., etc., receiving basins, etc., in (2) southerly corner of Sothern and Corona Aves. and on easterly side of Corona Ave. near angle point between Sothern Ave. and Merritt Pl., 2nd Ward, from S. Muccini, 6102 18th Ave., Brooklyn, (1) $28,229; Kennedy & Smith, 93 Amity St., Flushing, (1) $33,212 (2) $775; Murphy Bros., 262 Bay 43rd St., Brooklyn, (1) $34,848; Green Contg. Co., (2) $900; J. H. O'Brien, Jr., (2) $940. Noted July 20.

CONTRACTS AWARDED

N. Y., Perrysburg—See "Buildings."

N. C., Kernersville—See "Waterworks."

O., Columbus—W. H. Duffy, dir. Pub. Serv., 23,480 ft. 6-15 in. sanitary sewers in Dunedin Rd., to Gessner & Co., 616 Nicholas Bldg., Toledo, $39,018. Noted July 20.

O., Columbus—See "Streets and Roads."

Minn., Barnum—See "Waterworks."

Mo., Kennett—See "Streets and Roads."

Neb., Grand Island—Sewers and sewerage disposal plant, Sects. 1 and 4, to H. J. Peterson, 1119 South 35th St., Omaha, who sublet same to Ward & Weighton, 516-17 Davidson Bldg., Sioux City, Ia., $61,846; Sect. 2, to C. L. Hansen, Charles City, Ia., $131,274; Sect. 3, to Chambers Constr. Co., Grand Island, $41,181; Sect. 5, to Hansen & Willodson, Omaha, $35,718. Noted May 4.

Ont. Atwood—Elma Twp., ditching, mostly excav., small amount tile and concrete work, to G. Arbuckle, c/o G. Lochead, Atwood, $63,742. Engrs. est. $70,000.

Ont., Toronto—Vitr. tile sanitary sewers in Mount Pleasant Rd., to Grant Contg. Co., 50 Front St. E., $2,295; in Ruskin Ave., to W. R. Worthington, 555 Markham St., $64,694. Work involves 12,000 ft. vitr. tile, 8 in. and up. Engrs. est. $67,000.

Waste Disposal

BIDS RECEIVED

N. Y., Buffalo—For 200 ton incinerator plant, from C. O. Bartlett-Snow Co., French and Winter Sts., Cleveland, O., $291,286, G. W. Goethals Co., 40 Wall St., New York, $309,379, Universal By-Products Corp., Buffalo, $135,000; 50 ton garbage drying plant, from C. H. A. Wannenwetsch & Co., 563 William St., $78,000. Noted June 22.

D. C., Wash.—Dist. Comrs., 509 Dist. Bldg., additional incinerators at trash plant, Mt. Olivet Rd. and Mantello Ave., from Vulcan Incinerator Co., Surety Bldg., St. Louis, Mo., $33,685 (90 days); Sparks Crematory Constr. Co., Memphis, Tenn., $15,350 (60 days); Nye Odorless Crematory Co., Georgia Life Bldg., Macon, Ga., $18,250 (18 days). Noted July 6.

Bridges

PROPOSED WORK

La., Minden—See "Streets and Roads."

Ky., Morganfield—Union and Crittenden Counties soon take bids steel bridge across Tradewater River. $25,000. R. Orcutt, Morganfield, engr.

Mo., Kansas City—See "Railways."

Ont., Prairie Siding—Kent Co. (Chatham) authorized construction of steel, double lift, leaf type bridge over Thames River, here. $150,000. W. G. McGeorge, Chatham, Co. engr.

BIDS DESIRED

Virginia—Aug. 18, by State Hy Comm., Richmond, bridge over Rappahannock River, Route 1, Project S-225; rein.-con. bridge over Swift Creek, Route 1, Project S-249; bridge over Spring Branch, Route 10, Project S-250. G. P. Coleman, commr.; adv. this issue.

S. C., Bennettsville—Aug. 15, by Bd. Comrs. Marlboro Co., 6 culverts and 4 rein.-con. bridges. B. M. English, co. engr.; adv. this issue.

Tenn., Nashville—Sept. 7, by S. H. McKay, city clk., City Hall, for East Nashville viaduct and east and west approaches to Church St. viaduct. Freeland, Roberts & Co., 1212-13 Independent Life Bldg., consult. engrs.; adv. this issue.

O., Columbus—Aug. 11, by Dept. Hys., and Pub. Wks., bridges in following counties; Brown Co., Sect. "P" Milford-Hillsboro Rd., $2,777; Guernsey Co., Sect. "I" National Rd., $8,361; Guernsey Co., Sect. "K" National Rd., $8,724; Columbiana Co., Sect. "Salineville" Salineville-Yellow Creek Rd., concrete bridge, $6,053; Highland Co., Sect. "N" Hillsboro-Washington C. H. Rd., 2 bridges $11,096; Medina Co., Sect. "P" Ashland-Medina Rd., bridges and culverts, $6,923; Pickaway Co., Sect. "U" Columbus-Portsmouth Rd., $12,565.

Illinois—Aug. 18 by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, following bridges: substructures for 1 steel bridge and 1 steel span, 4 rein.-con. approach spans for 1 steel and concrete, Route 1, Sect. 29-B, Saline Co., 1 steel superstructure, Route 1, Sects. 29-C, Saline Co., 1 rein.-con., Route 1, Sect. 30-B, Saline Co., 4 rein.-con., Route 1, Sect. 31-B, Saline Co., rein.-con. approach spans for steel and concrete, 1 rein.-con. bridge and 1 culvert, Route 1, Sect. 33-B, Saline Co., 1 steel superstructure, Route 1, Sect. 33-C, Saline Co., 1 rein.-con. bridge and 1 culvert, Route 1, Sect. 34-B, Williamson-Johnson Co., 1 rein.-con. bridge and 1 culvert, Route 1, Sect. 37-B, Johnson Co., 2 rein.-con. bridges and 2 culverts, Route 3, Sect. 37-B, McDonough Co., 2 rein.con. bridges and 7 culverts, Route 3, Sect. 8-B, Rock Island Co., 1 substructure for steel. Route 8, Sect. 32-B, Woodford Co., 1 steel superstructure, Route 8, Sect. 32-C, Woodford Co., 3 rein.-con. bridges, Route 12, Sect. 15-B, Marion Co. rein.-con. approach spans for concrete and steel, Federal Aid Project 26, Sect. 20-B, Logan Co., 1 steel superstructure, Route 26, Sect. 20-C, Logan Co., rein.-con. approach spans and 1 steel substructure, 1 rein.-con., Route 33, Sect. 43-B, Fulton Co., 1 steel superstructure, Route 33, Sect. 43-C, Fulton Co., (Proposals will also be considered for specified combinations.) C. Older, ch. highway engr.

Ia., Tipton—Aug. 10 by Auditor Cedar Co., 40 box culverts, 1 circular culvert, 20 extensions, 1 slab and 1 pony truss bridge, reconstruction 2 I-Beam bridges. H. L. Phelps, co. engr.

Minn., Two Harbors—See "Streets and Roads."

Missouri—Aug. 11, by State Hy. Dept. Bd., at Kennett, two 80 ft. steel truss spans, one 45 ft. and one 30 ft. I beam spans, one 30 ft. I beam span-skewed, all creosoted wood floors, 18 ft. roadways, concrete abutment, Federal Aid Project 183 C, Dunklin Co.

Missouri—Aug. 14, by State Hy. Bd., at Benton, one 50 ft. and one 40 ft. I beam span, one 70 ft. and one 85 ft. steel truss spans, all creosoted wood floors, 18 ft. roadways, concrete abutments, Federal Aid Project 5, Scott Co.

Wash., Seattle—Aug. 15 (change of date) constructing bascule portion of 288 ft. bridge over West Waterway on Spokane St., two side spans and girder crossing, steel construction, 5 ft. center to center, wood block floor, 6 ft. sidewalk, $1,500,000. F. A. Rapp, 6312 44th St., S. W., engr.

Que., Vaudreuil—Iles Perrot Bridge Comn. taking bids, 2 bridges, which will connect Ile Perrot with Vaudreil on one side and St. Anne De Bellevue on other. M. Necktar, Dept. Roads, Quebec, engr. Noted March 2.

Australia, New South Wales—Sydney—Sept. 1, 1923, by New South Wales Government, superstructure and substructure of cantilever bridge across Sydney Harbor. T. A. Coghlan, agt. genl.

BIDS RECEIVED

North Carolina—State Hy. Dept., Raleigh, rein.-con. bridges and culverts on (1) State Project 131, Gates, (2) State Project 888, Yancey Co., (3) State Project 484, Wake Co., (4) State Project 702 A, Alleghany Co., (5) State Project 952 A, Jackson Co., (6) State Project 569, Moore Co., (7) State Project 963, Macon Co., from W. D. Murray-Saddler Corp., Norfolk, Va., (1) $28,908; Batson-Cook Co., West Point, Ga., (1) $29,462, (3) $31,292; Bacon-Moore Co., Littleton, (1) $30,707; Clark Co. Constr. Co., Winchester, Ky., (2) $42,076; Luck co., Sylva, (2) $45,436, (5) $42,608; Luten Bridge Co., 405 East 4th Ave., Knoxville, Tenn., (2) $57,022, (4) $36,469; Booz-Lloyd & Co., Marion, (3) $28,205; R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, (3) $31,310; W. E. Graham, Mt. Ulla, (4) $38,786; Brooks Calloway Co., Forsyth Bldg., Atlanta, Ga., (5) $36,889, (7) $25,115; Costello Bros., Knoxville, Tenn., (5) $45,426 (7) $26,731; C. B. Hester, Greensboro, (6) $26,390; Mayfield Constr. Co., Denmark, S. C., (6) $26,871; J. A. Marrow, Clarksville, Va., (6) $27,645; J. T. Plott, Greensboro, (7) $28,310. Noted July 6 and 13.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, received bids for following bridges (1) 1 concrete and substructure for steel, Route 3, Sect. 38-B. (2) 1 steel superstructure, Route 3, Sect. 38-C, McDonough Co. (3) 5 concrete, Route 3, Sect. 56-B (4) 1 steel superstructure, Route 3, Sect. 56-C (5) 4 concrete and 1 steel, Route 3, Combination K, Greene Co. (6) 1 concrete, Route 11, Sect. L-2, Effingham Co. (7) 1 substructure for steel, Route 11, Sect. H-1, (8) 1 steel superstructure, Route 11, Sect. H-2, Cumberland Co. (9) 4 concrete, Route 14, Sect. 9-B, Hamilton Co. (10) 1 concrete, Project 6, Sect. K-1. (11) 1 steel superstructure, Project 6, Sect. K-2. (12) 1 concrete and 1 steel, Project 6, Combination V, Mason-Menard Co. (13) 5 concrete, Project 26, Sect. 17-B, McLean Co. (14) 3 concrete, Project 34, Sect. 26-B (15) 2 concrete, Project 34, Sect. 27-B (16) 5 concrete, Project 34, Combination N (17) 1 concrete, Project 37, Sect. 22-B (18) 1 steel superstructure, Project 37, Route 22-C (19) 1 steel, Route 37, Combination O, Clinton Co. (20) 1 steel substructure, Route 39, Sect. 1-B (21) 1 steel superstructure, Route 39, Sect. 1-C (22) 1 steel, Route 39, Combination P, Carroll Co., from D. Alford, Cuba, (1) $11,152. H. C. Holmes, Macomb, (1) $12,308. W. H. Shons, 109 Spring St., Freeport, (1) $12,443 (3) $43,820 (6) $13,769 (7) $12,174 (9) $10,057 (10) $75,559 (14) $11,555 (16) $39,200 (20) $2,804 (21) $8,545 (22) $11,100. Mississippi Valley Steel Co., Decatur, (2) $6,751 (4) $10,441 (8) $7,632. Illinois Steel Bridge Co., Jacksonville, (2) $7,081 (4) $10,621 (11) $14,998 (18) $13,148. St. Louis Structural Steel Co., Bank of Commerce Bldg., St. Louis, Mo., (2) $7,313. Herrick Constr. Co., Carlinville, (3) $36,126. C. M. Haines, Jerseyville, (3) $40,318. Rochester Bridge Co., Rochester, Ind., (4) $10,796 (8) $8,185 (11) $15,272 (18) $13,232 (21) $8,294. J. Brogen, Carrolton, (5) $58,500. W. Belindt, St. Peter, (6) $10,445, (9) $7,641. C. J. Moritz, Effingham, (6) $13,781. Zimmerly Bridge Co., Paris, (7) $13,311 (15) $24,000 (17) $53,732. W. C. Johnson, 512 South High St., Belleville (7) $13,789 (14) $11,569 (15) $25,952 (18) $13,500 (19) $75,000. Vincennes Bridge Co., Vincennes, Ind., (8) $7,947. M. Frazier, Louisville, (9) $10,021. Ferguson Constr. Co., Rockford, (10) $75,975 (17) $56,909. Porter-McCully Co., Mackinaw, (11) $16,482 (12) $103,700. E. H. Riebe, Lincoln, (13) $20,901. Carmine Constr. Co., Sullivan, (13) $21,719. G. C. Fairclo, Milburn, (13) $22,188. A. H. Ladd, Edwardsville, (14) $11,561. Parkham Constr. Co., East St. Louis, (15) $25,598 (19) $75,500. M. & P. Contg. Co., Rockport, Ind. (16) $39,700. Roth Bros. & Akers, Ottumwa, Ia., (16) $41,000. Stressenreuter Bros., 3020 South Halstead St., St. Louis, Mo., (17) $57,884. B. Harrison, Decatur, (20) $2,263 (22) $11,700. B. Griesen, Bloomington, (20) $2,582. Continental Bridge Co., 460 Monadnock Bldg., Chicago, (21) $8,503. Noted June 29.

Missouri—State Hy. Dept. at div. office, Canton, opened bids June 30, one 85 ft. steel, one 30 ft. rein.-con. spandrel filled arch, one 24 ft. and three 30 ft. rein.-con. deck girder, one 14 ft., and two 20 ft. rein.-con. slab spans, 18 ft. roadways, on Federal Aid Project 38, Lewis Co., from O. J. Hanick, 4066 Lindell St., St. Louis, $35,370. Noted May 4.

CONTRACTS AWARDED

Michigan — State Hy. Dept., Lansing, Bridge 3,807,001, grading and drainage structures on 0.396 mi. road, and abutments for subway under Michigan Central R.R. tracks, 1,683 cu.yd. rein.-con., 26,921 lb. steel, 15.442 cu.yd. earth approach and fill, etc., to Fargo Eng. Co., Jackson, $45,303. State to furnish cement.

Bridges (Continued)

Ia., Newton—Jasper Co. 2 high truss bridges to Vinton Eng. and Constr. Co., Vinton, $38,932. Concrete figures $25.95 per cu.yd.

Ia., Waukon—Allamakee Co. to A. Olson Constr. Co., Waterloo, 1 high truss, 1 I-Beam, 18 box culverts and extensions, $40,636, concrete figures $27.92 per cu.yd.; J. C. Beede, Waukon, 30 box culverts and extensions, $14,532, concrete figures $19.57 per cu.yd.; W. C. Bender, Waukon, 10 box culverts, $6,153, concrete figures $24.13; Pittsburgh-Des Moines Steel Co., 4th St. south of Tuttle St., Des Moines, 10 box culverts, 1 I-Beam, 1 pony truss, $20,480, concrete figures $30.39 per cu.yd.; J. J. Thomas, Waukon, 6 box culverts $2,729, concrete figures $22.18 per cu.yd.; J. B. Elliott, Fairbank, 20 box culverts and extensions $11,900 concrete figures $25.48 per cu.yd.

Minn., Moorhead — See "Streets and Roads."

Tex.—Waco-McLennan Co., concrete culverts and bridges on 10 mi. lateral roads in Mart Dist., to McCoy & Richards, Arlington, $37,886.

Colorado—State Hy. Dept., Denver, 11 timber bridges, Lincoln Co., to A. R. Mackey, Sterling, $37,738. Engrs. est. $37,192. Noted July 6.

Wash., Central Ferry (Penawawa P.O.)—State Hy. Comm., Olympia, 700 ft. steel bridge across Snake River on Inland Empire Highway, here, connecting Whitman and Garfield Counties, to Penn Bridge Co., Beaver Falls, Pa., 4,270 cu.yd. concrete at $21 to $27.50 per cu.yd., 1,900,000 lb. structural steel $0.0767 per lb., 210,000 lb. steel reinforcing bars $0.059, 3,000 cu.yd. earth approach and fill, $8.50 per cu.yd., etc., total $283,297. Engrs. est. $300,000. Noted June 15.

Ont., Orangeville—Garafraxa and East Luther Twps., Dufferin Co., two bridges over Grand River, 100 ft. concrete truss to J. Langdon, Kenilworth, $18,374; 180 ft. concrete bridge with two concrete arch trusses, to J. Kidd, Inglewood, $22,055. Noted June 22.

Dams

BIDS DESIRED

N. Y., Newburgh—Aug. 14, by W. J. McKay, city mgr., dams at Silver Stream. G. W. Fuller and J. C. Harding, 170 Bway., New York City, engrs.; adv. this issue.

Railways

PROPOSED WORK

New York — Bd. Contract & Supply, Rochester, soon takes bids removing car tracks on Augustine St. from side to center of street. $33,000. C. A. Poole, city engr.

Missouri—Kansas City, Kaw Valley & Western R.R., 919 Baltimore St., Kansas City, purchased Kansas City Outer Belt & Electric R.R. and plans to expend $500,000 on improvements, incl. regrading and relaying with 80 lb. steel rail in several places, constructing overhead crossing and number of bridges. W. R. Taylor, vice pres. and genl. mgr.

BIDS DESIRED

New York—Aug. 15, by Transit Comn., 49 Lafayette St., New York, installing tracks for portion of 14th St.-Eastern Line in Boros. of Manhattan and Brooklyn. Former bids rejected. G. C. McAneny, chn. Noted July 6.

CONTRACTS AWARDED

Quebec — Montreal Tramways Co., 78 Craig St. W., Montreal, will lay 3,187 ft. double track on Church Ave., Verdun, from Wellington St. to Aqueduct. $133,427. Work will be done by day labor. R. B. Graves, ch. engr.

Excavation and Dredging

PROPOSED WORK

La., Alexandria—Soon takes bids improving 7th St. Ditch and other drainage improvements. $100,000 bonds voted for project. V. M. Ake, clk.

Ky., Morganfield—Bd. Drainage Comrs., Union Co., soon takes bids 11 mi. open ditches, 300,000 cu.yd. excav., floating dredge work. N. R. Orcutt, ch. engr.

Mich., Detroit—Wayne Co., Macomb Co. (Mt. Clemens) and Oakland Co. (Rochester) making plans Stevens and Base Line Drain No. 1, 4,758 ft. long, average depth 5 ft., width at bottom 2 ft.; Stevens and Base Line Drain No. 2, 14,700 ft. long, depth varying from 7 ft. to 4.5 ft., average width at bottom 2 ft. $25,000. G. A. Dingman, County Bldg., engr.

Wis., Kenosha—Kenosha Co., Drainage Bd., c/o A. L. Drury, attorney, 210 Market St., making preliminary plans draining 8 sq.mi. Dist. 2, Mud Lake, part open ditch and part tile drains. W. E. O'Brien, 791 Sheridan Rd., engr.

Wis., Madison—Dane Co. Drainage Bd., c/o P. H. Hintze, Court House, plans dredging Yahara River. $75,000. Engineer not selected.

Wis., Mayville—Dodge Co. Farm Drainage Bd., having plans prepared 15,000 ft. 10-18 in. drian tile, some open ditch work. $25,000. L. M. Schindler, 717 Clark St., Appleton, engr.

Minn., New Ulm—L. G. Vogel., and Brown Co. takes bids about Aug. 19, drainage work, 27,050 ft. 6-26 in. tile. C. Case, New Ulm, engr.

Neb., North Platte—D. D. 1, Lincoln Co., plans drainage system, 22.8 mi. open ditches, 16.4 mi. tile drains, 884,000 cu.yd. excav. $260,000. W. A. Kelly, c/o Federal Land Bank of Omaha, Omaha, dist. engr.

Cal., Paradise—Paradise Irrigation Dist. takes bids about Aug. 7, replacing 1,300 ft. open canal with wood stave pipe line and completing distributing system. $65,000 bonds voted. L. M. Edwards, Paradise, supt.

BIDS DESIRED

Mo., New Madrid—Aug. 7, by C. L. V. Jones, clk. New Madrid Co., and W. B. Rossiter, engr., New Madrid, main ditch and Laterals 1 and 2, in D. D. 36, 124,552 cu.yd. excav.; main ditch and laterals 1, 2 and 3 in D. D. 37, 49,925 cu.yd. excav.

Ark., Varner—Aug. 15, by Comrs. Cummins D. D., Lincoln and Desha Counties, at office of Penitentiary Comn., State Capitol Bldg., Little Rock, 5½ mi. main ditch, 10 ft. deep, 45 ft. bottom, 428,117 cu.yd. excav.; 3 mi. lateral ditches, 6 ft. deep, 6 ft. bottom, 31,000 cu.yd. excav. Parkes Eng. Co., Citizens Bank Bldg., Pine Bluff, engrs.

BIDS RECEIVED

N. Y., Brooklyn—C. L. Cadle, supt. Pub. Wks., Albany, opened bids July 25, dredging portion of Henry St. slip at Gowanus Bay, here, Terminal Contr. 90, from Taylor Dredging Co., Communipaw Ave., Jersey City, N. J., $19,085; Great Lakes Dredge & Dock Co., 17 Battery Pl., New York City, $21,184; Columbia Dredging Corp., 30 Church St., New York City, $22,235. Noted June 29.

Streets and Roads

PROPOSED WORK

N. Y., Bath—Defeated $25,000 bond issue paving various streets. Noted July 13.

N. Y., Hornell—Authorized $100,000 for new brick pavements.

Pa., Erie—See "Miscellaneous."

Pa., Franklin—Comrs. Venango Co. plan paving 1.5 mi. Reno-Oil City Rd., concrete, 16 ft $25,000. Co. Eng. Dept., engrs.

Pa., Pittsburgh—Plans repaving Milwaukee St. from Herron to Jefferson Sts., 30 ft. wide. $44,000. C. A. Finley, dir. pub. wks.

D. C., Wash.—Dist. Comrs., 509 Dist. Bldg., plan paving various streets. $235,000 appropriated.

D. C., Wash.—Dist. Comrs., 509 Dist. Bldg., plan grading and paving various streets. $70,000 appropriated.

Va., Norfolk—Making plans and soon takes bids concrete paving New York Ave. $8,700, Harrington Ave. $7,70, Claremont St. $18,000; draining Omohundro Ave. $9,235. C. E. Ashburner, city engr.

Va., Petersburg—Making plans and soon take bids constructing 3 mi. of 18-30 ft. concrete road. $60,000. L. Budd, city engr.

Fla., Bushnell—Sumpter Co. plans to vote on $54,000 bonds for paving with asphalt and crushed rock 4 mi. road from Center Hill west to Main Rd.; $54,000 4 mi. road from Wildewood to Lake Co. line; $18,000 road from Main Highway to Dade Memorial Park. W. N. Potter, co. clk.

Fla., Melbourne—Aug. 12, to vote on $70,000 bonds grading, widening, paving and laying storm sewers in various streets.

Tenn., Knoxville—Plans asphalt paving 7 mi. Snabs Blvd., 35 ft. W. T. Brooks, Knoxville, engr.

Tenn., Rutledge—Grainger Co. making plans grading 50 mi. and paving 25 mi. road, 22 ft., macadam. $204,000. W. Bewely, Knoxville, engr.

Tenn., Sevierville—Plans paving, guttering and grading various streets, 20-30 ft. $75,000.

La., Minden—Webster Parish will sell $325,000 bonds Aug. 22 building roads and bridges in Road Dist. 1. C. R. Davis, clk.

Ky., Morganfield—Soon takes bids brick paving, curbing, guttering and laying sidewalks on 2 mi. various streets. N. R. Orcutt, city engr.

O., Warren—Plans to issue $93,000 bonds paving and widening etc., 3,925 ft. East Market St. G. T. Hecklinger, city clk.

Ind., Cannelton—Perry Co. received no bids grading and gravel surfacing 17,240 ft. Hanser Rd., 16 ft. $37,000. Will re-advertise. County Surveyor, Cannelton, engr.

Mich., Hamtramck (Detroit P. O.)—Making plans paving 2,599 ft. Lumpkin Ave. from Caniff to Carpenter Ave., 24 ft., 6,853 sq.yd. asphalt or concrete, 5,136 lin.ft. combined concrete curb and gutter, 3,080 cu.yd. earth excav., etc. G. Jerome, 1331 Majestic Bldg., Detroit, engr.

Wis., Beloit—Soon receives bids resurfacing 10,000 sq.yd. State St. from Public Ave. to State line, 13,000 sq.yd. Portland Ave. from 4th to Lincoln Aves. Bids to be asked on various types. G. E. Helbink, City Hall, engr.

Kan., Garnett—Anderson Co. plans gravel surfacing 4.121 mi. King of Trails Highway, Sect. A, Federal Aid Project 113, 18 ft. J. P. Irons, co. engr.

Kan., Wellington—Sumner Co. had plans prepared grading 8.425 mi. Meridian Rd., Sects. D. and E, Federal Aid Project 35, 29½ ft. J. W. Mavity, Wellington, engr.

Nebraska—State Hy. Dept., Lincoln, plans gravel surfacing 8 mi. Project 3, Grand Island West; grading Project 169, from Grand Island to Hastings, road from Schuyler west, Colfax Co.; paving Project 98 B, Crete east, 690 lin.ft. concrete, bitulithic, brick, asphalt or asphaltic concrete, 20 ft., with 12 in. flat curb both sides, 5,910 lin.ft. 4 in. gravel, 20 ft.; grading and clay surfacing Project 197, Springview to Ainsworth, Keyapaha and Brown Counties. G. E. Johnson, state highway engr.

Neb., Lincoln—Plans paving 6 blocks Dist. 490, 11th St. from Van Dorn to High Sts., High St. from 11th to 13th Sts.; 1 block Dist. 491, Plum St. from 14th to 15th Sts.; 5 blocks Dist. 492, 10th St. from D to Garfield Sts.; 2 blocks Dist. 493, 28th St. from Holdredge to Potter Sts.; 16 blocks Dist. 494, A St. from 11th to 1st Sts., west half of A St. from 1st St. to Folsom Ave.; 1 block Dist. 131, alley between 17th and 18th Sts. from L to M Sts. G. W. Bates, city engr.

Missouri—State Hy. Dept., Jefferson City, plans 7.329 mi. road from Cairo to Poplar Bluff, 24 ft., Federal Aid Project 5, Scott Co., 10,107 cu.yd. earth excav., 3,307 cu.yd. borrow, 16,546 sq.yd. reconstructed base course, 51,815 sq.yd. gravel pavement, 16 ft. wide, 11 in. at center, 9 in. at edges, 16,546 sq.yd. gravel surface course, etc.; 8.426 mi. road from Dexter to Malden, 24 ft., Federal Aid Project 183, Sect. C, Dunklin Co., 26,955 cu.yd. earth excav., 10,711 cu.yd. borrow, 40,356 sq.yd. of 8 in. 1 course plain concrete, 9 ft. wide, 7,257 sq.yd. of 7½ in. gravel surfacing, 7 ft. wide, 31,283 sq.yd. gravel surfacing, 16 ft. wide, 10 in. at center, 8 in. at edges, etc.; 5.801 mi. road from Dexter to Malden, 24 ft., Federal Aid Project 183, Sect. B, Dunklin Co., 17,624 cu.yd. earth excav., 4,318 cu.yd. borrow, 54,440 sq.yd. gravel surfacing 16 ft. wide, 11 in. at center, 9 in. at edges, etc.; 12.311 mi. road through Buffalo, State Aid Project 20.183, Dallas Co., 42,437 cu.yd. earth and 1,009 cu.yd. rock excav., 10,526 cu.yd. borrow, 586.5 cu.yd. concrete masonry, etc. B. H. Piepmeier, state highway engr.

Tex., Jasper—Jasper Co. plans grading and gravel surfacing 8 mi. State Highway 7, from here to Newton Co. line, 16 ft. $130,000. C. P. Hunder, co. engr.

Tex., Leonard—Voted $25,000 bond issue for street paving and improvements. Address Mayor.

Tex., Tyler—Smith Co. having plans prepared grading, surfacing with gravelly clay and bridging 7 mi. State Highway 31 from near here to Henderson Co. line, 16 ft., 20,000 cu.yd. borrow, 37,000 cu.yd. roadway earth excav., 1,440 lin.ft. concrete piles, 18,250 cu.yd. gravelly clay, 112,000 lb. reinforcing. $80,000. C. K. Caldwell, co. engr.

Cal., Crescent City—Had plans prepared improving various streets 23,900 cu.yd. grading excav., 316,300 sq.ft. grading surface, 316,300 sq.ft. asphaltic macadam pavement, 168,418 sq.ft. asphaltic macadam pavement to be rebuilt, 22,312 lin.ft. concrete curb, 55,351 sq.ft. concrete gutter, 607 lin.ft. 12 in. c. i. pipe for outfall sewer, 11,321 lin. ft. 6-12 in. vitr. pipe sewers, 893 ft. 10-24 in. corrugated iron pipe culverts, 648 ft. 18-30 in. corrugated iron segmental culverts, 2,170 lin.ft. 1 in. galvanized iron electric conduit, etc. C. Kennedy, Call Bldg., San Francisco, engr.

Cal., Merced—Had plans prepared improving 21st St., between L and R Sts., 24,630 sq.ft. grading, 24,630 sq.ft. 1½ in warrenite bitulithic on 3½ in. asphaltic con-

Streets and Roads (Continued)

crete, 914 lin.ft. concrete curbs; alleys in Blocks 84 and 112, 15,732 sq.ft. grading, 15,732 sq.ft. 1½ in. warrenite bitulithic on 2½ in. asphaltic concrete, 1,600 lin.ft. wood curbs. C. D. Martin, Merced, engr.

Ont., Hamilton—Having plans prepared asphalt paving, curbing and guttering Gibson Ave. from Wilson to Burton Aves., $22,000; Edgemont Ave. from Roxboro to Dunsmore Aves., $10,000; Roxboro Ave. from Province St. to Robins Ave., $17,000; Cannon St. from Buch to Sherman Aves., $17,000. Work involves 15,000 sq.yd. asphalt on concrete, etc. E. R. Gray, City Hall, engr.

Ont., Niagara Falls—Authorized asphalt pavements on Victoria Ave. $62,559; South Main St. $56,729. J. C. Gardner, city engr.

Ont., Stamford—Plans to construct new roads, $30,000, repairs and maintenance $20,000. M. F. Kerr, Stamford, engr.

BIDS DESIRED

Rhode Island—Aug. 16, by State Bd. Public Roads, Providence, reconstructing 2 sections State Highway, on Boston Neck Rd., in Narragansett; adv. this issue.

N. Y., Elmira—Aug. 7, by G. Jarchow, clk., paving 2,659 sq.yd. North Main St., 2,646 sq.yd. Baldwin St., 11,373 sq.yd. East and West Miller St., 3,733 sq.yd. College and West Side Aves., widening 121 sq.yd. North Main St., 3,010 sq.yd. North Main St., Sect. 2, 2,479 sq.yd. Sly St., 361 sq.yd. Irvine Pl., 300 sq.yd. Diven Ave., brick, asphalt, sheet asphalt, bitulithic or rein.-con. Noted June 29.

New York—Aug. 15, by H. S. Sisson, comr. State Hy. Dept., Albany, reconstructing roads in Columbia, Dutchess, Lewis and Orleans Counties; improving roads in Cayuga, Cortland, Essex and Orange Counties. J. C. Finch, secy.; adv. this issue.

N. Y., New York—Aug. 7, by J. Miller, pres. Manhattan Boro., Municipal Bldg., for widening and repaving with sheet asphalt on concrete, roadway Madison Ave. from 60th to 61st Sts., 57th St. from 5th to 6th Aves.; repaving with asphalt on concrete roadway 50th St. from Madison to 6th Aves., 51st St. from point 50 ft. west of westerly house line Park Ave. to 8th Ave., also paving granite block on concrete between rails of track from 6th Ave. to point 210 ft. westerly.

N. Y., St. George—Aug. 10, by J. A. Lynch, pres. Richmond Boro., grading Lincoln Ave. from South Railroad Ave. to Southfield Blvd., 50 ft.

N. Y., St. George—Aug. 8 by J. A. Lynch, pres. Richmond Boro., reconstructing with concrete pavement roadway Richmond Turnpike from Bulls Head to Linoleumville factory.

N. J., Freehold—Aug. 7, by Mayor and Council, reconstructing Bowne Ave. C. A. Niles, boro. engr.; adv. this issue.

N. J., Woodbury—Aug. 15, by Bd. Freeholders Gloucester Co., reconstructing Paulsboro-Gibbstown Rd. W. C. Cattell, co. engr.; adv. this issue.

Pa., Ashville—Aug. 14, by Boro. Council, c/o Cambria Co. Controller (Ebensburg), paving 3,000 ft. Broad St. and Dry Gap Rd. known as Main St., 20 ft., $30,000, separate bids on 245,000 No. 1 repressed vitr. paving block. O. P. Thomas, Johnstown, engrs.

Pa., Ebensburg—Aug. 14 by Supervs. East Taylor Twp., c/o Cambria Co. Controller, paving 4,800 ft. Mineral Point Rd. starting at West Point, 18 ft., $40,000, separate bids on 360,000 No. 1 repressed brick; by Supervs. Conemaugh Twp., c/o Cambria Co. Controller, 5,460 ft. Clapboard Run Rd., 18 ft., $55,000, separate bids on 438,000 No. 1 repressed brick. O. P. Thomas, Park Bldg., Johnstown, engr.

Pa., Franklin—Aug. 7 paving 6,200 sq.yd. Otter, Eagle and Chestnut Sts., brick on concrete. $25,000. J. McSnow, City Hall, engr.

Pa., Scalp Level (Windber P. O.)—Aug. 14 by Scalp Level Boro., c/o Cambria Co. Controller (Ebensburg), paving 2,500 ft. Main St., 20 ft., $25,000, separate bids on 210,000 No. 1 repressed vitr. brick. O. P. Thomas, Park Bldg., Johnstown, engr.

Pa., Youngsville—Aug. 17, by C. W. Spencer, boro. secy., paving 3,637 ft. Main St., 18 ft., one course rein.-con. $25,000. Noted June 1.

Maryland—Aug. 15, by State Roads Comn., Baltimore, building seven sections state highways in following counties, Garford Co., Contr. H-28; Somerset Co., Contr. F-56; Montgomery Co., Contr. M-36; Harford Co., Contr. H-28; Someset Co., Contr. S-16; Worcester Co., Contr. WO-27; Howard Co., Contr. HO-25. J. N. Mackall, chn.; adv. this issue.

Va., Petersburg—Aug. 10, by L. Brownlow, city mgr., 3 mi. road, 18 to 30 ft. wide, incl. 14,400 sq.yd. concrete. R. D. Budd, city engr.

North Carolina—Aug. 30, by State Hy. Comn., Raleigh, improving 10.47 mi. State Project 822, Cleveland Co., 12 acres clearing, 89,000 cu.yd. common and 4,300 cu.yd. rock excav., 3,502 ft. 15-30 in. concrete pipe, 110,620 sq.yd. concrete or asphaltic paving, 670 cu.yd. concrete, 81,000 lb. reinforcing, 1,340 lb. plates and bolts, $353,000; 7.03 mi. State Project 328, Columbus Co., 8,250 cu. yd. excav., 74,260 sq.yd. concrete or asphaltic paving, $199,000; 2.1 mi. State Project 590, Rockingham Co., 4,600 cu.yd. common and 1,200 cu.yd. rock excav., 342 ft. 15-24 in. concrete pipe, 19,720 sq.yd. concrete or asphaltic paving, etc., $57,200; 7.12 mi. State Project 106, Bertie Co., 18 acres clearing, 42,000 cu.yd. common excav. and borrow, 3,000 cu.yd. drainage ditches, 454 ft. 18-30 in. concrete pipe, 18,800 cu.yd. topsoil, 533 cu.yd. concrete, 66,400 lb. reinforcing, 1,050 ft. untreated timber piles, etc., $43,000; 9.55 mi. State Project 658, Mecklenburg Co., 34,400 cu.yd. common excav., 1,314 ft. 15-36 in. concrete pipe, 58,870 sq.yd. concrete or asphaltic paving, 297 cu.yd. concrete, 15,200 lb. reinforcing, $213,400; 11.06 mi. State Project 712, Ashe Co., 111,600 cu.yd. common and 16,600 cu.yd. rock excav., 222 cu.yd. rubble masonry, 2,806 ft. 15-30 in. concrete pipe, 29,300 cu. yd. topsoil, $69,000; 3.84 mi. State Project 847, McDowell Co., 27 acres clearing, 25,600 cu.yd. common and 41,200 cu.yd. rock excav., 571 cu.yd. concrete, 43,000 lb. reinforcing, 730 cu.yd. rubble masonry, $64,900; 7.59 mi. State Project 901, Buncombe Co., 77,100 cu.yd. common and 10,000 cu.yd. rock excav., 2,224 ft. 18-30 in. concrete pipe, 83,270 sq.yd. concrete or asphaltic paving, 519 cu.yd. concrete, 54,000 lb. reinforcing, etc., $280,900; 15.8 mi. State Project 882, Rutherford Co., 154,400 cu.yd. common and 6,000 cu.yd. rock excav., 3,476 ft. 15-30 in. concrete pipe, 40,920 cu.yd. topsoil, 614 cu. yd. concrete, 38,000 lb. reinforcing, etc., $92,000. C. M. Upham, state highway engr.

N. C., Raeford—Aug. 10, by Bd. Town Comrs., 15,000 sq.yd. concrete or asphaltic paving. Taplin & Perkins, High Point, engrs. Noted May 4.

S. C., Charleston—Aug. 24, by Comrs. Charleston Co., grading and surfacing 2.17 mi. road between Navy Yard and Port Terminals, 5,564 cu.yd. excav., 20,375 sq.yd. concrete surfacing. Sanitary and Drainage Comn., Broad St., engrs.

S. C., Orangeburg—Aug. 22, by Orangeburg Co., paving 1.59 mi. Orangeburg-Bamberg Rd., 3,198 cu.yd. excav., 16,837 sq.yd. plain concrete, bituminous concrete or sheet asphalt, etc., on 5 in. concrete.

S. C., Pickens—Aug. 15, by Pickens Co., improving 8.525 mi. Pickens-North Carolina Rd. between point near Reedy Cove Gap and North Carolina State line, work to be done in two sections, first section 1.54 mi. long, 25,978 cu.yd. common and 4,032 cu. yd. rock excav., 16,338 sq.yd. crushed stone surfacing, etc.; other section 6.97 mi. long, 144,600 cu.yd. common excav., 12,434 cu.yd. rock in retaining wall, 9,379 cu.yd. topsoil, 21,894 sq.yd. crushed stone surfacing, 5,191 lin.ft. rein.-con. pipe.

Ga., Americus—J. B. Ansley, engr., Courthouse, Sumter Co., taking bids surfacing 7 mi. Americus-Ellaville Rd., 50,000 sq.yd. bituminous macadam.

Louisiana—Aug. 10, by Highway Comn., Baton Rouge, gravel surfacing Homer-Minden Highway, Sects. A and B, Projects 364 and 365, 3,685 cu.yd. washed gravel, 5,475 cu.yd. sand clay gravel not less than 40% stone. J. M. Fourmy, state highway engr.

Tenn., Nashville—Aug. 16, at office S. H. McKay, city clk., resurfacing various streets with granite block and bituminous concrete, also grading and paving various streets asphaltic pavement. F. Z. Wilson, mayor; adv. this issue.

O., Columbus—Aug. 11, by Dept. Highways and Pub. Wks., grading, bridging and paving roads in the following counties: Allen Co., Sect. "A" Delphos-Kalida Rd., 0.66 mi., bituminous macadam, asphalt or tar, $14.478; Ashland Co., Sect. "Loudonville" Columbus-Wooster Rd., 0.208 mi., brick, $16,183; Crawford Co., Sect. "G" Bucyrus-Cresline Rd., 1.69 mi., rein.-con. $64,821, bituminous macadam, asphalt or tar, $57,254, brick $64,776; Cuyahoga Co., Sect. "A" Chagrin Falls-Cuyahoga Falls Rd., 2.731 mi., rein.-con., $81,534, brick $128,497; Franklin Co., Sect. "B" Columbus-Wooster Rd., 4.113 mi., Proposal No. 1 and Proposal No. 2 combined, waterbound macadam $69,587, brick $108.986; Gallia Co., Sect. "A-1" Gallipolis-Crown City Rd., 0.86 mi., plain concrete, $31,909; Guernsey Co., Sect. "F" and "Liberty" Cambridge-Newcomerstown Rd., 1.672 mi., rein.-con., $51,406; Guernsey Co., Sect. "G-1" Cambridge-Newcomerstown Rd., 2.036 mi., rein.-con., $64,504; Jefferson Co., Sect. "K-1" Ohio River Rd., 2.157 mi., brick, $112,248; Medina Co., Sect. "Medina West" Ashland-Medina Rd., 0.83 mi., rein.-con., $33,131, mono-brick $37,693; Meigs Co., Sect. "L" Pomeroy-Athens Rd., 2.845 mi., rein.-con., $78,727, bituminous macadam, asphalt or tar, $76,692; Morrow Co., Sect. "J" Marion-Galion Rd., 2.233 mi., bituminous macadam, asphalt or tar, $72,495; Morrow Co., Sect. "L" Mt. Gilead-Mansfield Rd., 6.322 mi., Kentucky rock asphalt, $196,895, bituminous concrete, $197,813, rein.-con., $200,904; Scioto Co., Sect. "R-2-a" Ohio River Rd., 3.139 mi., mono-brick, $129,068, rein.-con., $115,500, bituminous macadam, asphalt or tar, $105,851; Seneca Co., Sect. "A-1" Columbus-Sandusky Rd., 0.69 mi., concrete curb only $2,772; Washington Co., Sect. "K-2" Marietta-Caldwell Rd., 4.88 mi., rein.-con., $150,660.

O., Columbus—Aug. 15, by Dept. Highways and Pub. Wks., grading, bridging and paving 2.002 mi. Sect. "P" Akron-Wooster Rd. in Wayne Co., rein.-con. $52,697, monolithic brick $58,497, bituminous concrete $61,509.

O., Grandview Heights (Columbus P. O.)—Aug. 14, by Village Clerk, grading, paving with bituminous macadam, asphaltic concrete or sheet asphalt and building walks on following streets: Oakland Ave. (South) 680 ft. long, 50 ft. wide, 1,563 cu.yd. excav., 1,660 sq.yd. paving, 725 sq.yd. sidewalk and 1,304 lin.ft. curbs and gutters; Merrick Rd., 1,050 ft. long, 60 ft. wide, 965 cu. yd. excav., 2,824 sq.yd. paving, 1,096 sq. yd. sidewalk and 2,110 lin.ft. curbs and gutters; Broadview Ave., 1,018 ft. long, 60 ft. wide, 1,920 cu.yd. excav., 2,400 sq.yd. paving, 1,100 sq.yd. sidewalk and 1,964 lin.ft. curbs and gutters; Ashland Ave., 1,018 ft. long, 50 ft. wide, 3,258 cu.yd. excav., 2,415 sq.yd. paving, 1,100 sq.yd. sidewalk, 1,970 lin.ft. curbs and gutters; Oakland Ave. (North), 1,175 ft. long, 50 ft. wide, 2,753 cu.yd. excav., 2,775 sq.yd. paving, 1,263 sq.yd. sidewalk and 2,264 lin. ft. curbs and gutters; Elmer Ave., 952 ft. long, 50 ft. wide, 1,422 cu.yd. excav., 2,415 sq.yd. paving, 1,100 sq.yd. sidewalk, 1,970 lin.ft. curb and gutters; Elmwood Ave., 1,018 ft. long, 50 ft. wide, 2,105 cu.yd. excav., 2,415 sq. yd. paving, 1,100 sq.yd. sidewalk, 1,970 lin. ft. curb and gutters; 2nd Ave., 864 ft. long, 60 ft. wide, 4,148 cu.yd. excav., 2,262 sq.yd. paving, 925 sq.yd. sidewalk and 1,900 lin. ft. curb and gutters; Eastwood Ave., 570 ft. long, 50 ft. wide, 2,917 cu.yd. excav., 934 sq.yd. paving, 220 sq.yd. sidewalk and 785 lin.ft. curb and gutters; Virginia Ave., 500 ft. long, 50 ft. wide, 1,604 cu.yd. excav., 833 sq.yd. paving, 350 sq.yd. sidewalk and 650 lin.ft. curbs and gutters; Oxley Rd., 3,612 ft. long, 50 ft. wide, 10,888 cu.yd. excav., 9,059 sq.yd. paving, 3,783 sq.yd. sidewalk and 6,660 lin.ft. curb and gutters. All to be awarded to one bidder. Total cost, $140,000. Burgess & Niple, 223 East Broad St., Columbus, engrs.

O., Dayton—Aug. 7, by G. F. Baker, dir. pub. service, paving 1,000 ft. Five Oaks Ave. from Forest to Old Orchard Aves., 30 ft. wide, brick, cement curb and gutter, $19,600; repaving 1,500 ft. Monument Ave. from Main to Kenton Aves., 40 ft., brick, or brick gutters with asphalt, $25,000; 3 alleys, 1,750 ft. long, 16 ft. wide, rein.-con., $9,500. I. E. Houk, city engr.

Indiana—Aug. 8, by State Hy. Comn., Indianapolis, grading and gravel surfacing 8.877 mi. French Lick Rd., 16 ft., in Dubois Co., $76,000; grading and concrete paving, 3.26 mi. Dixie Bee Line, 16 ft., in Sullivan Co., 18,932 sq.yd. concrete on concrete, $65,000. State Hy. Dept., engrs.

Ind., Jeffersonville—Aug. 7, by Comrs. Clark Co., grading and paving 9,343 ft. James Helger Rd., 16 ft., 10,277 sq.yd. concrete on concrete. $38,500. County Surveyor, Jeffersonville, engr.

Ind., Princeton—Aug. 7, by Comrs. Gibson Co., grading and paving with crushed stone, 14,807 ft. C. B. Smith Rd., $28,000; 13,604 ft. W. C. Barrett Rd., $26,500; 15,748 ft. Chas. Sidle Rd., $29,000, all 18 ft. County Surveyor, Princeton, engr.

Michigan—Aug. 8, by State Highway Dept., Lansing, grading and surfacing 8.283 mi. State Trunk Line Rd. 89-4, Allegan Co., 50,576 cu.yd. excav., 77,597 sq.yd. gravel.

Michigan—Aug. 9, by State Hy. Dept., Lansing, grading and surfacing 1.063 mi. State Trunk Line Rd. 31-12, Sect. A, Huron Co., 4,930 cu.yd. excav., 11,228 sq.yd. asphalt, concrete or bituminous concrete.

Illinois—Aug. 18, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, gravel surfacing 1.68 mi. Route 7, Sect. N-29-A, Madison Co., 16 ft., paving 5.37 mi. Route 1, Sect. 25, Clark Co., 5.04 mi. Route 3, Sect. 8, Rock Island Co., 0.61 mi. Route 6, Sect. 28, Whiteside Co., 1.67 mi. Route 6, Sect. 29, Whiteside Co., 5.94 mi. Route 9, Sect. 9, McLean Co., 3.75 mi. Route

Streets and Roads (Continued)

9, Sect. 10, McLean Co., 6.58 mi. Route 22, Sect. 13, Will Co., 0.77 mi. Route 22, Sect. 17, Kane Co., 5.09 mi. Route 31, Sect. 5, Adams-Brown Co., 5.67 mi. Route 31, Sect. 6, Brown Co., 5.81 mi. Route 38, Sect. 1, Jersey Co., 4.87 mi. Federal Aid Project 26, Sect. 21, Logan Co., 5.68 mi. Federal Aid Project 26, Sect. 22, Logan Co., 5.28 mi. Federal Aid Project 27, Sect. 36, Tazewell Co., 5 mi. Federal Aid Project 28, Sect. 26, Livingston Co., 4.23 mi. Route 29, Sect. 36, Iroquois Co., 6.6 mi. Route 29, Sect. 37, Iroquois Co., 2.9 mi. Federal Aid Project 29, Sect. 38-D, Iroquois Co., 3.66 mi. Federal Aid Project 30, Sect. 15, Kankakee Co., 5.63 mi. Federal Aid Project 30, Sect. 16, Kankakee Co., 4 mi. Federal Aid Project 30, Sect. 17, Will Co., 4.17 mi. Federal Aid Project 32, Sect. 11, Jefferson Co., 3.4 mi. Federal Aid Project 32, Sect. 12, Jefferson Co., 5.42 mi. Federal Aid Project 32. Sect. 13, Washington-Jefferson Co., 5.16 mi. Federal Aid Project 33, Sect. 42, Fulton Co., 5.37 mi. Federal Aid Project 36, Sect. 66, Woodford-Marshall-La Salle Co., 4.91 mi. Federal Aid Project 36, Sect. 67, Marshall-La Salle Co., 5.21 mi. Federal Aid Project 38, Sect. 45, Schuyler Co., 3.64 mi. Federal Aid Project 38, Sect. 46, Schuyler Co., 5.04 mi. Federal Aid Project 39, Sect. 2, Carroll Co., 6.63 mi. Federal Aid Project 44, Sect. 2, Christian Co., 0.35 mi. Route 6, Sect. E, Bond Co., 0.94 mi. Route 15, Sect. K-29-A, La Salle Co., all foregoing 18 ft. Alternate bids on following types; portland cement concrete, monolithic brick (4 in. brick) bituminous filled brick (3 in. brick) bituminous concrete with binder course (specifications C1, C2, C3 or CT) bituminous concrete without binder course (specifications C1, C2, C3 or CT). Grading 90,505 cu.yd. Route 1, Sect. 29-A, White-Gallatin-Saline Co., 30,125 cu.yd. Route 1, Sect. 30-A, Saline Co., 47,500 cu.yd. Route 1, Sect. 31-A, Saline Co., 45,895 cu.yd. Route 1, Sect. 33-A, Saline Co., 60,410 cu.yd. Route 1, Sect. 34-A, Williamson-Johnson Co., 31,400 cu.yd. Route 1, Sect. 35-A, Johnson Co., 55,970 cu.yd. Route 1, Sect. 36-A, Johnson Co., 52,010 cu.yd. Route 1, Sect. 37-A, Johnson Co., 56,049 cu.yd. Route 3, Sect. 37-A, McDonough Co., 67,020 cu.yd. Route 8, Sect. 32-A, Woodford Co., 42,225 cu.yd. Route 8, Sect. 37-A, Tazewell Co., 42,120 cu.yd. Route 9, Sect. 9-A, McLean Co., 26,370 cu.yd. Route 9, Sect. 10-A, McLean Co., 37,340 cu.yd. Route 12, Sect. 15-A, Marion Co., 36,865 cu.yd. Route 28, Sect. 44-A, Knox-Henry Co., 31,550 cu.yd. Route 28, Sect. 5-A, Henry Co., 25,797 cu.yd. Federal Aid Project 26, Sect. 25-A, Logan Co., 60,930 cu.yd. Federal Aid Project 33, Sect. 43-A, Fulton Co., 46,830 cu.yd. Route 38, Sect. 44-A, Schuyler Co. Proposals will be considered for the sections separately and also for specified combinations. C. Older, ch. highway engr.

Ill., Morris—Aug. 15, by Bd. Supervs. Grundy Co., paving 6,584 ft. Route 2, Sect. E-15-D, 18 ft. portland cement concrete. $29,613. E. G. Cryder, chn.

Ill., Sycamore—Aug. 9 at office J. G. Betty, clk., for 9,140 sq.yd. bituminous macadam and 580 sq.yd. rein.-con. paving, 5,138 ft. concrete curb.

Wis., Johnson Creek—Aug. 11, by W. A. Christians, village clk., and Jefferson Co. State Road & Bridge Com., concrete surfacing etc., Milwaukee St. from Union to South Sts., Watertown St. from Milwaukee to Lincoln Sts., incl., 2,062 lin.ft. combined curb and gutter, 2,144 cu.yd. earth excav., 7,803 sq.yd. concrete, etc. $25,000. Parsons & Orbert, 216 West Water St., Milwaukee, engrs.

Wis., Milwaukee—Aug. 8, by W. Cary, clk. Milwaukee Co., paving Oklahoma Ave. from Howell Ave. to Old Chicago Rd., 6,800 sq.yd. asphalt on concrete, 5,900 cu.yd. earth excav. $30,000. W. Cavanaugh, Court House Annex, engr.

Ia., Council Bluffs—Aug. 7, paving 10,971 sq.yd. various streets. $28,000. E. E. Spetman, city engr.

Ia., Garner—Aug. 8, by Auditor Hancock Co., grading 6.37 mi. Federal Aid Project 139, Sect. A, between here and Klemme, 62,449 cu.yd. excav.; gravel surfacing 16.219 mi. Federal Aid Project 139, Sect. A, from Klemme south to county line, and from here north, 25,301 cu.yd. gravel.

Minn., Two Harbors—Aug. 23, by I. W. Foote, aud. Lake Co., 39.5 mi. State Project 1-01, Federal Aid Project 282, between Little Marais and Two Harbors, 549,000 cu.yd. excav., portable and monolithic culverts; Bridge 3457, 150 ft., Bridge 3459, 380 ft., Bridge 3460, 80 ft., Bridge 3582, 220 ft., Bridge 3586, 60 ft., Bridge 3587, 50 ft., Bridge 3588, 60 ft., Bridge 3590, 40 ft., Bridge 3887, 23 ft., all concrete. State Highway Dept., 1246 University Ave., St. Paul, engrs.

Minn., Willmar—Aug. 10, by S. Nelson, aud. Kandiyohi Co., 6 mi. State Rd. 2, Job 2207, 6,000 cu.yd. excav., 10,000 cu.yd. overhaul; 6 mi. State Rd. 2, Job 2208, 64,940 cu.yd. excav., 96,400 cu.yd. overhaul; County Rd. between Kandiyohi and Meeker Counties, 5,000 cu.yd. excav. $25,000.

Wyo., Casper—Aug. 7, paving and building storm sewers in Lincoln St. from 6th to 2nd Sts., Paving Dist. 22, 11,948 sq.yd. paving, 370 lin.ft. 10 in. and 765 lin.ft. 12 in. tile sewer, 220 cu.yd. excav., etc., $40,135; 980 ft. South Jackson St., Dist. 21, 4,988 sq.yd. pavement, 1,060 ft. 12 in.vitr. tile sewer, 850 cu.yd. excav., etc., $17,655; East 1st St. from Durbin to Grant Sts., also Grant, Kimball, Park and Beech Sts., Dist. 19, alternate bids on concrete, bituminous concrete and btiulithic, $57,313-$77,902; 1,940 ft. North McKinley and Fast C Sts., alternate bids on concrete, bituminous concrete and bitulithic, $27,376-$36,160. F. S. Knittle, Box 1143, engr.

Missouri—Aug. 11, by State Highway Dept. at div. office, Kennett, 5.801 mi. road from Dexter to Kennett, Federal Aid Project 183 B, Dunklin Co., 17,624 cu.yd. earth excav., 4,318 cu.yd. borrow, 7,600 cu.yd. per 100 ft. overhaul, 54,440 sq.yd. gravel surfacing, 87.1 cu.yd. concrete, 5,027 lb. reinforcing; 8.426 mi. road from Dexter to Kennett, Federal Aid Project 183C, Dunklin Co., 26,955 cu.yd. earth excav., 10,711 cu.yd. borrow, 5,000 cu.yd. per 100 overhaul, 40,356 sq.yd. 1 course plain concrete pavement, 38,540 sq.yd. gravel pavement, 10 in. at center, 18 in. at edges, 80.2 cu.yd. concrete, etc. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Aug. 14, by State Highway Bd. at div. office, Buffalo, 12,311 mi. road from Sikeston eastward and westward, Federal Aid Project 5, Scott Co., 10,107 cu.yd. earth excav., 3,307 cu.yd. borrow, 100 cu.yd. sub-base, 16,546 sq.yd. reconstructed base course, 51,815 sq.yd. gravel pavement, 16,546 sq.yd. gravel surface course, 180 cu.yd. Class B concrete, 1,320 lb. reinforcing. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Aug. 14, by State Highway Bd. at div. office, Buffalo, 12.311 mi. road through Buffalo, State Aid Project 20.183, Dallas Co., 42,437 cu.yd. earth and 1,009 cu.yd. rock excav., 10,526 cu.yd. borrow, 386.5 cu.yd. concrete, 40,196 lb. reinforcing, etc. $31,509. B. H. Piepmeier, Jefferson City, state highway engr.

Mo., Columbia—Aug. 7, by J. S. Bicknell, city clk., grading, curbing, guttering and paving 5 streets, Kentucky rock asphalt, also repairing, surfacing and resurfacing streets in Dists. 2, 4, 6 and 7; adv. this issue.

Tex., Halletsville—Aug. 17, by J. A. Somerlatte, judge Lavaca Co., grading, bridging, etc. 11.07 mi. State Highway 3-B, 16 ft., 64,023 cu.yd. earth excav., 1,835.8 cu.yd. concrete, 227,256 lb. reinforcing and 174,740 lb. structural steel. W. H. Koether, co. engr.

Tex., Seguin—Aug. 15, by J. B. Williams, judge, Guadalupe Co., grading, gravel surfacing, etc., 3.39 mi. State Highway 3, between Schertz and Cibolo, 16 and 18 ft., 13,194 cu.yd. borrow, 10,538 cu.yd. roadway excav., 657 cu.yd. concrete, 86,240 lb. reinforcing, 9,157 cu.yd. gravel surfacing at pits. $36,745. C. E. Sandford, res. engr.

Colorado—Aug. 8, by State Hy. Dept., Denver, paving 4.049 mi. Ft. Collins-Denver Rd., Federal Aid Project 221, Larimer Co., 18 ft., 1 acre clearing, 856 cu.yd. concrete, 12,000 cu.yd. earth and 50 cu.yd. rock excav., 14,300 cu.yd. borrow fill, 42,788 cu.yd. 1 course plain cement concrete pavement, 72,350 lb. reinforcing, $144,627, 0.433 mi. road beginning at Arkansas River Bridge north of Las Animas and extending south to Las Animas city limits, Federal Aid Project 630, Bent Co., 18 ft., 430 cu.yd. earth excav., 1,000 cu.yd. borrow fill, 4,575 sq.yd. 1 course plain cement concrete pavement, $13,184; grading 7.477 mi. Cochetopa Pass Rd. beginning at point about 6 mi. west of Saguache and extending westerly toward Cochetopa, Federal Aid Project 119-B, Saguache Co., 16 ft., 12,400 cu.yd. earth and 1,000 cu.yd. rock excav., 23,600 cu.yd. borrow fill, 398 cu.yd. concrete, 19,350 sq.yd. gravel surfacing, 20,064 lb. reinforcing, $48,632; gravel surfacing 3.634 mi. beginning 1¾ mi. northwest of Grand Junction and extending northwest toward Fruita, Federal Aid Project 209, Mesa Co., 18 ft., 13,500 cu.yd. earth and 50 cu.yd. rock excav., 800 cu.yd. borrow fill, 631 cu.yd. concrete, 7,310 cu.yd. gravel surfacing, 41,430 lb. reinforcing, $45,286, 8.341 mi. Sante Fe Trail beginning at Hasty and extending easterly toward Lamar, Bent Co., 18 ft., 9,800 cu.yd. earth excav., 26,700 cu.yd. borrow fill, 195 cu.yd. concrete, 88,577 sq.yd. gravel surfacing, 9,310 lb. reinforcing, 1 acre clearing, $58,925.

Tex., Sonora—Aug. 10, by L. W. Elliott, judge Sutton Co., grading, gravel surfacing, etc. 9.66 mi. State Highway 4, Federal Aid Project 272, 18 ft., 22,129 cu.yd. roadway and 3,520 cu.yd. rock excav., 631.5 cu.yd. concrete, 71,338 lb. reinforcing steel, (30,774 cu.yd. gravel surfacing furnished by county.) $114,000.

California—Aug. 21, by State Hy. Comn., Sacramento, grading 9.3 mi. and gravel surfacing 7.6 mi. highway between west boundary and Central House, Amador Co. A. B. Fletcher, state highway engr.

Cal., Marysville—Aug. 9, by Supervs. Yuba Co., improving 6 mi. Knox Rd., Sects. 1 and 2, 31,000 cu.yd. excav., 3,806 cu.yd. crushed rock, 4 concrete bridges, etc. L. B. Crook, co. surv.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres. Boro Hall, opened bids July 26, paving (1) Bay 32nd St. from 86th St. to Benson Ave. (2) Dikeman St. from Dwight to Otsego Sts. (3) Division Pl. from Kingsland to Debevoise Aves. (4) Dumont Ave. from Barbey to Jerome Sts. (5) Hegeman Ave. from Pennsylvania to New Jersey Aves. (6) Midwood St. from Nostrand to New York Aves., (7) Rutland Rd. from Nostrand to New York Aves. (8) 19th Ave. from 72nd to 76th Stas. and 15th Ave. at intersection of 74th St. where not already paved, (9) 85th St. from 4th to 5th Aves. repaving (10) Porter Ave. from Johnson Ave. to Ingraham St., (11) Bradford St. from Liberty to Pitman Aves., (12) Cooper St. from Bway to Wilson Ave. (13) High St. from Liberty St. Plaza to Washington St. (14) Johnson Ave. from Leonard St. to Bushwick Ave. (15) Wyona St. from Dumont to Riverdale Aves, (16) 7th St. from 2nd to 3rd Aves, (17)17th St. from 6th Ave. to Prospect Park West, grading, curbing and laying sidewalks on (18) East 2nd St. from Elmwood Ave. to Ave. I, grading (19) Hinsdale St. from Hegeman to Lorraine Aves., (20) Schenectady Ave. from Crown to Montgomery Sts. also grading, curbing and flagging Empire Blvd. from Troy to Lefferts Aves. and Lefferts Ave. from Schenectady to Utica Aves., curbing and laying sidewalks on (21) Hinsdale St. from Hegeman to Lorraine Aves., curbing and paving (22) Ave. K from Ocean to Bedford Aves., (23) Sunnyside Court from Sunnyside Ave. to point 204 ft. northerly, from

Cranford Co., 52 9th St., (1) $6,393 (3) $3,217 (4) $2,271 (5) $2,453 and $2,427 (6) $6,887 (7) $6,887 (8) $13,723 (9) $13,454 (11) $10,616 (12) $42,804 (14) $35,939 (15) $13,787 (17) $21,771 (22) $14,464.

Brooklyn Alcatraz Asphalt Co., 467 Hamilton Ave., (1) $6,843 (6) $7,321 and $7,245 (7) $7,314 (8) $13,056 (9) $13,380 (17) $21,162 (22) $15,415.

Borough Asphalt Co., 1301 Metropolitan Ave., (1) $7,250 (5) $2,710 (8) $14,585 (9) $15,875 (12) $39,950 (14) $39,726 (17) $21,802 (22) $16,046.

J. D. Norton, 20 Sterling Pl., (2) $3,837 (13) $1,657 (16) $15,975 (20) $12,742 (19) $1,236 (23) $1,228.

Grimm Constr. Co., 170 McKinley Ave., (2) $3,810 (10) $3,587 (18) $1,919 (21) $2,437.

T. B. Scott, 671 Halsey St., (2) $3,949 (10) $3,548 (13) $822 (18) $1,604 (21) $2,402 (23) $1,218.

Sicilian Asphalt Paving Co., 41 Park Row, New York City, (3) $3,244, (4) $2,291 (11) $10,180 (12) $35,341 (14) $30,586 (15) $13,296.

Cleveland Trinidad Paving Co., Flushing, (3) $3,586 (4) $2,422 (5) $2,661 (6) $7,766 (7) $7,721.

Casalino Contg. Co., 217 Havemeyer St. (10) $3,367 (20) $15,320.

Uvalde Asphalt Paving Co., 1 Bway., New York City, (11) $10,978 (15) $14,336.

Greico Bros., 172 Russell St., (13) $2,095, (16) $17,410.

M. J. O'Hara, 1228 Park Ave., New York City, (16) $16,792.

Emmerett Co., Inc., (18) $1,860 (21) $2,425.

C. C. Dempsey, 516 Prospect Ave., (19) $1,195.

Catapana & Wright, (19) $1,291.

H. E. Kordes Co., 2577 Cooper St., (20) $14,940 (23) $1,473. Noted July 20.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg. opened bids July 25, grading, curbing and laying sidewalks on (1) Buckley St. from Foster Ave. to Queens Blvd., paving (2) Newtown Rd. from 13th to 16th Aves., etc, (3) 13th Ave. from Jamaica to Grand Aves. Jamaica Ave. from 13th to 14th Aves., (4) Kingsland Ave. from Luydig Pl. to 51st St., (5) 7th Ave. from Washington to Graham

Streets and Roads (Continued)

Aves., 1st Ward, recurbing (6) John St. from Metropolitan Ave. to Bleecker St., curbing, paving and laying sidewalks on (7) Park Lane from Union Turnpike to 115th St. (Hamilton Pl.), grading, curbing, recurbing, flagging, reflagging, paving, etc., (8) 46th St. from Jackson to Roosevelt Aves., Louvona Ave. from Roosevelt to Kings Aves., repairing sheet asphalt pavements in (9) 1st and 2nd Wards, from Welsh Bros. Contg. Co., 32 Queens St., (1) $3,488, (6) $4,560, (7) $38,571; Peace Bros., Inc., 20 Main St., Flushing, (1) $4,790; Cleveland Trinidad Paving Co., Flushing, (2) $11,799, (3) $14,304, (4) $36,334, (5) $13,733, (8) $73,304; Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (2) $12,347, (3) $15,120, (4) $40,908, (5) $14,515, (8) $69,500, (9) $19,682; W. J. Fitzgerald, 547 West 45th St., New York City, (2) $12,955, (3) $15,984, (4) $38,852, (5) $12,566, (8) $63,637; Kennedy & Smith, 93 Amity St., Flushing, (6) $5,279, (7) $47,113; H. J. Mullin Contg. Co., Jamaica Ave. and 144th St., Jamaica, (6) $5,776; C. Gallagher, 745 Dean St., Brooklyn, (7) $46,920; Brusstar Constr. Co., Inc., Harlem River and 150th St., New York City, (9) $17,744; Sicilian Asphalt Paving Co., 41 Park Row, New York City, (9) $22,660. Noted July 20.

N. Y., Syracuse—C. L. Cadle, supt. Pub. Wks., Albany, opened bids July 25, paving portion of terminal site, constructing railroad and crane tracks, etc., here, Terminal Contr. 89, from J. H. Gallup, Union Bldg., $59,609; Mohawk Dredge & Dock Co., Manion Bldg., Herkimer, $66,840; Brown, Lowe & Law Bros., Herkimer, $67,572. Noted June 29.

Pa., Phila.—F. H. Caven, dir. pub. wks., opened bids July 25, (1) grading Fairhill St. from Wingohocking to Ansberry Sts., (2) asphalt paving Magee St. from Torresdale Ave. to Tulip St., Water St. from Tabor Rd. to Clarkson Ave. and 2nd St. from Mentor St. to Roosevelt Blvd., (3) Allegheny Ave. from Chatham to Miller Sts., (4) Fillmore St. from Ashland to Leiper Sts., Mascher St. from Tioga to Venango Sts., Wakeling St. from Horrocks to Large Sts., (5) C St. from Ruscomb to Eleanor Sts., (6) granite block paving 2nd St. from Wyoming Ave. to Mentor St., from T. L. Flannigan, 1403 East Montgomery Ave., (1) $5,274. Mark Contg. Co., Commercial Trust Bldg., (1) $2,619. Barber Asphalt Paving Co., Land Title Bldg., (2) $25,163, (3) $25,266, (4) $27,012, (5) $35,873. Mack Paving Co., Germantown, (2) $26,783. Eastern Paving Co., Colonial Trust Bldg., (2) $24,582, (3) $25,973, (4) $27,963, (5) $35,022. Fish-Rutherford, Inc., Real Estate Trust Bldg., (6) $5,917. M. J. McCrudden, Real Estate Trust Bldg., (6) $6,275. Noted July 20.

North Carolina—State Hy. Dept., Raleigh, improving (1) 7.78 mi. State Project 535, Guilford Co., (2) 14.83 mi. State Project 236, Johnston Co., (3) 3.53 mi. State Project 713, Ashe Co., (a) grading and concrete or asphaltic paving, (b) rein.-con. bridges and culverts; grading, concrete or asphaltic paving and rein.-con. bridges and culverts on (4) 6.21 mi. State Project 494, Warren Co., (5) 5.91 mi. State Project 342, Cumberland Co., improving (6) 9.73 mi. State Project 132, Gates Co., (a) clearing, grading and topsoiling, (b) rein.-con. bridges and culverts; grading and concrete or asphaltic paving (7) 13.54 mi. State Project 183 A, Pitt Co., (8) 8.79 mi. State Project 484, Wake Co., (9) 1.63 mi. State Project 764, Surry Co., grading and waterbound or penetration macadam paving (10) 9.28 mi. State Project 602, Alexander Co., (11) 8.17 mi. State Project 640, Iredell Co., grading, waterbound macadam paving or two course gravel surfacing (12) 15.2 mi. State Project 888, Yancey Co., clearing and grading (13) 10.22 mi. State Project 952 A, Jackson Co., (14) 8.68 mi. State Project 963, Macon Co., grading, sand-clay and waterbound macadam paving (15) 7.75 mi. State Project 702 A, Alleghany Co., clearing, grading, topsoiling and corduroy, (16) 13.5 mi. State Project 131, Gates Co., clearing, grading and topsoiling (17) 18.97 mi. State Project 569, Moore Co., grading, concrete, asphaltic or brick paving, rein.-con. bridges and culverts (18) 7.22 mi., State Project 173, Perquimans and Pasquotank Co., from Leaksville Lumber Co., Leaksville, (1a) $246,731, (9) $45,962; Hagedorn Constr. Co., Thomasville, (1a) $246,932, (1b) $16,907, (9) $50,922; Atlantic Bridge Co., Roanoke, Va., (1b) $18,272; S. J. Groves & Son, 306 Globe Bldg., Minneapolis, Minn., (1a) $248,938, (5) $172,003, (7) $363,504, (10) $208,393, (11) $198,390; Concrete Steel Bridge Co., Clarksburg, W. Va., (1b) $19,321, (2b) $13,147, (3b) $18,922; R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, (2a) $419,943, (2b) $12,167, (4) $199,158, (8) $282,610; R. M. Hudson Co., Salisbury, (2a) $437,737, (8) $280,196; A. J. Wardrep, Holston Bank Bldg., Knoxville, Tenn., (2a) $459,044, (5) $161,275, (7) $368,993; Luten Bridge Co., 405 East 4th Ave., Knoxville, Tenn., (2b) $13,721, (3b) $20,595; J. F. Mulligan, North Wilkesboro, (3a) $135,908, (3b) $21,269, (15) $143,555; W. E. Graham, Mt. Ulla, (3a) $140,274, (10) $147,608, (11) $142,655, (15) $133,444; Clifford Eng. Co., Montgomery, W. Va., (4) $189,209; P. R. Ashby, Tucker Bldg., Raleigh, (4) $193,139, (8) $257,117; C. D. Rigsbee, Durham, (5) $173,351; J. A. Marrow, Clarksville, Va., (6a) $38,508, (6b) $17,032, (17) $62,245; Batson-Cook Co., West Point, Ga., (6a) $51,545; W. D. Murray-Sadler Corp., Norfolk, Va., (6b) $18,134; Jamison Bros., High Point, (6a) $51,998; Bacon-Moore Co., Littleton, (6b) $18,148, (16) $103,529; Clayton, Mitchell Co., Jacksonville, Fla., (7) $391,409; G. R. Martin, Salisbury, (9) $50,586; Porter & Boyd, Realty Bldg., Charlotte, (10) $152,000, (11) $191,197; Luck Co., Sylva, (12) $89,304, (13) $116,649; Ross Bros., Andrews, (12) $102,860; O'Brien Constr. Co., Birmingham, Ala., (12) $108,560, (14) $87,971, (15) $132,153; Brooks Callaway Co., Forsyth Bldg., Atlanta, Ga., (13) $107,517; Costello Bros., Knoxville, Tenn., (13) $124,090, (14) $85,208; Bolton Constr. Co., Marion, (14) $90,584, (17) $65,682; Mayfield Constr. Co., Denmark, S. C., (17) $61,929; D. E. and L. E. Williams, South Mills, (18) $218,816; N. M. Leigh, Mannington, W. Va., (18) $260,864. Noted July 6 and 13.

O., Upper Sandusky—Opened bids July 26, grading, curbing, laying watermains, sewers and sewer connections and paving (1) 3,000 ft. Tremont Rd., 26 and 36 ft. (2) 1,700 ft. Andover Rd., 20 ft. (3) 800 ft. Fairfax Rd., 20 ft. (4) 2,100 ft. Yorkshire Rd., 20 ft. all asphalt, from B. F. Patterson, 1214 Neil Ave., Columbus, (1) $48,086 (2) $13,544 (3) $5,323 (4) $27,700; Cleveland Trinidad Paving Co., The Arcade, Cleveland, (1) $48,001 (2) $13,808 (3) $5,334 (4) $27,744; Franklin Asphalt Paving Co., 209 South High St., Columbus, (1) $49,234 (2) $14,196 (3) $5,594 (4) $29,109. Noted July 20.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, concrete paving (1) 6.324 mi. Route 2, Sect. 50, Macon Co. (2) 3.644 mi. Route 3, Sect. 48, Greene Co., (3) 3.209 mi. Route 8, Sect. 14, (4) 2.858 mi. Route 8, Sect. 15 (5) 6.067 mi. Route 8, Combination A, Peoria Co., (6) 4.825 mi. Route 14, Sect. 9, (7) 4.825 mi. Route 14, Combination B, incl. 1 steel bridge, Hamilton Co., (8) 4.616 mi. Route 17, Sect. 2, aMrshall Co., (9) 4.129 mi. Route 37, Sect. 11, Franklin Co., (10) 4.599 mi. Route 37, Sect. 12, Franklin-Williamson Co., (11) 1.8 mi. Route 37, Sect. 13, Williamson Co., (12) 10.528 mi. Route 37, Combination C, Franklin-Williamson Co., (13) 10.464 mi. Route 44, Sect. 18, Will Co., (14) 0.302 mi. Federal Aid Project 8, Sect. V-4, Macoupin Co., (15) 0.882 mi. Federal Aid Project 9, Sect. Y, Bond-Fayette Co., (16) 6.488 mi. Project 26, Sect. 16, (17) 5.175 mi. Project 26, Sect. 17, (18) 5.278 mi. Project 26, Sect. 18, (19) 16.941 mi. Project 26, Combination D, McLean Co., (20) 3.141 mi. Project 27, Sect. 31, Woodford Co., (21) 5.277 mi. Project 27, Sect. 36, Tazewell Co., (22) 8.418 mi. Project 27, Combination F, Woodford-Tazewell Co., (23) 5.71 mi. Project 34, Sect. 26, (24) 5.71 mi. Project 34, Combination G, Clinton Co., (25) 3.914 mi. Project 35, Sect. 17, Marion Co., (26) 3.682 mi. Project 35, Sect. 18, (27) 7.596 mi. Project 35, Combination H, Marion-Clinton Co., (28) 4.81 mi. Project 40, Sect. 29, Hancock Co., (29) 5.033 mi. Project 41, Sect. 16, Minnebago Co., (30) 6.853 mi. Project 42, Sect. 161, Cook Co.; grading (31) 137,120 cu.yd. Route 3, Sect. 56-A, Greene Co., (32) 6,400 cu.yd. Federal Aid Project 2, Sect. 11, Will Co., (33) 66,590 cu.yd. Federal Aid Project 34, Sect. 27-A, (34) 42,420 cu.yd. Project 37, Sect. 22-A, Clinton Co., (35) 34,900 cu.yd. Project 39, Sect. 1-A, (36) 17,375 cu.yd. Project 39, Sect. 2-A, (37) 52,275 cu.yd. Project 39, Combination I, Carroll Co., from McMahon Constr. Co., Rochester, Ind., (1) $120,773.

Verhey Constr. Co., St. Joseph, (1) $130,498.

Macon Co. Bd. Supervs., Decatur, (1) $139,893.

J. Kesl & Sons, Edwardsville, (2) $71,546, (23) $117,300, (24) $130,000, (25) $79,351, (26) $69,194, (27) $146,000.

C. M. Haines, Jerseyville, (2) $72,789.

Dawson-Powers Constr. Co., 5866 Etzel Ave., St. Louis, Mo., (2) $73,258, (23) $122,889.

McElwee & Rogy, Peoria, (3) $73,682, (4) $64,530, (5) $138,212.

Capitol Constr. Co., Des Moines, Ia., (3) $81,339, (4) $71,169, (20) $79,388, (21) $146,098, (22) $225,486, (28) $119,957.

Cameron & Joyce, Keokuk, Ia., (3) $83,210, (4) $75,230, (5) $143,302, (17) $138,517, (19) $368,354, (20) $66,796, (28) $102,984.

L. S. Kuhn, Bloomington, (5) $150,000.

C. J. Moritz, Effingham, (6) $109,419, (13) $208,264, (15) $33,770, (20) $67,190.

Mautz & Oren, Effingham, (6) $110,752, (7) $121,500, (15) $38,408.

Jaicks Bros., 232 East Pearson St., Chicago, (8) $108,218, (29) $107,975.

J. W. Etchison, Casey, (6) $116,821, (23) $123,350, (25) $76,208, (26) $61,378, (27) $136,791.

Cole & Fauber, Marion, (9) $84,753, (10) $102,034, (11) $38,849.

C. E. Hamilton, Carbondale, (9) $91,989, (10) $108,183, (11) $41,674, (12) $241,846.

Wabash Constr. Co., Vincennes, Ind., (9) $104,315, (10) $120,795, (11) $46,812, (12) $244,730, (27) $164,433.

Powers & Thompson Co., Joliet, (13) $210,904, (32) $6,500.

C. E. Carson, 601 St. Clair St., Chicago, (13) $221,199, (16) $150,249, (17) $146,852, (19) $374,500.

A. M. Boatman, Carlinville, (14) $7,007.

Alzina Constr. Co., Springfield, (14) $10,063.

W. C. Johnson, 512 South High St., Belleville, (15) $36,626, (34) $14,404.

I. D. Lane, Bloomington, (16) $139,865, (17) $130,533, (18) $100,118, (19) $370,516.

R. L. Williams, Wyatt, Mo., (16) $145,795 (18) $109,083.

Chicago Heights Coal Co., Chicago Heights, (18) $109,263.

Keokuk Quarry and Constr. Co., Keokuk, Ia., (21) $137,956 (28) $99,340.

H. Pfizenmeyer, 710 South 4th, St., Terra Haute, Ind., (21) $141,792.

Powell & Gauen, Collinsville, (24) $148,600.

Edwardsville Constr. Co., Edwardsville, (25) $78,201 (26) $69,549.

Milburn Bros., Rockland, (29) $104,475.

F. E. Marsh, Jefferson, Ia., (29) $111,597.

A. Ward & Son, Oak Glen, (30) $181,817.

Public Constr. Co., Hammond, Ind., (30) $186,582.

F. Lorenz, Oak Glen, (30) $188,542.

C. M. Haynes, Jerseyville, (31) $36,106.

F. J. McLowey, Chicago, (31) $36,689 (33) $22,360.

New Era Constr. Co., 3735 North Halstead St., Chicago, (31) $36,988 (33) $21,224.

J. N. Pierson Co., Chicago Heights, (32) $5,509.

A. W. Hecht, St. Louis, Mo., (32) $7,043.

B. Kyffmeyer, Carlyle, (33) $18,988.

Keating Bros., Auburn, (34) $10,639.

Tritt Bros., Belleville, (34) $16,165.

Anderson Bros., Rockford, (35) $14,934 (36) $10,146 (37) $25,000.

Lord & Talbot, Monmouth, (35) $15,127 (36) $9,876 (37) $23,900.

B. Harrison, Poor Farm Rd., Decatur, (35) $15,353 (36) $9,437 (37) $24,100. Noted June 29.

Minn., St. Paul—Opened bids July 17, paving with 3½ creosoted wood blocks (1) Grand Ave. from Oakland Ave. to Milton St., (2) Grand Ave. from Milton St. to Cretin Ave.; paving Hudson Rd. from Point Douglas Rd. to east city limits, (a) traprock concrete, (b) gravel concrete, (c) limestone aggregate, from Fielding & Shepley, 216 University Ave., (1) $55,929, (2) $175,046, (3a) $82,200, (3c) $79,500; White Constr. Co., 17 North La Salle St., Chicago, (1) $60,900, (2) $187,600; Thornton Bros. Co., 304 Central Bank Bldg., (1) $61,151, (2) $188,252, (3a) $80,016, (3b) $77,445; Johnson Drake & Piper, 809 1st Natl.-Soo Line Bldg., Minneapolis, (3a) $80,593, (3c) $77,653; E. M. Ganley Co., 1002 Plymouth Bldg., Minneapolis, (3b) $79,888, (3c) $78,445. Noted July 13.

Missouri—State Hy. Dept., Jefferson City, opened bids improving 13.07 mi. road from Liberty to Excelsior Springs, Federal Aid Project 25, Clay Co., from Haden & Austin, Hill and Market Sts., Houston, Tex., $230,186 and $221,501; E. T. Meek, Kansas City, $264,093 and $238,150; W. M. Spencer, Independence, $286,564 and $359,556; Unit Constr. Co., Title Guaranty Bldg., St. Louis, $239,217 and $284,159; P. P. Young, Savannah Rd., St. Joseph, $358,685 and $360,185; Koss Constr. Co., 2818 5th Ave., Des Moines, Ia., $374,048; Dalton Constr. Co., Junction City, Kan., $387,927. Noted July 20.

Missouri—State Hy. Dept. at div. office New London, opened bids June 26, 3,8 mi. road from New London eastward and westward, 24 ft., State Aid Project 20.168, Ralls Co., from O. J. Hanick, 4066 Lindell St., St. Louis, $21,513. Noted July 6.

Streets and Roads (Continued)

Missouri—State Hy. Dept. at div. office Fayette, opened bids June 26, 4.811 mi. road through Fayette, 24 ft., State Aid Project 20.93, Howard Co., (1) 41,452 cu.yd. earth excav., (2) 700 cu.yd. borrow, etc., from K. A. Raines, Fayette, (1) $0.39 per cu.yd. (2) $0.34, total $26,488; Hartman Constr. Co., St. Joseph, (1) $0.40 (2) $0.35, $27,171; W. Washam, Jacksonville, (1) $0.46 (2) $0.42, $30,225. Noted June 8.

Missouri—State Hy. Dept. at div. office Bloomfield opened bids June 27, 4.946 mi. road from Cairo to Poplar Bluff, 24 ft., Federal Aid Project 178 A. Stoddard Co., (1) 11,844 cu.yd. earth excav., (2) 23,605 cu.yd. borrow, (3) 34,793 sq.yd. gravel surfacing, 12 ft. wide, etc., from Allhands & Davis, Joplin, (1) $0.27 per cu.yd. (2) $0.27 (3) $0.61, total $35,350; J. H. Howitt, Little Rock, Ark., (1) $0.25 (2) $0.27 (3) $0.725, $38,707; N. Davis, Sikeston, (1) $0.25 (2) $0.25 (3) $0.75, $39,268. Noted June 15.

Missouri—State Hy. Dept. at div. office Canton, opened bids June 30, 7.9356 mi. road from Canton northward and southward, 24 ft., Federal Aid Project 39, Lewes Co., (1) 30,882 cu.yd. earth excav., (2) 5,692 cu.yd. borrow, (3) 18,824 cu.yd. broken stone base course, (4) 55,867 sq.yd. gravel pavement, (5) 18,824 sq.yd. gravel surface course, etc., from Gaines Bros., Fairland, Okla., (1) $0.46 per sq.yd. (2) $0.40 (2) $0.35 (4) $0.61 (5) $0.35, total $79,856; O. J. Hanick, 4066 Lindell St., St. Louis, (1) $0.46 (2) $0.40 (3) $0.35 (4) $0.65 (5) $0.30, $83,466.

Missouri—State Hy. Dept. at div. office Pineville, opened bids July 7, 4.972 mi. road from Pineville northward and southward, 24 ft., State Aid Project 20,178, McDonald Co., (1) 36,753 cu.yd. earth excav., (2) 12,551 cu.yd. borrow, etc., from J. P. Wolfenbarger, Neosho, (1) $0.32 per cu.yd. (2) $0.30, total $26,036; J. M. Roark, Anderson, (1) $0.35 (2) $0.32, $26,669; M. A. Holman Constr. Co., Carterville, (1) $0.36 (2) $0.35, $28,402.

Arizona—State Hy. Dept., Phoenix, received bids July 6, grading, gravel surfacing and building structures on 5.1929 mi. Florence-Superior Highway, Sect. F, Federal Aid Project 23, from Goodman & Merrill, St. David, $55,341; M. Ryan, Superior, $56,662; O. C. McElrath Constr. Co., Mesa, $60,644.

Cal., San Francisco—Improving Taraval St. between 37th and 48th Aves., (1) 6,228 lin.ft. concrete curb, (2) 655 lin.ft. 8 in. sewer, (3) 315 lin.ft. 12 in. sewer, (4) 1,225 lin.ft. 10 in. culvert, (5) 6,604 sq.ft. artificial stone walks, (6) 180,930 sq.ft. asphaltic concrete pavement, from Fay Impvt. Co., Phelan Bldg., (1) $0.98, (2) $4.14, (3) $4.38, (4) $2.12, (5) $0.197, (6) $0.29, total $71,720; State Impvt. Co., San Francisco, (1) $1.05, (2) $4, (3) $4.50, (4) $2, (5) $0.195, (6) $0.294, total $72,720; A. J. Raisch, 46 Kearny St., (1) $1, (2) $3.90, (3) $4.60, (4) $2, (5) $0.2, (6) $0.30, total $73,349. Noted May 25.

Que., Montreal—Opened bids asphalt paving (1) 750 ft. Des Erables St. from Amity to Sherbrook Sts., 65 ft., (2) 300 ft. St. Donat St., 65 ft., and 200 ft. cement sidewalks, 5 ft.; cement sidewalks on (3) 1,687 ft. Monkland St. from Melrose to Grand Blvd., 5 ft. wide, (4) 937 ft. Des Carrieres St. from Laurier to Lamorichiere Sts., 5 ft., from B. Brault Ltd., Bleury St., (1) $21,361, (2) $15,628; Sicily Asphaltum Paving Co., 60 St. Viateur St. E., (1) $21,627, (2) $15,902; Quinlan, Robertson & Janin, Ltd., 50 Notre Dame St., (3) $4,305; Duranceau & Duranceau, 152 Hamilton St., (3) $5,775; Rondon, Corlier & Co., 3227 Christophe Colomb St., (3) $6,259, (4) $3,387; F. Lapau, 601 Lamorichiere St., (4) $2,938. Noted June 22.

CONTRACTS AWARDED

Massachusetts—Concrete paving 6,400 ft. state highway in Andover, to M. McDonough Co., Swampscott, $89,850, 6,200 ft. in Longmeadow, 21 ft., to Lane Constr. Co., 37 Colony St., Meridan, Conn., $64,960, 9,994 ft. in West Springfield, 18 ft., to Hassam Paving Co., 17 Federal St., Worcester, $82,830; bituminous macadam paving 18,430 ft. in Sterling and West Bolyston, 18 ft., to State Constr. Co., 158 Adams St., Boston, $104,268, 5,160 ft. in Lowell, to Powers Bros., North Montello St., Brockton, $103,918, 8,794 ft. in Yarmouth, 18 ft., to Atwood-Thomas Constr. Co., Middleboro, $53,433.

Mass., North Adams—Improving 1,500 ft. State St., 7,000 sq.yd. concrete, 950 ft. granite curb to reset, 800 sq.yd. concrete sidewalk, 1,400 sq.yd. combined curb and gutter, 3,000 cu.yd. excav., to D. S. McGrath, Inc., Adams. Engrs. est. $25,000.

N. Y., Lynbrook — Village Bd. Trustees paving certain streets, reinforced cement concrete, to Good Roads Eng. & Contg. Co., Portchester, $143,674. Noted July 6.

N. C., Greensboro—Paving 5 mi. various streets, 83,000 sq.yd., to Murray Constr. Co., Holston Natl. Bank Bldg., Knoxville, Tenn., $250,000.

Fla., Sanford—Comrs. Seminole Co., 181,000 sq.yd. macadam, 45,450 sq.yd. brick and 12,700 sq.yd. rock, to Finley Method Co., Graham Bldg., Jacksonville, $78,343. Noted July 13.

N. J., Newton—Paving High St., rein.-con., to Pub. Service Production Co., 80 Park Pl., Newark, $38,737. Noted June 29.

O., Cleveland—Sandstone walks in Easterly, Westerly and Southerly Dists., to Ohio Quarries Co., Citizens Bldg., $59,792; cement walks in Westerly and Southerly Dists., to Rieley Bros., The Arcade, $18,284; walks in Northerly Dist., to P. H. De Santis, Woodland Ave., $10,613.

O., Cleveland—Paving Kinsman Rd. from East 55th to East 79th Sts., to Cleveland Trinidad Paving Co., The Arcade, $60,965. Noted July 27.

O., Cleveland—Paving Euclid Ave., asphalt, to Cleveland Trinidad Paving Co., The Arcade, $80,871. Noted July 13.

O., Columbus — W. H. Duffy, dir. Pub. Serv., to Franklin Asphalt Paving Co., 209 South High St., grading, curbing and paving 332 ft. Clinton St., 24 ft., $5,669, 284 ft. Frebis Ave., 24 ft., $5,347, 303 ft. Tompkins St., 20 ft., $4,536, grading and paving 145 ft. 8th Ave., 20 ft., $1,819, all asphalt; to Davies & Davies, Columbus, 366 ft. alley west of 4th St., 16 ft., $1,494, 306 ft. alley north of 5th Ave., 16 ft., $1,360, 240 ft. alley west of 4th St., 16 ft., $1,848, 450 ft. alley west of Lexington Ave., $2,453, 208 ft. alley north of Madison Ave., 20 ft., $1,428, all concrete; to B. F. Patterson, 1214 Neil Ave., resurfacing 2,155 ft. 11th Ave., 36 ft., asphalt, $31,679; to Pub. Wks. Constrfl Co., 57 Wiggins Blk., Cincinnati, 2,569 ft. Fair Ave., 30 ft., $23,704 also water and sewer connections and paving 2,590 ft. Champion Ave., 28 ft., $23,704, both asphalt. Noted July 20.

O., Dayton—G. M. Baker, dir. Pub. Serv., paving South Main St. from 5th to 6th Sts., 60 ft., wood block, to E. D. Murray, 18 Cambridge Ave., $24,247; Louie St. from Washington to Norwood Aves. and Norwood Ave. from 5th to Louie Sts., brick, to J. I. Geiger, 409 Dayton Savings & Trust Bldg., $20,506 and $4,095 respectively; Garland Ave., rein.-con., to Finke Eng. Co., 15 South St. Clair St., $10,302. Noted July 20.

O., Euclid—Laying concrete sidewalks on Arbor Ave., Bliss Rd. and East 207th St., to V. Q. Galier, Builders Exch., Cleveland, $46,661; Cut Rd., Fuller, Brewer, Donald, Erieview and Pond Aves., to F. B. Stein, Euclid, $55,497; bluestone sidewalks on Goller Rd., North Vine St., Recher Ave., East 209th, 210th and 212th Sts., to Green Rd. Stone & Supply Co., Euclid, $23,815. Noted July 20.

Ind., Cannelton—Perry Co., grading and gravel surfacing 18,480 ft. Gayer Rd., 16 ft., to A. H. Lutgring, Tell City, $34,325. Engrs. est. $36,000.

Michigan—State Hy. Dept., Lansing, grading and surfacing 2.079 mi. Federal Aid Project 29, Sect. B, Calhoun Co., to Lenderink & Baber, Kalamazoo, 16,017 cu. yd. earth excav. $0.50, 2,790 yd. sta. overhaul $0.02, 19.9 cu.yd. concrete $12, 24,286 sq.yd. rein.-con. pavement $1.515, etc., total $46,204. State to furnish cement $20,920. Noted June 22.

Michigan—State Hy. Dept., Lansing, grading and surfacing 2.912 mi. Federal Aid Project 75, Sect. B, Jackson Co., 20 ft., to Brooks Constr. Co., 2104 Miner St., Ft. Wayne, Ind., 14,148 cu.yd. earth excav. $0.45, 2,310 lin.ft. 8 in. vitr. tile under drain $0.70, 1,160 lin.ft. vitr. tile under drain $0.80, 76.5 cu.yd. concrete $13, 34,324 sq.yd. reinforced bituminous pavement $2, etc., total $81,643; 6.42 mi. Assessment Dist. Rd. 23, Lenawee and Monroe Counties, 12 ft., to J. E. Coon, Swanton, O., $46,926; 5.867 mi. State Trunk Line Rd. 14-3 Sect. C, 14-13 Sects. A and B and 14-11 Sect. B, Missankee and Roscommon Counties, 16 ft., to G. Davenport, Lake City, $25,562; 0.947 mi. State Trunk Line Rd. 19-18, Marysville Co., 20 ft., to J. H. Baker & Son, Port Huron, $22,755; 1.241 mi. State Trunk Line Rd. 27-18, Sanilac Co., 16 and 18 ft., to Moore-Elmer Constr. Co., Snover, $23,963; 2.773 mi. State Trunk Line Rd. 12-29, Bessemer Co., 16 and 20 ft., to W. S. Peters, Wakefield, $44,459; 6.367 mi. Federal Aid Project 66, Sect. A, St. Joseph Co., 18 and 20 ft., to Dovey & Kloosterman, Batavia, 19,053 cu.yd. earth excav. $0.30, 68,708 sq.yd. reinforced concrete pavement $1.35, etc., tota. $99,891; 7.929 mi. State Trunk Line l.Rd. 54.1, Newaygo Co., 16 ft., to F. Hill, Big Rapids, 44,366 cu.yd. earth excav. $0.35, 74,407 sq. yd. one course gravel surface $0.527, etc., total $56,547; 2.946 mi. Federal Aid Project 79, Genesee Co., 18 ft., to Michigan Asphalt Paving Co., Flint, 19,991 cu.yd. earth excav. $0.50, 183.9 cu.yd. concrete $12, 31,555 sq.yd. reinforced bituminous pavement sheet asphalt specifications $2.25, etc., total $114,985; grading 9.344 mi. State Trunk Line 69-4, Baraga Co., to Hill Bros., Chatham, 79,603 cu.yd. earth excav. $0.52, 6,000 cu.yd. rock $2.25, 120 cu.yd. concrete $22, etc., total $72,487. All cement for above projects furnished by State.

Michigan—State Hy. Dept., Lansing, grading and surfacing 4.862 mi. Assessment Dist. Rd. 346, Ionia and Barry Counties, 12 ft., to Saginaw Constr. Co., Saginaw, $33,131; 0.916 mi. State Trunk Line Rd. 47-19, St. Charles Co., 18 to 70 ft., 1,236 lin.ft. combined curb and gutter, 5,473 cu.yd. earth excav., 14,774 sq.yd. concrete, to Taylor Constr. Co., Birmingham, $25,012, State to furnish cement at $12,922; 4.631 mi. State Trunk Line Rd. 47-3, Saginaw Co., 16, 18 and 20 ft., to R. C. Bailey, Corunna, 19,176 cu.yd. earth excav. $0.50, 192.6 cu.yd. concrete $14, 39,475 sq.yd. gravel surface $0.61, 4,994 sq.yd. concrete pavement $1.96, etc. total $50,789, State to funish cement at $4,957; 2128 mi. State Trunk Line Rd. 47-2, Chesaning Co., 16, 20 and 70 ft., to Holmes, Crane & Baily, Alma, 7,826 cu.yd. earth excav. $0.65, 7,598 sta.yd. overhaul $0.03, 5,652 sq.yd. gravel surface $1, 25,360 sq.yd. concrete pavement $1.30, etc., total $48,786, State to furnish cement at $21,414.

Mich., Detroit — Paving to Detroit Asphalt Paving Co., 20 McGraw Bldg., 9,700 sq.yd. Baylis Ave. $38,534, 3,780 sq.yd. Burke Ave. $18,873, 1,800 sq.yd. Canfield Ave. $8,985, 1,370 sq.yd. Edgewood Ave. $6,851, 3,990 sq.yd. Fairview Ave. $19,399, 1,440 sq.yd. Strong Ave. $7,222, all above 3½ in. sheet asphalt on 8 in. concrete, 26 ft. wide, 1,880 sq.yd. Fern Ave. $7,476, 4,600 sq.yd. Pelouze Ave. $20,376, 3 in. asphalt on 6 in. concrete, 26 ft.; to Cleveland Trinidad Paving Co., 402 Hammond Bldg., 2,600 sq.yd. Louis Ave. 3 in. sheet asphalt on 6 in. concrete, 24 ft., $10,895, 3,550 sq. yd. Leslie Ave., 24 ft., $17,738 and 3,800 sq. yd. Sturtevant Ave., 26 ft., $18,717, both with 3½ in. asphalt on 8 in. concrete. Noted July 27.

Wis., Fond du Lac—Paving Oak Pl., Howard and Merrill Aves., Rose, Oak, Smith and Grand Sts., to J. Rasmussen & Sons, foot 7th St., Oshkosh, trinidad asphalt $2.80 sq.yd. concrete curb and gutter $0.80 lin.ft. catch basins, $55, total $85,394. Noted July 13.

Wis., Milwaukee—Concrete paving to F. Banaszak, 1335 4th Ave., Middlemass St. from Dunlap St. to Middlemass subdivision $4,766, Windlake Ave. from 13th to 15th Aves. $5,133, 8 alleys $17,610; to J. Bluhn & Son, 164 Burliegh St., 19th St. from Teutonia to Atkinson Aves, $23,360, 4 alleys $17,807; to R. B. Hartman, 4001 Highland Blvd., 6 alleys $10,415; to Ryback & Sadowski, 1092 2nd Ave. 1 alley $1,554; to A. Retzloff, 948 4th St., 7 alleys $15,541; to Kroening Constr. Co., 39th Ave. and Mitchell St., 2 alleys $7,511; to S. W. Talmadge, 445 Milwaukee St., 1 alley $2,403; to F. Schomann, 770 28th St., 1 alley $1,734; to T. C. Froemming, 1288 Humboldt Ave., 1 alley $24,706.

Wis., Watertown—Paving Milford St., to Lehmann Bros., 900 8th St., 3,500 cu.yd. excav. $0.90, 8,300 sq.yd. plain concrete pavement $2.33, 2,080 sq.yd. rein.-con. pavement $2.46, 1,560 lin.ft. combined concrete curb and gutter $0.85, total $29,272. Noted June 1.

Ia., Allison—Butler Co. gravel surfacing 11.42 mi. Primary Rd. Project 71, north and south of Greene, north of Parkersburg and east of here, to L. O. Kimball, Clear Lake, 14,866 cu.yd. gravel 1 mi. haul at $0.36, 3,011 cu.yd. at $0.40, 27,467 units gravel ½ mi. haul $0.10, 131,500 units $0.095 and 10,500 units $0.12; 2.9 mi. Sect. D, Federal Aid Project 85, south of here, to L. O. Kimball, Clear Lake, 4,360 cu.yd. gravel 1 mi. haul $0.38, 23,250 units gravel ½ mi. haul $0.10; Primary Rd. Project 167, northwest and east of Shell Rock and southeast of Parkersburg, to W. Bolen, Omaha, Neb., 94,866 cu.yd. excav. $0.199, O'Hanlon & Reilly, Omaha, Neb., 63,980 cu.yd. $0.21, J. W. Peed & Son, Ft. Dodge, 63,980 cu.yd. $0.214.

Ia., Algona—Kossuth Co. grading and paving 1.8 mi. Primary Rd. Project 270 from Wesley to east county line, to Empire Constr. Co., 308 7th St., Des Moines, 6,290 cu.yd. excav. at $0.55 and 19,120 sq.yd. pavement at $2.53.

Ia., Cresco—Howard Co. grading 10.414 mi. Primary Rd. Project 103, east of Elma to here, 138,793 cu.yd. excav. to Leach Bros., Omaha, Neb., $0.20 per cu.yd.

Streets and Roads (Continued)

Minn., Fairmont—Paving about 10,600 sq.yd. various streets, concrete, to F. D. Gould, Fairmont, $23,383. Noted July 20.

Minn., Moorhead—Clay Co., grading 16 mi. Trunk Highway 2, east of Moorhead. 24 ft., to Larkin Constr. Co., Barry $63,-783; two bridges and monolithic culverts to Minneapolis Bridge Co., Metropolitan Life Bldg., Minneapolis, $12,261.

Neb., Lincoln—To Abel Constr. Co., Terminal Bldg., repaving Dist. 87, 11,390 sq. yd. asphaltic concrete at $0.94 pere sq.yd., etc., total $10,707; paving Dist. 406, 4,357 sq.yd. asphaltic concrete $2.32, 325 sq.yd. concrete pavement $2.10, 260 lin.ft. artificial stone curb $0.50, 2,984 lin.ft. artificial stone curb and gutter $0.80, total $13,406. Noted July 6.

Mo., Kennett—Curbing, laying sewers and paving various streets, to Rouse & Hely Constr. Co., Cape Girardeau, $90,-540. Noted July 13.

Tex., Georgetown—Williamson Co. paving and topping 7 mi. various streets, macadam base with 71,211 sq.yd. 2 in. bituminous topping, 21,904 lin.ft. curb and 3,200 lin.ft. resetting curb, to W. E. Dozier, Austin Natl. Bank Bldg., Austin, $237,000,

Tex., Gonzales—Gonzales Co. grading and gravel surfacing 9.27 mi. State Highway 29, Federal Aid Project 183-C, 15 ft., to R. G. Buckner & Sons, Cleburne, $49,292. Noted July 27.

Tex., Port Arthur—Jefferson Co. grading, paving, etc., 3 mi, Houston, San Antonio, Dallas and Ft. Worth Aves., etc., 30, 50 and 70 ft., to Smith Bros., Crockett, $450,-561. Noted July 6.

Okla., Duncan—Bd. Comrs. asphaltic concrete paving Dist. 10, 11, 12, 13 and 15, to Western Paving Co., 1 West Chickasaw St., Oklahoma City, $100,000.

Wash., Seattle—Paving Yale Ave. et al., 8,625 sq.yd. 6 in. vitr. block, 740 sq.yd. 7 in. concrete, 4,775 lin.ft. concrete curbing, 2,300 cu.yd. subgrade, to R. G. Stevenson. 1327 North 34th St., $62,191. Engrs. est. $65,000. Noted July 20.

Cal., Hemet—Improving Buena Vista St., et al., 409,700 sq.ft. 4 in. concrete pavement, 8,600 lin.ft. cement curb, 6,600 sq.ft. cement walks, to Oswald Bros., 366 East 58th St., Los Angeles, $72,784. Noted July 27.

Cal., Hanford—Kings Co. paving 1.75 mi. Kings Co. Highway from Eaton bridge south and east, to California Constr. Co., 58 2nd St., San Francisco, 17,640 sq.ft. 3 in. asphaltic concrete base in shoulders at $0.195 per sq.ft., 158,769 sq.ft. 2 in. asphaltic concrete wearing surface $0.103.

Cal., Lodi—To Clark & Henery Constr. Co., 38 South Sutter St., Stockton, improving Eden St., 83,415 sq.ft. 1½ in. warrenite bitulithic on 2½ in. asphaltic concrete at $0.185 per sq.ft., 91,425 sq.ft. grading $0.02, 4,980 lin.ft. concrete curbs $0.50, 5,525 sq.ft. concrete gutters, $0.26 Stockton St. 77,352 sq.ft. 1½ in. warrenite bitulithic on 2½ in. asphaltic concrete $0.185, 83,159 sq.ft. grading $0.02, 3,664 lin.ft. concrete curb $0.50, 4,505 sq.ft. concrete gutter $0.26.

Cal., San Rafael—Grading and surfacing Bolinas Co. Rd. from Steep Ravine to Randall Ranch, to S. P. Brownlee, San Rafael, $27,983. Noted June 15.

Cal., San Rafael—For 267,000 sq.yd. warrenite bitulithic pavement, to S. P. Brownlee, San Rafael, $41,520. Noted July 27.

Cal., San Rafael—Marin Co. paving Sect. 1, Point San Pedro Rd., hydraulic concrete, to S. P. Brownlee, San Rafael, $27,089.

Cal., Stockton—Improving streets in Searchlight Addition, to C. Moreing & Son, Commercial & Savings Bank Bldg., $102,-350. Noted July 27.

Ont., Hamilton—Will construct 250,000 sq.ft. concrete curbs and sidewalks on Arkley Ave., both sides Cline to Parsley Aves.; Newton Ave. from King St. to Hamilton Ancaster Rd.; Parsley Ave. from South Oval to Hamilton Ancaster Rd. and from South Oval to Newton Ave.; Barkley Ave., both sides, from Marion to Cline Aves.; Marion Ave., west side, from South Oval to Barkley Ave.; Cline Ave., south side from King St. to Hamilton Ancaster Rd.; Sherbroke Ave., north side from Kensington to Rosslyn Aves.; Paling Ave., east side, from Britannia to Roxboro Aves.; Wallace Ave. from Beach Rd. to McNulty Blvd.; Newton Ave. from South Oval to Arkell Ave.; Parsley Ave. from King St. to Arkell Ave.; Marion Ave. from King St. southerly to Lot 1822. $50,000. Work will be done by day labor. City will buy all materials.

Ont., Tilbury—Paving ½ mi. Young St., 24 and 26 ft., concrete, to Chick Contg. Co., McDougall Ave., Windsor. Engrs. est. $28,-000. Noted May 11.

Ont., Toronto—York Twp. let following contracts for concrete sidewalks, to D. M. McKay, 289 Ashdale Ave., Bungalow Rd. $4,300, Chilton Ave. $4,300, Hopedale Ave. $6,500, Pope Ave. $4,000, Stanhope Ave. $3,500, to Britnell Contg. Co., Baxter St., Bude St. $1200, Dunvegan Rd. $700, Normanna Ave. $1,000, to S. Simpson, 41 Stibbard St., Brunnell Ave. $800, Metheun Ave. $2,700, to Natl. Contg. Co., 9 Garnock Ave., Harshaw Ave. $3,200, Willard Ave. $1,000, to A. Johnson, 35 Burgess Ave., Cedarvale Ave. $650, Woodycrest Ave. $750; for 24 ft. asphalt pavement on concrete, to Kilmer & Barber, 24 Adelaide St., W., Connaught Ave. $7,000, Dunvegan Rd. $8,000 to Constructing and Paving Co., Confederation Life Bldg., Heathdale Rd. $6,000, Forest Hill Rd. $8,400, to Godson Contg. Co., Manning Chambers, Normanna Ave. $7,500, to Britnell Contg. Co., Baxter St., Becknell Ave. $3,300.

Industrial Works

PROPOSED WORK

Mass., South Boston (Boston P. O.)—Natl. Can Co., 36 Washington St., soon lets contract 2 story, 92 x 160 ft. rein.-con. factory, 1 story, 20 x 60 ft. brick garage and 3 story 20 x 40 ft. brick storehouse, Locust St. $125,000. Noted April 6.

Pa., Osgood—Du Roth Steel Truck and Car Wheel Co., 611 Keystone Bldg., Pittsburgh. Plans to construct several buildings, here. First unit 1 story, 100 x 200 ft. steel structure. Total cost $1,500,000. C. E. Long, 1202 Peoples Bank Bldg., Pittsburgh, engr.

Pa., Pitcairn—Pennsylvania R.R., Broad St. Sta., Phila., soon receives bids for superstructure of steel car repair shop, here. $300,000. A. C. Shand, ch. engr.

Tenn., Knoxville—Iddens Mchy. Co. making plans and soon takes bids 1 story plant. $50,000. Architect not announced.

Ill., Chicago—Henschien & McLaren, archts., 1637 Prairie Ave., soon receive bids 4 story, 75 x 150 ft., rein.-con., brick and steel, packing plant near Union Stock Yards, for Western Packing and Provision Co., 3854 South Morgan St. $170,000.

Mo., Kansas City—Plans election in November to vote on $100,000-$150,000 bonds improving hospital at Leeds Farm, incl. completion east wing of building and install hospital to care for drug addicts, ice refrigerating plants, modern laundry for men and women's buildings, electrical plant, roads, etc. A. Cromwell, mayor.

Wash., Tacoma—Carstens Packing Co., Tile Flats, having plans prepared by P. V. Cornils, company archt., 4 story, 67 x 72 ft. packing plant with 32 x 40 ft. wing, rein.-con. and steel. $1,000,000.

Ont., Aurora—Taylor Rubber Co., 37 Richmond St. E., Toronto, plans factory, probably concrete or steel and brick. Yonge St. About $300,000. Architect not selected.

Ont., Brantford—H. C. Johnston & Sons, having plans prepared and take bids about August 15, addition to plant. $100,000. Private plans.

Ont., Ft. William—Fort William Paper Mills plan mill, Mission St. $300,000. Private plans.

Ont., Welland—Dodds Canadian Iron Wks., Ltd., plans large iron works. $250,-000. Private plans.

Ont., Welland—Maple Leaf Milling Co. plans 5 story flour and grain mill to replace one destroyed by fire. $150,000. Architect not announced.

BIDS DESIRED

Pa., Pittsburgh—Aug. 8 by Hunting-Davies Co., archts., Century Bldg., 3 story. 79 x 117 ft., brick and concrete warehouse addition, for H. J. Heinz Co., 1062 Progress St., N. S.

Pa., Pittsburgh—Hunting-Davis Co., archts., Century Bldg., taking bids 1 story, 41 x 108 ft. brick and tile garage, Western Ave., for T. Donaldson, c/o Donaldson McAleer Motor Co., 1100 Western Ave.

Pa., Pittsburgh—Commercial Land Co. c/o F. M. Love, 235 Water St., receiving bids 4 story garage, rein.-con. and brick, Rebecca St. and Baum Blvd. $175,000. Private plans. Buick Motor Co., Baum Blvd. and Euclid Ave., Lessee.

La., Plaquemine—See "Waterworks."

O., Cleveland—Cleveland Heater Co., 1905 West 112th St., receiving bids 1 story, 30 x 240 ft. brick, steel and wood factory, plain foundation, West 112th St. and Locust Ave. $100,000. G. S. Rider & Co., Century Bldg., archts. and engrs.

Mich., Detroit—A. Kahn, archt., 1000 Marquette Bldg., taking bids and opens same about Aug. 15, for 5 story, 60 x 441 ft., rein.-con., brick and steel factory, plain foundation, Campau Ave., for Studebaker Corp., Brush St. and Piquette Ave. $400,-000.

Ill., Evanston—C. C. Henderson, archt., 105 South La Salle St., Chicago, receiving bids 1 and 2 story, 66 x 204 ft., rein.-con., brick and steel garage, 1622-24 Chicago Ave., here, for J. E. Hibblethwaite, 1707 Ridge Ave. $40,000.

Cal., Pittsburg—Pioneer Rubber Mills, 68 Sacramento St., San Francisco, receiving bids 1 story, 80 x 200 ft., rein.-con. warehouse, here. $150,000. B. G. McDougall, 381 Bush St., San Francisco., archt. Noted June 15.

Ont., Petrolea—Peninsular Sugar Co., Petrolea, receiving bids 1 and 2 story 250 x 800 ft. brick and steel plant, and 1 story, 175 x 225 ft. brick power house. $1,500,000. Honolulu Iron Wks., 8047 Hamilton Blvd., Detroit, Mich., engrs. Noted Dec. 15.

CONTRACTS AWARDED

N. Y., Rochester—Eastman Kodak Co., 2 story, 162 x 262 ft., rein.-con. warehouse, known as Bldg 56, in Kodak Park, to Ridge Constr. Co., c/o owner. Archts. est. $125,000.

Pa., Butler—Hinman Bros., 1017-7th Ave., Altoona, 2 story, 100 x 150 ft. brick and steel garage, on Green Ave. and 8th St., here, to C. M. Singiser, 1717-21st St., Altoona, $60,000.

Pa., Butler—Standard Plate Glass Co., near Lincoln Ave., will build 1 story, 100 x 250 ft. factory addition, brick and steel, by day labor. Archts. est. $100,000.

Pa., New Kensington—Natl. Auto Service Co., 1 story,, 25 x 60 ft. and 75 x 60 ft., brick garage, 1030 5th Ave., to Good Constr. Co., 5452 Penn Ave., Pittsburgh. Archts. est. $40,000.

Pa., Waynesboro—Frick Co., West Main St., will build 1 story, 300 x 600 ft. concrete brick and steel addition to plant, by day labor.

Pa., West Hickory—H. H. Smith & Co., will rebuild 3 story, 68 x 72 ft. and 50 x 140 ft. tannery and bleach house, by day labor. Archts. est. $50,000. Noted June 15.

W. Va., Wheeling—Natl. Garage of Wheeling will build 2 story, 103 x 112 ft., brick, tile and steel garage, Natl. Pike, by day labor. $50,000. G. H. Dieringer, 880 McCollock St., archt.

N. C., Reidsville—Reidsville Warehouse Co., 2 story, 128 x 235 ft., brick warehouse with 60 x 60 ft. annex in rear, South Scales St., to Leaksville Lumber Co., Leaksville. Noted June 22.

O., Cleveland—F. P. Screw Co., 2921 East 79th St., 1 story, 25 x 160 ft., brick and steel factory, plain foundation, 2921 East 79th St., to L. Dautel & Sons Co., 5710 Hough Ave. Archts. est. $40,000.

O., Zanesville—Kerns Gersuch Bottle Co., 1 story, 24 x 40 ft. factory, to Fort Pitt Bridge Co., Oliver Bldg., Pittsburgh, Pa. Archts. est. $100,000.

Ind., Anderson—Natl. Tile Co., 25th and Pitts Sts., 1 story, 85 x 485 ft. plant, brick, to Eshelman & Sons, Anderson, $50,000.

Mich., Detroit—Park Davis Co., 2951 Atwater St., 75 x 100 ft. power house addition to factory, Gouin St., to F. H. Davis, 1838 Penobscot Bldg. Engrs. est. $75,000. Noted June 22.

Ill., Chicago—Commonwealth Edison Co., Clark and Adams Sts., 6 story, 120 x 280 ft. power plant addition, rein.-con., brick and steel 100th St. and Ave. N., to G. A. Fuller & Co., 140 South Dearborn St. Archts. est. $1,000,000.

Ill., Chicago—Pratt & Lambert, Inc., 320 West 26th St., 2 story, 50 x 150 ft., rein.-con., brick and steel factory, 26th St. near Princeton St., to J. P. and J. W. O'Connor, 189 West Madison St. Archts. est. $60,000.

Wis., Marinette—Heath Cedar Co., 1863 Riverside Ave., will build 1 story, 50 x 100 ft., brick and timber, addition to factory, plain foundation, Sherman and State Sts., by day labor. Private plans.

Wis., Nekoosa—Nekoosa Iron Wks. will build 1 story, 50 x 75 ft., machine shop and foundry, brick and rein.-con., plain foundation, by day labor. $40,000. Manske & Henry, Wisconsin Rapids, archts.

Wis., Waukesha—Manitowoc Church Furniture Co., 1214 Lincoln Ave., 1 story, 70 x 90 ft., brick and rein.-con. unit to factory, plain foundation, to C. A. Dailey Son, 202 Randall St. Engrs. est. $50,000.

Minn., Duluth—McDougall Terminal Warehouse Co., 510 Alworth Bldg., 6 story, 200 x 500 ft. refrigerator plant and terminal warehouse, steel frame, rein.-con. and brick, Railroad St. and 9th Ave. W., to Jacobson Bros., 406 Columbia Bldg., $1,000,000.

Minn., Duluth—Universal Portland Cement Co., 202 Wolvin St., will increase capacity of plant No. 7. Improvements include 200 ft. kiln for burning raw material, etc. $200,000. Work will be done by day labor. Structural steel from Amer. Bridge Co., Wolvin Bldg.

Industrial Works (Continued)

Minn., Minneapolis—A. L. Westernhagen, mgr. Western Newspaper Union, 200 North 3rd St., 2 story, 46 x 134 ft. printing plant and office, rein.-con. brick and tile, 316-8th Ave. S., general contract to O. P. Bailey Co., 746 Builders Exch. Bldg., percentage basis. Archts. est. $125,000. Noted July 6.

Cal., San Francisco—W. P. Fuller Co., Beale and Mission Sts., rein.-con. garage, to McLeran & Co., Hearst Bldg., $40,000.

Ont., Trenton—Dominion Combing Mills, 709 Continental Life Bldg., Toronto, general contract, 1 and 2 story, rein.-con. and brick plant, here, to G. T. H. Shaw, 291 A Markham St. Toronto. Archts. est. $200,000. Noted April 20.

Buildings

PROPOSED WORK

N. Y., Brooklyn—Office—Brooklyn Edison Co., 360 Pearl St., having plans prepared by McKenzie, Voorhees & Gmelin, archts., 342 Madison Ave., New York, 12 story, brick, steel and stone, Winoughby and Pearl Sts. $1,000,000.

N. Y., New York—Club House—Intercollegiate Cosmopolitan Club, 2929 Bway., having plans prepared by Jallade, Lindsay & Warren, archts., 129 Lexington Ave., 9 story, 128x168 ft., brick, steel and stone, 520 Rivers.de Dr. $750,000.

Pa., Wilkes-Barre—Bank and Office—Luzerne County Natl. Bank, 27 Public Sq., plans 10 story building, 92 ft. wide. Architect not announced.

Va., Portsmouth—Prentis Place Baptist Church, 1708 Prentis Ave., having plans prepared by C. M. Major, archt., Commercial Bldg., and soon takes bids 2 story, 60 x 110 ft., stone, Lincoln St. $150,000-$175,000.

N. C., Asheville—Store—E. D. Lotta, Charlotte, having plans prepared by W. H. Peeps, archt., 222 Latta Arcade, Charlotte, ten 3 story, combined frontage 250 ft., depth 100 ft., concrete and brick, Biltmore Ave., here. $500,000.

N. C., Raleigh—Office—Odd Fellows Lodge, Home Bldg., having plans prepared by G. L. Preacher & Co., archts., Raleigh, and Healy Bldg., Atlanta, Ga., 10 story, rein.-con., steel, tile and granite, Hargett and Salisbury Sts.

Ia., Muscatine—Y. W. C. A., c/o M. Robe, secy., receives bids about Aug. 15, 3 story, 60 x 140 ft., rein.-con., brick, tile and stone. $150,000. Shattuck & Layer, 19 South La Salle St., Chicago, archts. Noted June 30, 1921.

Cal., Tanforan — Club — Pacific Coast Jockey Club, 913 First Natl. Bank Bldg., San Francisco, soon takes bids 2 story, frame, club, and steel and frame grand stand, on race track site, here. $200,000. H. Spreckels, secy. Contract for twelve 1 story barns, containing 388 stalls, (in connection with above project), to J. Piasecki, 239 Clinton Park, San Francisco, $63,624.

Que., Montreal—Church—Church of the Sacred Heart plans 77 x 220 ft. gothic architecture, to replace one recently destroyed by fire. $300,000. J. Venne, 402 Plessis St., archt.

Que., Montreal — Engineering — McGill University of Montreal plans 5 story, 11,000 sq.ft., steel, rein.-con., grey limestone, corner University and Milton Sts. $500,000. F. G. Robb, 127 Stanley St., archt.

Que., Montreal—School—Catholic School Comn. having plans prepared by Gascon & Pount, archts., 502 St. Catherine E., 3 story, 64 x 151 ft., 18 room, St. Josephs Blvd. between Chambord and DeLanondiere Sts. $150,000.

Ont., London—Home—Victoria Hospital Trustees, Ottaway Ave., plan Nurses Home, Ottaway Ave. Election probably in January to vote on $300,000 bonds. W. M. Gartshore, chn.

BIDS DESIRED

N. Y., New York—Theatre—Aug. 31, by H. G. Wiseman, archt., 25 West 43rd St., altering brick, steel and stone theatre, for Manhattan Opera House, West 34th St. $250,000.

La., New Orleans—School—Orleans Parish School Bd., Municipal Bldg., taking bids 2 story, 147 x 250 ft. rein.-con. and brick, Claude and Alder Sts. $250,000. E. A. Christy, City Hall, archt.

Mich., Detroit—Office—Bonnah & Chaffee, archts., 528 Farwell Bldg., receiving bids and opens same about Aug. 10, for 10 story, 40 x 100 ft. rein.-con., brick, steel and stone, plain foundation, Randolph St. and Cadillac Sq. Owner's name withhelld.

Mich., Detroit—School—Aug. 7, by Bd. Educ., 2 story, 85 x 125 ft. and 76 x 90 ft. rein.-con., brick, steel and stone, plain foundation, Congress St. $150,000. Malcomson, Higginbotham & Palmer, 405 Moffat Bldg., archts. Noted May 4.

Mich., Detroit—School—Aug. 8, by Bd. Educ., 2 story, 105 x 145 ft. rein.-con., brick, steel and stone addition to Hutchinson School, Kerwin and Warren Aves. $150,000. Malcomson, Higginbotham & Palmer, 405 Moffat Bldg., archts.

Ill., Chicago—Apartment—D. S. Klafter, archts., 64 West Randolph St., receiving bids 3 story, rein.-con., brick and steel, Pratt Blvd. near Ashland Ave., for W. Ferlman, c/o architect. $200,000. Noted May 18.

Ill., Chicago—Church—J. W. McCarthy, archt., 139 North Clark St., receiving bids 1 story, 166 x 168 ft. rein.-con., brick and steel, 63rd St. near Fairfield Ave., for St. Rita of Casia Catholic Parish c/o J. F. Green, pastor, 6211 South Washtenaw Ave.

Ill., Chicago—Store and Office—J. P. Cowing Eng. Co., archts., 30 North La Salle St., receiving bids 2 story, 100 x 250 ft., rein.-con., brick and steel, Randolph St. near May St. here, for C. A. Stanton, South Bend, Ind. $250,000.

Ill., Oak Park—Club—Holmes & Flinn, archts., 8 South Dearborn St., Chicago, receiving bids 2 story, 160 x 165 ft., rein.-con., brick and steel, Ontario St. and Oak Park Ave., here, for Oak Park Club c/o architects. $300,000. Noted Sept. 15.

Ill., Stateville—Administration, etc.—Aug. 22, by Penitentiary Comn., at office J. A. Patten, secy., 111 West Jackson Blvd., Chicago, for administration building, kitchen and dining hall, steel and terra cotta, at new Illinois State Penitentiary, here, Zimmerman, Saxe & Zimmerman, 64 East Van Buren St., Chicago, archts.

Minn., Duluth—Jail—Oct. 1, by F. W. Borgen, aud. St. Louis Co., 4 story, 45 x 131 ft., rein.-con., steel, stone and terra cotta, 2nd St. and 5th Ave. W. $400,000. Holstead & Sullivan, 407 Palladio Bldg., archts. Noted June 1.

BIDS RECEIVED

N. Y., New York—Schools—Bd. Educ., 500 Park Ave., opened bids July 25, (1) P.S. 139, southerly side of West 140 St. and point 275 ft. easterly of 7th Ave., Manhattan, (2) P.S. 69, southerly side of Randall Ave. from Thieriot and Soundview Aves. to Leland Ave., Clason Point, Bronx, from P. J. Brennan & Son, 624 Madison Ave., (1) $604,200; G. F. Driscoll Co., 115 Schermerhorn St., Brooklyn, (1) $609,800 (2) $307,600; J. MacArthur Co., 220 Ormond Pl., Brooklyn, (1) $610,548; Blenton Building Co., 342 Madison Ave., (2) $261,769; T. Dwyer, Bway and 216th St., (2) $313,000. Noted Dec. 29.

N. Y., Wende — Penitentiary — Bd. Supervs. Erie Co., (Buffalo), for administration building, bakery, laundry, and other buildings, here, from Morris & Allan, Inc., Prudential Bldg., Buffalo, $687,900, Mosier & Summers, Inc., 1266 Seneca Bldg., Buffalo, $739,000, Eastern Concrete Steel Co., Morgan Bldg., Buffalo, $897,350; heating and ventilating from Power Efficiency Corp., White Bldg., Buffalo, $47,700, Shevlin Eng. Co., Inc., 110 West 34th St., New York, $81,743, E. Joy Co., Buffalo, $109,000. Noted July 20.

CONTRACTS AWARDED

Conn., Bridgeport — Bank — Commercial Bank and Trust Co., 1334 Main St., 1 story, brick, stone, marble and tile, plain foundation, Main St., to T. J. Pardy Constr. Co., 1481 Seaview Ave. Archts. est. $150,000. Noted May 11.

Conn., New Britain—Normal School—State Bd. Educ., Hartford, 1 and 2 story, brick, steel and rein.-con. main structure, and 1 story boiler house, Camp St., general contract to Fitzpatrick & McArthur, 55 South Bway., New York City, $553,518; heating and ventilating, to M. J. Daly & Sons Co., 555 Bank St., Waterbury, $60,077; plumbing to A. A. Mills, 80 West Main St., New Britain, $26,023. Noted July 13.

N. Y., Elmira—High School—Bd. Educ. general contract Junior High School, 3 story, brick, on south side, to Felton Constr. Co., Elmira, $374,926; vacuum cleaning equipment, plumbing and gas fixtures, also heating and ventilating work, to Ellet-Stempfle Co., 112 Lake St., $28,144 and $55,723 respectively. Noted July 13.

N. Y., New York—Apartment—Paterno & Son Contg., Co., 117 West 54th St., will build 15 story, 80 x 122 ft., brick, steel and stone, Riverside Dr. and 88th St., by day labor. $1,000,000.

N. Y., Perrysburg — Hospital — Com. Parks & Buildings, Room 6, Municipal Bldg., Buffalo, general contract hospital incl. 1 story X-ray laboratory, power plant, etc., here, to J. W. Cowper Co., Fidelity Bldg., Buffalo, $203,500; heating work, to Shelvin Eng. Co., 110 West 34th St., New York City, $218,743; plumbing work, to Power Efficiency Corp., White Bldg., Buffalo, $98,250; sewage disposal plant, to G. W. Moore, 82 Richfield Ave., Buffalo, $23,849. Noted June 8.

N. J., Westwood — School — Bd. Educ., brick, steel and stone, plain foundation, to Equity Constr. Co., 400 St. Nicholas Ave., New York City.

Pa., Carrick—Church—Stewart Avenue Evangelical Lutheran Church, 1 and 2 story, brick and stone, Stewart Ave. and Brownsville Rd., to J. Ehrlingers Sons, 425 Van Braam St., Pittsburgh. Archts. est. $150,000.

Pa., Duquesne—Church and Parsonage—Methodist Episcopal Church, c/o P. Lindberg, pastor, 29 North 2nd St., 2 story, 100 x 100 ft., stone, 6th and Kennedy Sts., to C. V. Hobaugh, Butler. Archts. est. $150,000. Noted Feb. 10.

Pa., Elwood City—Store, Apartment and Theatre—T. N. Barnes, 112 5th St., will build 3 story, 66 x 150 ft., brick, steel, tile and stone, Lawrence Ave., by day labor. Archts. est. $150,000.

Pa., Pittsburgh—Church—Central Baptist Church, Wylie Ave., 2 story, church, Kirkpatrick St. and Wylie Ave., to Tri-State Constr. Co., Memphis, Tenn. Archts. est. $150,000.

Pa., Pittsburgh—Office—Natl. Union Fire Insurance Co., Chamber of Commerce Bldg., 4 story, stone and steel, Natalie St., to W. T. Grange Constr. Co., Keenan Bldg. Archts. est $250,000.

Pa., Pittsburgh—Store—Donahoe Co., Inc., 421 Smithfield St., 3 story, 30 x 100 x 110 x 120 ft., brick, tile and steel, Diamond St., to W. B. Snoman, Empire Bldg., $350,000. Noted July 6.

Pa., Sandy Creek (Verona P. O.)—Club House—Longue Vue Country Club, Lincoln Ave., Pittsburgh, 3 story, here, to E. Wehr, Highland Bldg., Pittsburgh, archts. est. $400,000.

D. C., Wash.—School—Dist. Comrs., 509 Dist. Bldg., plan 8 room addition to Garrison School, 12th St. near R St., N.W. $140,000 appropriated.

W. Va., Charleston—Theatre—Plagonees, Shirello & Becker, 705 State St., 1 story, 50 x 120 ft., brick and terra cotta, 705 State St., to C. C. Jones, 204 Russel St. Archts. est. $200,000.

O., Cleveland—Office—K. V. Painter, 3240 Fairmount Blvd., will build 2 story, 41 x 127 ft., brick and steel, East 17th St. and Euclid Ave., by day labor. $200,000. Private plans.

O., Cleveland—School—Our Lady of Peace Church, c/o J. T. Cummins, pastor, 12402 Buckingham Ave., 2 story, 66 x 188 ft., concrete, brick and steel, rein.-con. flooring, East 126th St. and Shaker Blvd., to W. J. Pierik, 7016 Euclid Ave. Archts. est. $200,000. Noted May 11.

O., Cleveland — Temple — Oak Pythian Temple Co., c/o F. W. Striebinger, archt., 1900 Euclid Ave., 4 story, 50 x 100 ft., brick, steel and concrete, plain foundation, 712 East 105th St., to J. Woide, 1659 East 86th St. Archts. est. $300,000. Noted May 4.

O., Rocky River—Commercial—E. L. Mitchell, 15703 Detroit Ave., Cleveland, 3 story, 85 x 10 ft., brick and steel, Detroit Rd., here, to Forest City Steel & Iron Co., 1500 West 110th St., Cleveland. Archts. est. $150,000.

Ind., Ft. Wayne—Bank—First and Hamilton National Bank, 12 story, 120 x 155 ft. rein.-con., brick and steel, to M. Irmscher & Son, 118 West Berry St. Archts. est. $900,000. Noted Dec. 22.

Ind., Lafayette—Union—Students University Building Co., c/o T. F. Moran, chn., West Lafayette, 2 story, 300 x 650 ft. brick, near Purdue University, to A. E. Kemmer, 644 North 7th St., percentage basis. Archts. est. $1,500,000. Noted Dec. 29.

Ind., Newcastle—High School—Bd. Educ. 2 story, 95 x 125 ft. brick, South 14th and Walnut Sts., to H. B. Krauel, Danville, Ill., $209,905. Archts. est. $200,000. Noted May 25.

Mich., Lansing—College—State Bd. of Agriculture, East Lansing, will build 3 story, 38 x 200 ft. with 39 x 78 ft. wing, brick, on M. A. C. Campus, here, by day labor. H. H. Halliday, secy. E. A. Bowd, 127 West Allegan St., archt.

Mich., Marquette — Orphanage — Holy Family Orphanage, 5 story, 42 x 80 ft. and 20 x 76 ft., rein.-con. and brick addition, plain foundation, to Hegner Constr. Co., 989 Appleton St., Appleton, Wis. Engrs. est. $150,000.

Ill., Chicago — Aquarium and Monkey House—Lincoln Park Comn., Lincoln Park, 1 story, 50 x 100 ft., rein.-con. and brick,

Buildings (Continued)

in Lincoln Park, to H. H. Friestedt, 327 South La Salle St. Archts. est. $175,000. Noted March 9.

Ill., Chicago—Hotel—Allerton House Co., 143 East 39th St., New York City, 20 story, 109 x 150 ft., rein.-con., brick and steel, Michigan Ave. and Huron St., here, to McLennan Constr. Co., 400 North Michigan Blvd. Archts. est. $3,000,000. Noted June 15.

Ill., Chicago—Store—H. J. Schlacks, archt., 721 North Michigan Ave., 7 story, 65 x 170 ft., rein.-con., brick and steel, 1338-40 South Michigan Ave., to H. F. Friestedt Co., 327 South La Salle St., archts. est. $250,000. Owner's name withheld.

Wis., Milwaukee — Apartment — Franklin Court Apartment Co., c/o Rosman & Wierdsman, archts., 424 Jefferson St., 2 story, 120 x 120 ft., brick, tile and concrete, plain foundation, Wells and 26th Sts., to D. B. Danielson, 874 Layton Blvd. Engrs. est. $150,000.

Wis., Sheboygan—Church and Auditorium —St. Andreas Congregation, 1101 Bway., 2 story, 70 x 110 ft., brick, rein.-con., and stone, plain foundation, to F. Radloff, Plymouth. Engrs. est. $150,000.

Minn., Albert Lea—Office—South Minnesota Gas & Electric Co., 4 story, rein.-con., brick and tile, general contract to J. F. Hanson, Albert Lea. Noted Feb. 23.

Minn., International Falls—High School —Bd. Educ., 2 story, T-shaped 100 x 250 ft. rein.-con., brick and tile, general contract to Evenson & Utterberg, 550 Builders Exch. Bldg., Minneapolis, $177,950. Noted July 13.

Minn., Minneapolis—Office—Retail Hardware Mutual Fire Insurance Co., 1024 Metropolitan Life Bldg., 3 story, 85 x 140 ft. rein.-con., brick and tile, Nicollet Ave. and 24th St., general contract to J. Leck Co., 316 South 7th St., cost plus percentage basis. Archts. est. $225,000. Noted June 8.

Minn., Minneapolis—Store and Office—S. T. McKnight Co., 1236 McKnight Bldg., 6 story, 92½ x 158 ft. rein.-con., brick and tile, 1st Ave. N. and 7th St., general contract to Pike & Cook, 416 South 5th St. Archts. est. $325,000.

Wash., Seattle—Office and Bank—Dexter-Horton Estate, New York Blk., removal of New York Blk. on 3rd Ave. side, and erecting 12 story, steel and concrete, 3rd Ave. and Cherry St., to Puget Sound Bridge and Dredging Co., Central Bldg., $2,500,000. Later Cherry St. side will be removed and similar unit constructed. Noted July 6.

Que., Montreal—Schools—Catholic School Comrs., St. Catherine St. W., 3 story, 62 x 164 ft. rein.-con. and brick, St. George Etienne Cartier Sq., to Quinlan, Robertson & Janin, Ltd., 50 Notre Dame W.; 3 story, 60 x 160 ft. rein.-con. and brick, Bercy St., to J. A. Durocher, 291 Chambly St., $169,844; 4 story, 55 x 160 ft. rein.-con. and brick, Villeray St., to Ovila Filiore, 2985 St. Denis St., $175,800

Ont., Toronto—Collegiate—Bd. Educ., 155 College St., 3 story, 100 x 276 ft. rein.-con. brick and steel, Jarvis St., masonry to Britnell Contg. Co., Baxter St., $224,720; stone to G. Oakley & Son, 278 Booth Ave., $86,490; carpentry to Hudson & Mosely, 611 Algonquin Ave., $58,000; steel to Dominion Bridge Co., Imperial Life Bldg., $19,178. Noted June 1.

Federal Government Work

PROPOSED WORK

D. C., Wash.—Dredging—U. S. Engineer, 250 Old Land Office Bldg., plans dredging below Bennings Bridge. $150,000 appropriated.

BIDS DESIRED

N. Y., Buffalo—Office, Storehouse, etc.—Aug. 25, at Office U. S. Engineer, Buffalo, office, storehouse building, and 6 operating houses at Black Rock Lock and storehouse at Ferry St. Bridge; adv. this issue.

N. Y., New York—Dredging—Sept. 5 at Office U. S. Engineer, 710 Army Bldg., 39 Whitehall St., dredging in Hudson River; adv. this issue.

N. Y., Tupper Lake—Foundations—Spec. 4698—Aug. 9 by Bureau Yards & Docks, Navy Dept., Wash., D. C., foundations for 5 buildings, here.

N. C., Raleigh—Remodeling—Aug 28, by Treas. Dept., Wash., D. C., remodeling in U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

La., New Orleans—Dykes, etc.—Sept. 5 at Office U. S. Engineer, Custom House, for dykes at head of pass, and bulkhead at south west pass; also two 4,000 bbl. oil barges.

La., New Orleans—Earthwork—Aug. 8, at Office U. S. Engineer, 140 Decatur St., for 4,032,500 cu.yd. earthwork in lower Tensas, Atchafalaya, Lafource, Barataria, Ponchartrain and Lake Borgne Levee Dist.

Tenn., Memphis.—Levee Work—Aug 14, at Office Mississippi River Comn., 1st and 2nd Dists., Custom House, Memphis, earthwork in Upper and Lower St. Francis and White River Levee Dists.; adv. this issue.

Tenn., Nashville—Steel Gates—Sept. 5, at office U. S. Engineer, Nashville, steel gates for Lock F, Cumberland River; adv. this issue.

Tex., Ft. Worth—Extension to Workroom—Aug. 25 by Treas. Dept., Wash., D. C., extension to workroom in U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

BIDS RECEIVED

Va., Hampton Roads—Equipment—Spec. 4667—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids for coal and ash handling equipment at Naval Base, here, (1) work complete, from Specialty Eng. Co., Allegheny and Newton Sts., Phila., Pa., (1) $72,930 (150 days) (2) deduct $5,230 (3) $54,000 (120 days) (4) $25 (5) $1 (7) $2,670; A. Pope, 4722 15th St., N. W., Wash., D. C., (1) $79,900 (100 days) (3) $64,770 (100 days) (4) $15 (5) $0.50 (7) $2,250; D. E. McIntyre, 74 Broad St., Boston, Mass., (1) $81,540 (125 days) (3) $69,157 (4) $17.25 (5) $0.60 (7) $1,500. Noted July 20.

Va., Hampton Roads — Heating Plant — Spec. 4629—Bureau Yards & Docks, Navy Dept., Wash., D. C., opened bids for heating plant building at Naval Base, here, (1) work complete, from Amer. Bridge Co., Wilkins Bldg., Wash., D. C., (1) $24,707 (150 days); Miller Eng. Corp., 1012 Water St., Norfolk, (1) $27,300 (120 days) (2) add $1,200. Noted July 20.

CONTRACTS AWARDED

Pa., Phila — Partitions, Changes, etc.—Treas. Dept., Wash., D. C., repairs, etc. to post office, to E. C. Durrell, 1713 North 24th St., repairs and preservations $4,820, mechanical equipment $501.

Ala., Tuskegee—Fire Alarm System—Treas. Dept., Wash., D. C., fire alarm system in U. S. Veterans Hospital, here, to Michigan Auxiliary Fire Alarm Co., 4108 Woodward Ave., Detroit, Mich., $3,984. Noted July 27.

O., Ashtabula Harbor—Rubble Mound—U. S. Engineer, Federal Bldg., Buffalo, rubble mound extension of west breakwater, here, to Amer. Constr. Co., East 140th St. and Lake Shore Blvd., $17,500. June 22.

Minn., Albert Lea—Extension to Workroom, etc.—Treas. Dept., Wash., D. C., extension to workroom and mailing vestibule in U. S. Post Office, here, to Pearce Bros., Inc., 220 West 42nd St., New York City, $11,500 (4 months). Noted July 20.

Cal., Presidio (San Francisco P. O.) Pump House, etc.—Treas. Dept., Wash., D. C., pump house, installation pumping equipment and completion fire protection system at Marine Hospital, here, to Eng. Structure Co., Call Bldg., San Francisco, $24,850 (150 days). Noted July 13.

Miscellaneous

PROPOSED WORK

Elevator or Lift—Niagara Falls, N. Y.—Niagara State Reservation Comn. plans elevator or lift to replace present stairway at the Cave of The Winds. Will include all mechanical equipment, etc. $80,000. A. T. Clearwater, 280 Wall St., Kingston, chn.

Harbor Improvements—Erie, Pa.—Peninsula Park and Harbor Comn. having preliminary surveys made for improving Erie Harbor and peninsula, incl. roads, landing stages, docks, etc. $125,000. J. F. Woodward, secy. B. A. Haldeman, c/o Comn., engr.

Retaining Wall—Scranton, Pa.—Plans retaining wall on 3rd Ave., in 300 and 400 block section. $25,000. W. A. Shunk, city engr.

Cement—Delhi, Cal.—Delhi Land Colony will soon receive bids 15,000 bbls. cement. E. Fortier, Delhi, engr.

Park Improvements—Merced, Cal.—See "Sewers."

Grand Stand — Tanforan, Cal. — See "Buildings."

Ornamental Lighting — Niagara Falls, Ont.—Plans new ornamental lighting in North End, incl. Erie and Victoria Aves., Queen Centre and Culp Sts., 69 new standards and pumps. $24,125. Engineer not announced.

BIDS DESIRED

Paving Block—Buffalo, N. Y.—Aug. 12, by Comr. Pub. Wks., Municipal Bldg., 2,400 sq.yd. standard dressed block, Medina sandstone, not less than 3½ nor more than 6 in. thick, not less than 5 nor more than 6 in. deep, and from 7 to 12 in. long, delivered f.o.b. Lehigh Valley R.R. switch Hamburg Turnpike, Buffalo, between Aug. 20 and Sept. 10.

Elevation of Tracks—Camden, N. J.—Pennsylvania R. R., Broad St. Sta., Phila., taking bids elevating line from Everett St. to White Horse Pike, 45,000 cu.yd. earth excav. and fill 2.4 mi. track materials. A. C. Shand, Broad St. Sta., Phila., ch. engr.

Crushers, Trucks, etc.—Jersey Shore, Pa.—Pine Creek Lime & Stone Co. taking bids crushers, trucks and other miscellaneous machinery and equipment for quarrying and crushing stone. H. J. Carpenter, dir.

Intake Pier, Screens, etc.—Wheeling, W. Va. — Aug. 17, by W. M. Evans, city clk., intake pier, screens, mains and storage tanks. C. H. Dowler, city mgr.; adv. this issue.

Transmission Line—Pine Tops, N. C.—Aug. 7, by Mayor, 10 mi. transmission line from here to Tarboro. W. E. Cobb, clk.

Locomotive—Atlanta, Ga.—Southern Iron & Equipment Co., Grant Bldg., receiving bids 20 ton narrow gauge saddle tank locomotive. H. A. Merrill, Purch. Agt.

Boilers—Detroit, Mich.—Aug. 8, by H. S. Starkey, secy. Water Bd., furnishing and erecting two 400 hp. water tube boilers at water works plant. T. A. Leisen, 176 East Jefferson Ave., engr.

Crane—St. Paul, Minn.—See "Waterworks."

Mechanical Equipment—Sacramento, Cal.—Aug. 29, by State Dept. Pub. Wks., Div. of Architecture, plumbing, heating and ventilating system and electrical work for library, court and offices buildings (State Capitol Extension Group). $150,000. Weeks & Day, Phelan Bldg., San Francisco, archts. and engrs.

BIDS RECEIVED

Dumping Platform and Ramp, etc.—New York, N. Y.—J. H. Delaney, comr. Docks, Pier "A" foot of Battery Pl., opened bids July 27, superstructure on pier at East 35th St., Contr. 1773, consisting of (a) concrete dumping platform and ramp, (b) 1,610 sq.yd. granite block, (c) 725 sq.yd. asphalt (d) electrical work, from P. T. Cox Contg. Co., 154 Nassau St., (a) $31,980 (b) $7.25 (c) $3, (d) $1,210, total $47,037; Ettinger Contg. Co., (a) $33,447 (b) $6.95 (c) $3.30 (d) $568, $47,597; W. B. Miller, (a) $33,577 (b) $6.75 (c) $2.85 (d) $1,380, $47,891. Noted July 20.

Frogs, Switches, etc.—New York, N. Y.—Transit Comm., 49 Lafayette St., opened bids July 25, installing frogs, switches, tracks and pumping posts in yard near Jerome Ave. and Moshula Parkway, Boro. of Bronx, Jerome Ave. Line, Route 16, from Slattery Eng. & Constr. Co., 10 East 43rd St., $20,905; additional approach track to Lennox Ave. and 148th St. Yard, from Slattery Eng. & Constr. Co., 10 East 43rd St., $209,466, M. Del Balso, 660 East 221st St., $235,760, P. McGovern, Inc., 50 East 42nd St., $249,000; making changes in steel work at easterly approach to Queensboro Plaza Station, Routes 36 and 37, Sect. 1, Boro of Queens, Agreement "BZ," from Jobson Gifford Co., 30 East 42nd St., $67,570 Gotham Constr. Co. $77,000, C. Meads & Co., 217 West 14th St., $83,000. Noted July 13.

Paving Materials — St. Paul, Minn. — Opened bids materials for paving Hague Ave. from Lexington to Syndicate Aves., (1) 1,236 bbl. portland cement, (2) 960 cu.yd. crushed rock, (3) 1,149 cu.yd. screened sand, etc., from St. Paul Builders Material Co., 605 Ryan Annex, (1) $2.60 per bbl.; Corning-Donohue Brick Co., 613 Ryan Bldg., (1) $2.60; Stiefel Material Co., 501 Concord St., (1) $2.60, (2) $2.95, (3) $1.70; J. L. Shiely Co., 305 Dakota Bldg., (2) $2.66, (3) $1.50. Noted July 13.

CONTRACTS AWARDED

Heating System—Detroit, Mich.—Dept. Motor Transport, City Hall, heating system in municipal garage, incl. boilers, piping, valves, pump and accessories, to Grinnell Co. Inc. of Michigan, 710 Ford Bldg., $33,757.

Barns—Tanforan, Cal.—See "Buildings, under Proposed Work."

Swimming Pool—Ottawa, Ont.—Bd. Control, swimming pool and chemical purification, to E. Monette, 60 Sterling Ave., $71,800. Engrs. est. $75,000. Noted June 29.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Aug. 15.

Bridges and Culverts

Bennettsville, S. C.

Sealed proposals will be received until 1 o'clock, Aug. 15, 1922, and then publicly opened at the office of the Board of County Highway Commissioners Marlboro County, Bennettsville, S. C., for the construction of six culverts and four bridges of reinforced concrete.

The work is divided into two sections of the following approximate quantities:—

Section "A" Six reinforced concrete box culverts of:

445.9 cu.yd class "A" concrete
38,258 lb. reinforced steel

Section "B" Four reinforced concrete bridges of:

540.47 cu.yd. Class "A" concrete
68.7 cu.yd. class "C" concrete
74,080 lb. reinforced steel
5,360 lin.ft. untreated piles
330 cu.yd. wet excavation
55 cu.yd. dry excavation

Bids will be received separately on the two sections. All proposals to be accompanied by a certified check for $500.00. If both sections are bid on one check will be sufficient. Successful bidder to furnish contract bond in full amount of sum bid.

Proposal forms, plans and specifications can be obtained from office of County Engineer, Bennettsville, S. C., on deposit of $5.00, which sum will be returned upon receipt of bona fide bid and good condition of plans.

The Commission reserves the right to reject any or all bids and to waiver technicalities.

J. C. COVINGTON,
Chairman.
B. M. ENGLISH,
County Engineer.

Bids: Aug. 10.

Asphaltic Concrete Fine Aggregate Mix

Burlington, Vt.

Sealed proposals will be received by the City of Burlington on Thursday, August 10th, at one o'clock p.m. *Standard time*, at the City Hall, Burlington, Vermont, for the improvement of South Union Street and Shelburne Road. The work will consist of approximately 15,800 square yards of asphaltic concrete on macadam with 570 cubic yards concrete foundation in car track area. Or an alternate consisting of 14,300 square yards of asphaltic concrete on macadam with 340 cubic yards concrete pavement and 450 cubic yards concrete foundation.

All bids must be upon blanks provided in the proposal furnished to bidders.

Bids must be accompanied by a certified check for three per cent (3%), of the amount of the bid. Plans and specifications will be on file at the City Clerk's office, City Hall, Burlington, Vermont, and at the office of the Engineer, H. Eltinge Breed, Room 600, 507 Fifth Avenue, New York City.

Copies of the plans and specifications may be obtained for three dollars ($3.00) per set. No refund for blanks returned. Bidding blanks will be furnished free.

The right is reserved to reject any or all bids.

EDWARD CORLEY,
City Clerk.

OFFICIAL PROPOSALS

Bids: Aug. 18.

State Highway Work

Richmond, Virginia.

Sealed bids will be received at the office of the Virginia State Highway Commission, 116 S. Third Street, Richmond, Va., until 12 o'clock, noon, August 18th, 1922, for the construction of:—

(1)—PROJECT S-225, Route 1, Bridge over Rappahannock River at Falmouth, between Spotsylvania and Stafford Counties, 1019 Ft. 10½ ins. long, and 19 Ft. roadway, involving approximately 781,200 Lbs. structural steel, 17,820 Lbs. reinforcing steel; 103,000 B. M. Lumber, 843 Cu. Yds. concrete, 916 Cu. Yds. cement rubble masonry. ALTERNATE BIDS are requested for reconstructing this bridge, involving approximately 144,400 Lbs. structural steel; 19,000 B. M. Lumber, and 272 Cu. Yds. concrete. A certified check for $4,500.00, or bidders bond for $5,400.00 to accompany this bid.

(2)—PROJECT S-249, Route 1, Reinforced concrete bridge over Swift Creek, in Chesterfield County, 78 Ft. long, involving approximately 240 Cu. Yds. concrete, and 20,000 Lbs. reinforcing steel. A certified check for $300.00 or bidders bond for $360.00 to accompany this bid.

(3)—PROJECT S-250, Route 10, Reinforced concrete bridge over Spring Branch, in Pulaski County, 47 Ft.-7 inches long, involving 169 Cu. Yds. Concrete; and 4130 Lbs. steel. A certified check for $200.00 or bidders bond for $240.00 to accompany this bid.

Plans and specifications for inspection for these projects are on file at the office of the Virginia State Highway Commission, 116 S. Third St., Richmond, Va., and at the Offices of the District Engineers,—Fredericksburgh, Va., for project S-225, and at Roanoke, Va. for S-250. Additional plans for Project S-225 for bidders can be obtained from W. F. Hobart, 104 N. 8th St., Richmond, Va., on payment of $1.08, and for projects S-249 and S-250 on payment of 54 cents each.

Specifications and bidding proposals may be obtained by request from the office of the State Highway Commissioner, Richmond, Va.

Engineers will be at office of District Engineer, Fredericksburg, 10:30 A.M. Wednesday, August 16th, to show prospective bidders over project S-225, and at the office of Dist. Engr. 17 S. 3rd St., Richmond, 10:00 A.M. Tuesday August 15th, for Project S-249, and at Maple Shade Inn, Pulaski, Va., at 10:00 A.M. Tuesday, August 8th, for Project S-250.

The State Highway Commissioner reserves the right to reject any or all bids.

G. P. COLEMAN,
Commissioner.

Bids: Sept. 1, 1923.

Sydney Harbour Bridge

New South Wales, Australia.

INTENDING TENDERERS are hereby notified that the time for receipt of Tenders at Sydney, New South Wales, for the construction of the Superstructure and Substructure of a Cantilever Bridge across Sydney Harbour has been extended by the New South Wales Government until 1st September, 1923.

T. A. COGHLAN,
Agent-General for New South Wales.
Australia House, London, W. C. 2.
14th July, 1922.

OFFICIAL PROPOSALS

Bids: Aug. 7.

Road Construction

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Council of the Borough of Freehold, N. J., for the reconstruction of Bowne Avenue, and opened and read in public in the Municipal Building, Freehold, on Monday, August 7, 1922, at 8 p. m. Daylight Saving Time.

The work consists of approximately 3,600 lin. ft. of concrete curb and gutter and 4,500 sq. yds. of reinforced concrete of gravel road surface. Alternate bids will be received for both types. Contractor may submit bids for one or both types of surface.

Drawings and specifications for the proposed work, prepared by Chas. A. Niles, Borough Engineer, are on file at the office of said Engineer at the Municipal Building, Freehold, N. J., and plans and proposal forms may be obtained upon the deposit of $5.00, which amount will be refunded upon return of the plans before the time specified for opening the bids.

All bids must be submitted on the forms furnished by the Borough, enclosed in a sealed envelope, bearing the name and address of the bidder, the name of the proposed work, and addressed to the Mayor and Council of the Borough of Freehold. All bids must be accompanied by a certified check for a sum not less than 10 per cent of the amount bid and a surety company certificate stating that said surety company will provide the bidder with the required bond.

The Borough Council reserves the right to reject any or all bids if deemed to the best interests of the Borough to do so.

H. M. BURKE,
Borough Clerk.

Bids: Sept.

Spavinaw Water Project

Tulsa, Okla.

The Water Commission of the City of Tulsa, Oklahoma, contemplates receiving proposals during the last half of September for the construction of the Spavinaw Water Supply Project, for which $6,800,000 bonds have been voted.

The work contemplated consists of a masonry and earth dam 50 feet high, 28 miles of 60 inch and 25 miles of 54 inch pipe, a 78 inch tunnel 7,000 feet long, a 350,000,000 gallon storage reservoir, a 10,000,000 gallon high pressure reservoir, and approximately 7 miles of cast iron or steel force mains.

Plans and specifications will not be entirely completed before August 15th, but are now far enough advanced for contractors who contemplate bidding to look over the work, The engineers for the project are prepared to show intending bidders the location of the various works upon the ground and to give detailed information. Contractors contemplating inspecting the work should notify the engineers as far in advance as possible.

Formal notice to contractors will appear in this publication upon the completion of the plans.

THE WATER COMMISSION OF THE
CITY OF TULSA
By A. J. RUDD,
Chairman.

Trammell & Holway, Engineers,
329 Kennedy Building,.
Tulsa, Oklahoma.
Dabney H. Maury, Consulting Eng.,
Chicago, Ill.

OFFICIAL PROPOSALS

Bids: Aug. 8.

State Highway Work

Baltimore, Md.

Sealed proposals for building nine sections of State Highway, as follows:

ALLEGANY CO. Cont. A-21—One section of State Highway from Cumberland towards Oldtown, for a distance of 3.0 miles. Concrete.

FREDERICK CO. Cont. F-51—One section of State Highway from Libertytown toward New Windsor for a distance of 2.0 miles. Concrete.

HOWARD CO. Cont. HO-24—One section of State Highway from West Elkridge toward Pfeiffer's Corner for a distance of 2.0 miles. Alternate bids concrete and gravel.

ANNE ARUNDEL CO. Cont. AA-20—One section of State Highway from Jacobsville toward Lakeshore for a distance of 1.0 mile. Concrete.

PRINCE GEORGE CO. Cont. P-38—One section of State Highway from Riggs School toward Hyattsville, a distance of 1.0 mile. Concrete.

PRINCE GEORGE CO. Cont. P-33—One section of State Highway from end of Contract P-24 toward Ashton, for a distance of 1.0 mile. Concrete.

CHARLES CO. Cont. CH-20—One section of State Highway from end of Contract CH-17 toward Lyons Corner, a distance of 2.0 miles. Gravel.

ST. MARYS CO. Cont. SM-18—One section of State Highway from Harpers Corner toward Laurel Grove, a distance of 2.5 miles. Gravel.

DORCHESTER CO. Cont. D-26—One section of State Highway from end of Contract D-24 toward Lloyds, a distance of 1.0 mile. Concrete.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., Standard Time, on the 8th day of August, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 20th day of July, 1922.

JOHN N. MACKALL, Chairman.
L. H. STEUART, Secretary.

Bids: Aug. 15.

Paulsboro-Gibbstown Road

Woodbury, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Gloucester for reconstruction of Paulsboro-Gibbstown road, in the Township of Greenwich, in the County of Gloucester, New Jersey, with a reinforced concrete pavement, estimated amount of concrete pavement required is 28,008 sq.yd., and opened and read in public at Court House, Woodbury, N. J., on Tuesday, August 15th, 1922, at 10.00 o'clock a.m., Eastern Standard Time.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by William C. Cattell, County Engineer, have been filed in the office of the said engineer at Woodbury, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to the Board of Chosen Freeholders of the County of Gloucester and must be accompanied by a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the County of Gloucester.

CHESTER N. STEELMAN, Clerk.
WM. C CATTELL, County Engineer.

Bids: Aug. 16.

Sewerage System

Sayreville, N. J.

Sealed proposals will be received by the Mayor and Borough Council of the Borough of Sayreville, N. J., at the Borough Council Chambers, Borough Hall in the Borough of Sayreville on the 16th day of August, 1922 at the hour of 8 o'clock P. M., Daylight Saving Time and 7 o'clock P. M., Standard Time, for the construction of a system of sewers and appurtenances in the Borough of Sayreville. The work will in general consist of about

49,700 lin.ft. of 8 Inch Sewers
7,900 lin.ft. of 10 Inch Sewers
1,736 lin.ft. of 8 Inch c.i. outfall sewer on piles
3,700 lin.ft. of 6 Inch c.i. force main
1,470 lin.ft. of 10 Inch force main

together with sewage pumping stations and various appurtenances.

All of said work to be done in accordance with the plans, profiles and specifications prepared by Waldo S. Coulter, Consulting Engineer, 114 Liberty Street, New York, N. Y., which said plans, profiles and specifications were adopted by the Borough Council of the Borough of Sayreville at the meeting held Wednesday, March 15, 1922, and which said plans, profiles and specifications are now on file in the office of the Borough Clerk, Borough Hall, Sayreville, N. J., where they may be seen by bidders or a set of the said plans, profiles and specifications can be secured from Waldo S. Coulter, Consulting Engineer, by depositing fifteen dollars ($15.00) one-half of which will be refunded upon the return of the plans, profiles and specifications in good condition within seven (7) days after the award of the contract. All bids must be on the form of proposal to be obtained from the Consulting Engineer.

Each bidder must accompany his bid by a certified check of five thousand dollars ($5,000) payable unconditionally to the Treasurer of the Borough of Sayreville, which said check must be presented with the bid as a guarantee that the bidder will within ten (10) days after receiving the award enter into and execute a contract for the faithful performance of the work to be done under said contract, and said bid must be in a sealed envelope and marked "Proposal for a Sewerage System," The successful bidder will also be required to furnish a Surety Company bond to the Borough of Sayreville in the amount of Fifty thousand dollars ($50,000) for the faithful performance of the work to be done under said contract, said bond to be approved by the Borough Attorney.

In case of failure to execute the contract and furnish the required Surety Company bond within ten (10) days after due notice that the contract has been awarded to him, the successful bidder shall forfeit his deposit to the Borough of Sayreville as liquidated damages.

The right to reject any or all bids is reserved by the Mayor and Borough Council.

All of said work must be completed on or before December 1, 1923.

EDWARD E. CLARK,
Mayor.

Attest:
FRANK P. KOLB,
Borough Clerk.
Approved:
THOMAS H. HAGERTY,
Borough Attorney.

Bids: Aug. 7.

Street Improvement

Columbia, Mo.

SEALED PROPOSALS, separate for each street and district, will be received by the undersigned City Clerk of Columbia, Boone County, Missouri, until 4-o'clock p.m., the seventh day of August, 1922, for grading, curbing and guttering and paving with Kentucky rock asphalt of five streets in said city, according to the plans and specifications on file with the city clerk. Approximately 5,700 lin.ft. curb and gutter, 10,500 sq.yd. of paving.

Sealed proposals will also be received for repairing, surfacing and resurfacing with Tarvia preparations, or its equivalent, about 37,000 square yards of streets in districts 2, 4, 6 and 7, in accordance with the plans and specifications on file with the city clerk.

All the work to be paid for in special tax bills. Amount of deposit required with bid, cash or certified check for 10 per cent of amount of bid.

JOHN S. BICKNELL,
City Clerk.

Bids: Aug. 15.

Road and Bridges

Charleston, W. Va.

Sealed Proposals will be received by the State Road Commission of West Virginia at its office in Charleston, West Virginia, until 10 o'clock a.m., on the 15th day of August, 1922, and at that time and place publicly opened and read for the construction of the following bridges and section of state road. ROAD

Project 3126—Brooke County—0.2 mile grading and paving with Water Bound Macadam. Certified check for $700.00.

BRIDGES

Witcher Bridge No. 772, Project 116, Kanawha County, over Witchers Creek. 65 ft. steel span superstructure. Certified check for $500.00.

Cedar Grove Bridge No. 773, Project 3179 Kanawha County, over Kelly's Creek, 85 ft. steel span superstructure, concrete substructure. Separate proposals will be received for superstructure, certified check for $500.00 and substructure certified check for $500.00.

Hugheston Bridge No. 783, Project 3135-B Kanawha County, over Hughes Creek. 80 ft. steel span superstructure only, certified check for $500.00.

Hartland Bridge No. 805, Clay County, over Elk River. Concrete substructure only. Certified check for $1,100.00.

Bartow Bridge No. 829, Project 3185, Pocahontas County, over East Fork of Greenbrier River. Concrete arch, 2-56 ft. spans. Certified check for $500.00.

Poca Bridge No. 619, Putnam County, over Pocatalico River. 180 ft. span, steel truss superstructure, Ashlar masonry substructure. Separate proposals will be received for substructure, certified check for $1,400.00 and superstructure, certified check for $600.00.

East Keystone Bridge No. 727, Project 3096, McDowell County, over Elkhorn Creek. 65 ft. span steel with 5 ft. sidewalk, Ashlar masonry substructure. Substructure and superstructure to be let in one contract. Certified check for $500.00.

Clothier Bridge No. 810, Project 3059, Logan County, over Spruce Fork. 130 ft. steel span superstructure, Ashlar masonry substructure. Substructure to be let on separate contract. Certified check for $500.00.

Sharpless Bridge No. 826, Project 3059, Logan County, over Spruce Fork. 130 ft. steel span superstructure, Ashlar masonry substructure. Substructure to be let on separate contract. Certified check for $500.00.

Note: Superstructures for Bridges No. 810 and No. 826 to be let in one contract. Certified check $800.00.

Seng Camp Bridge No. 830, Project 3059, Logan County, over Seng Camp Creek. Concrete thru girder, 45 ft. span. Ashlar masonry substructure. Certified check for $500.00.

Allen Creek Bridge No. 730, Project 3062, Wyoming County, over Guyandotte River. Concrete arch, 2-75 ft. spans. Certified check for $1,000.00.

Cross Creek Bridge No. 819, Project 3126, Brooke County, over Cross Creek, concrete arch, 90 ft. span. Certified check for $1,200.00.

Granny Creek Bridge No. 807, Project 3110, Braxton County, over Granny Creek. Concrete deck girder, 50 ft. span, concrete substructure, pile foundation. Certified check for $750.00.

Junction Bridge No. 802, Project 3011-B, Hampshire County, over Mill Creek. Concrete slab, 6-20 ft. spans, concrete substructure. Certified check for $500.00.

Reynolds' Gap Bridge No. 808, Project 3013, Hardy County, over Mud Lick Run. Concrete thru girder, 2-40 ft. spans, concrete substructure. Certified check for $500.00.

Judy Bridge No. 809, Project 3014, Pendleton County, over N. Mill Creek. Concrete thru girder, 2-40 ft. spans, concrete substructure. Certified check for $500.00.

Reeds Creek Bridge No. 828, Project 3105, Pendleton County, over Reeds Creek. Concrete slab, 2-22 ft. spans, concrete substructure. Certified check for $500.00.

Proposals will be received only upon State Standard Forms in accordance with plans, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates may be obtained from the office of the State Road Commission at Charleston, West Virginia.

Each proposal must be accompanied by a certified check in the amount noted for each proposal.

The right is reserved to reject any and all proposals.

STATE ROAD COMMISSION
E. B. CARSKADON, Secretary.

Bids: Aug. 16.

Cast Iron Water Pipes

Sayreville, N. J.

Sealed proposals will be received by the Mayor and Borough Council of the Borough of Sayreville, N. J., at the Borough Council Chambers, Borough Hall, in the Borough of Sayreville on the 16th day of August, 1922 at the hour of 8 o'clock, P. M., Daylight Saving Time and 7 o'clock, P. M., Standard Time for the furnishing of one hundred forty-six (146) tons 4 Inch cast iron pipe, hub and spigot ends, Class "B"; twelve hundred ninety-three (1293) tons 6 Inch to 18 Inch Cast Iron Pipe, hub and spigot ends, classes "B" and "C", and twenty-four (24) tons special iron castings. All pipe and special castings to be manufactured in accordance with Am. W. W. Assn. specifications. All proposals shall state the price per ton of 2,000 pounds, Sayreville, N. J.

All of said bids shall be in accordance with the specifications prepared by Waldo S. Coulter, Consulting Engineer, 114 Liberty Street, New York, N. Y., which said specifications were adopted by the Borough Council of the Borough of Sayreville at the meeting held on Wednesday, March 15, 1922, which said specifications are now on file in the office of the Borough Clerk, Borough Hall, Sayreville, N. J., where they may be seen by bidders, or a set of said specifications can be obtained from Waldo S. Coulter, Consulting Engineer, upon the payment of two dollars ($2.00), which said sum of two dollars ($2.00) will not be refunded.

Each proposal must be in a sealed envelope and marked "Proposal for Cast Iron Pipe." Each bid must be accompanied by a certified check for four thousand dollars ($4,000) made payable unconditionally to the Treasurer of the Borough of Sayreville, which check must be presented with the bid as a guarantee that the bidder will within ten (10) days after receiving the award, enter into contract with the Borough of Sayreville for the furnishing of the said cast iron pipe and special castings, and will also provide a Surety Company Bond to be approved by the Borough Attorney in the sum of Thirty thousand dollars ($30,000) for the faithful performance of the contract.

The furnishing of said cast iron pipe and special castings shall be completed within 150 days from the date of the signing of the contract.

The Mayor and Borough Council reserve the right to reject and and all bids.

EDWARD E. CLARK,
Mayor.

Attest:
FRANK P. KOLB,
Borough Clerk.
Approved:
THOMAS H. HAGERTY,
Borough Attorney.

Bids: Aug. 30.

Tunnel

Providence, R. I.

Sealed proposals for building the Tunnel portion of the Scituate Aqueduct located in the Town of Scituate and the City of Cranston, R. I. about 8 miles southwesterly of the City of Providence, R. I. will be received at the office of the Water Supply Board, City Hall, Providence, R. I. until 1:30 P.M. Eastern Standard Time (2:30 P. M. daylight saving time) on Wednesday, August 30, 1922, at which time and place they will be publicly opened and read.

The work will include the construction of a concrete lined tunnel about 3⅓ miles in length with an area inside the lining equivalent to a circle 7 feet 9 inches in diameter but of a horse shoe shape except at and near the portals where a 7½ foot circular section will be used. A construction shaft about 140 feet in depth will be required. It is expected that the tunnel will be in rock for substantially its entire length. Some of the principal estimated quantities are: tunnel excavation 60,000 cubic yards, concrete 28,500 cubic yards, excavation in open cut 17,000 cubic yards.

Pamphlets containing plans, information for bidders, form of proposal, contract and bond and specifications, may be obtained on or about August 9 from the Secretary of the Board, City Hall, or from the Chief Engineer, 661 Westminster Street.

CITY OF PROVIDENCE
WATER SUPPLY BOARD.
B. THOMAS POTTER,
Chairman

SAMUEL N. GRAMMONT,
Secretary.
FRANK E. WINSOR,
Chief Engineer.

Bids: Aug. 10.

State Road Work

Trenton, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commission of New Jersey for the construction of the following:

Bituminous Concrete Shoulders two feet wide on each side of present concrete pavement, Route No. 4, Job 445, Broadway from Main Street to Scott Avenue in South Amboy, in the County of Middlesex. Estimated 1,950 square yards of bituminous concrete FABC-1 (Topeka) including scarifying, re-shaping, etc., where necessary.

Bids will be received by the State Highway Commission at the offices of the Commission, Broad Street Bank Bldg., Trenton, N. J., on Thursday, August 10th, 1922, at 11:00 A.M. STANDARD TIME and opened and read immediately thereafter.

Specifications, form of bid, special addressed envelopes and conditions under which bids will be accepted for the above are on file in the office of Mr. A. W. Muir, Superintendent of Maintenance, 517 Broad Street Bank Building, Trenton, N. J., and may be obtained upon request. Bids must be made upon the proposal forms furnished, in the manner designated therein, and as required by the specifications, same to be enclosed in sealed special addressed envelopes which will be furnished each bidder with the bid blank, bearing the name and address of the bidder and work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Bids not submitted on the standard proposal form or enclosed in other than the special envelope will be considered informal and will be rejected.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

The State Highway Commission reserves the right to reject any or all bids. By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: Aug. 15.

Inlet Construction

Ft. Lauderdale, Fla.

Notice is hereby given that the Board of County Commissioners, Broward County, Florida, will receive bids until 11.00 A.M., on Tuesday, August 15, 1922, for the construction of an inlet from New River Sound to the Atlantic Ocean, near Ft. Lauderdale, as per plans and specifications on file in the Clerk's Office, Courthouse Bldg., Ft. Lauderdale, Fla.

Such work shall be let in two contracts, being as follows:

(a) The dredging of 81,000 cubic yards more or less of earth; and the dredging of 5,000 cubic yards more or less of rock;

(b) The furnishing and placing of 6,200 cubic yards more or less of riprap and jetty hearting and of 2,500 tons more or less of jetty capping, all in riprap and jetty construction.

Separate bids will be received and separate contracts let for each of the two classes of work mentioned. Copy of plans and specifications may be secured from the Clerk upon payment of $1.00 to cover cost of printing the same.

Each bid shall be accompanied by a certified check in the amount of 3% of the bid, guaranteeing that the bidder will make contract and bond within ten days of notice of award.

Bond on each contract will be required in the sum of 50% of the amount bid.

Address all bids to the Board of County Commissioners, in care of Frank A. Bryan, Clerk, Ft. Lauderdale, Fla.

The Board reserves the right to reject any and all bids.

By order of the Board.

H. G. WHEELER,
Chairman.

Attest:—
Frank A. Bryan, Clerk.
Geo. B. Hills Company, Engineers,
Jacksonville, Florida.
Dated July 10, 1922.

Bids: Aug. 9.

Reconstruction: Sec. 6, Route 14

Atlantic City, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Atlantic County, N. J., at 12 o'clock noon on August 9th, 1922, (Daylight Saving Time), during a regular meeting of the Board at its meeting room in the Guarantee Trust Building, Atlantic City, N. J., for the reconstruction of section No. 6 of Route No. 14 in Hamilton Township, County of Atlantic, and State of New Jersey, with a Warrenite-Bitulithic pavement on a six inch (6 in.) 1-3-5 concrete base. The estimated amount of pavement and of base is 8,123.51 square yards together with excavation, extra embankment, gravel shoulders, drainage provisions and various other details required in the work. The aforesaid bids will be opened and read in public at the time and place stated for receiving them.

Plans, specifications, and forms of bid, certificate of surety, contract and bond, as prepared by A. H. Nelson, County Engineer and approved by the State Highway Commission, have been filed at the office of the County Engineer at 636 Guarantee Trust Building, Atlantic City, N. J., and at the office of the State Highway Commission in Broad Street Bank Building, Trenton, N. J., at which places they may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of said plans and specifications by the County Engineer on consideration of a deposit of $10 (Ten Dollars), which deposit will be refunded if the plans and specifications are returned to him in good condition by noon of August 9th, 1922. Each bid must be made on the standard proposal form, in the manner designated therein and required by the specifications, must be enclosed in a sealed envelope bearing on the outside the name and address of the bidder and the name of the road and the envelope must be addressed to the Board of Chosen Freeholders, Atlantic County, N. J. Each bid must be accompanied by a certificate of surety and by a certified check in an amount not less than Ten (10%) per cent of the bid and must be delivered at the place and on the hour above stated for receiving bids. A contract will be awarded, if awarded at all, subject to the sale and delivery of bonds which will be issued for the purpose of paying for the proposed work.

By order of the Board of Chosen Freeholders of Atlantic County.

F. W. WILLETTS,
Clerk.

Bids: August 17.

Intake Pier, Screens, Mains, Storage Tanks

Wheeling, W. Va.

Sealed proposals for the construction of an intake pier, 48-inch intake line, traveling screens with building, 17,000 feet of 30-inch steel force mains and 3,000 feet of 36-inch steel reservoir main, and 5 one-million-gallon steel storage tanks will be received by the City Clerk of Wheeling, W. Va., until twelve o'clock noon, Eastern Standard Time, on August 17th, 1922, and will then be opened and read publicly.

All bids shall be made upon the official proposal blanks attached to the Instructions to Bidders, Specifications, and Form of Contract and Bond, which may be seen at the office of the City Clerk, Wheeling, W. Va., or may be obtained by bona fide bidders upon application to The J. N. Chester Engineers, Union Bank Building, Pittsburgh, Pennsylvania, or W. M. Evans, City Clerk, upon deposit of Twenty-five Dollars ($25.00), which amount will be refunded to bidders upon return of plans and specifications in good order.

Each proposal shall be accompanied by a certified check made payable to the order of W. M. Evans, City Clerk, of not less than 5% of the total amount of the bid. This check is to be conditions that if bid is accepted, a contract will be entered into and performance of same secured within ten (10) days after notification of the acceptance of the bid. In case bid is rejected or contract entered into, check will be returned. Successful bidders will be required to furnish a corporate surety bond in an acceptable Surety Company, in the full amount of the contract.

The right is reserved to reject any or all bids.

C. H. DOWLER,
City Manager.

ATTEST:
W. M. EVANS,
City Clerk.

OFFICIAL PROPOSALS

Bids: Sept.7.

Viaducts and Approaches

Nashville, Tenn.

The Board of Public Works of the City of Nashville will receive sealed proposals for the furnishing of materials and labor and the constructing complete of the East Nashville Viaduct and of the East and West Approaches of the Church Street Viaduct, both to be located in Nashville, Tennessee, and to be prosecuted in accordance with the plans and specifications of Freeland, Roberts & Company, Consulting Engineers.

Proposals will be considered:

1—On a lump sum basis for the furnishing of all labor and materials and the constructing complete of the East Nashville Viaduct.

2—On a lump sum basis for the furnishing of all labor and materials and the constructing complete of the East and West Approaches of the Church Street Viaduct.

3—On a lump sum basis for the furnishing of all labor and materials and the constructing complete of the East Nashville Viaduct and the East and West Approaches of the Church Street Viaduct.

Plans, specifications and bidding blanks on file at the office of the City Engineer, City Hall and also at the office of the Consulting Engineers, Freeland, Roberts & Co., 1212-13 Independent Life Building, Nashville, Tennessee.

Plans can be obtained on application with a deposit of twenty-five ($25.00) dollars, per set, this fee to be refunded to depositor on return of plans and specifications in good condition.

A certified check for Five Thousand ($5,000.00) dollars, or approved bidding bond in the sum of five (5%) per cent of the amount of the proposal, executed in favor of the City of Nashville, must accompany each bid.

The successful bidder will be required to execute bond in the full amount of the contract price.

All proposals must be mailed or delivered to S. H. McKay, City Clerk, City Hall., Nashville, Tennessee, on or before ten (10) o'clock a.m., Thursday, September 7th, 1922. Envelopes shall be marked, "Viaduct Proposal."

The Board of Public Works reserves the right to accept any bid or combination of bids, or to reject any or all bids and to waive all formalities.

APPROXIMATE QUANTITIES

Reinforced concrete	9,600 cu.yd.
Steel reinforcement	750 tons

FELIX Z. WILSON,
Mayor.

Attest:
S. H. McKAY,
City Clerk.

Bids: Aug. 7.

Remodelling Water Treatment Plant

Falls Creek, Pa.

Will be received by the Borough of Falls Creek, Jefferson County, Pennsylvania, at the Council Chamber, until 7 p. m. on the 7th day of August, 1922, for the construction work and other incidental work to the remodelling of the Borough Water Treatment Plant.

Plans and specifications can be seen and proposal sheets obtained from the secretary of the borough or at the office of Banks & Craig, engineers, Telegraph Building, Harrisburg, Pennsylvania. The estimated cost of the work is $7,000.00.

A set of plans and sepcifications can be obtained by placing a deposit drawn to the Borough Treasury in the amount of $5.00; $3.00 of which will be returned if the plans are returned in good condition and $2.00 of which will be returned if the specifications are returned in good condition, within thirty days (30) after the award of the contract.

Each bid must be accompanied by a certified check, payable to the order of the Borough of Falls Creek, in the amount of $100.00 as a guarantee that the bidder will enter into contract with the Borough of Falls Creek within ten days from the award of the bid.

The Borough Council reserves the right to reject any and all bids.

A L LUKEHART,
President of Council
C. E. SLAYTON,
Secretary of Council

OFFICIAL PROPOSALS

Bids: Aug. 15.

State Highway Work

Baltimore, Md.

SEALED PROPOSALS for building seven section of State Highway, as follows:

GARRETT COUNTY—Contract G-22—One section of State Highway from Gortner toward Red House, a distance of 2.0 miles—(Concrete).

FREDERICK COUNTY—Contract F-56—One section of State Highway from Middletown toward Myersville, for a distance of 2.03 miles—(Concrete).

MONTGOMERY COUNTY — Contract M-36—One section of State Highway along Flower Ave. from Carroll Ave. to Blair Road a distance of 1.0 miles—(Concrete).

HARFORD COUNTY—Contract H-28—One section of State Highway along the Phila. Road from Aberdeen toward the Balto. Co. Line, a distance of 2.0 miles—(Concrete).

SOMERSET COUNTY—Contract S-16—One section of State Highway from Marion toward Tulls Corner, a distance of 1.5 miles—(Concrete).

WORCESTER COUNTY—Contract WO-27—One section of State Highway from Bishop to Bishopville, a distance of 1.8 miles—(Concrete).

HOWARD COUNTY—Contract HO-25—One section of State Highway from the Columbia Pike near Ellicott City toward Pfeiffer's Corner, for a distance of 1.5 miles—(Concrete), will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. Standard Time, on the 15th day of August, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 27th day of July, 1922.

JOHN N. MACKALL,
Chairman.
L. H. STEUART,
Secretary.

Bids: Aug. 10.

Drainage and Ditch Improvement

Wooster, Ohio.

Notice is hereby given that sealed proposals for the construction of the JOINT WAYNE-HOLMES COUNTY DITCH IMPROVEMENT will be received up until twelve o'clock noon Eastern Standard Time on Thursday, August 10, 1922, at the office of the Secretary of the Joint Board of County Commissioners of Wayne and Holmes Counties at the Court House at Wooster, Ohio.

The work to be done consists of the draining and dredging of Killbuck Creek in Wayne and Holmes Counties, in all, the distance of One Hundred and Fifty-Six Thousand (156,000) feet.

The yardage of earth to be moved is estimated at about 1,780,000 cubic yards, consisting principally of Hydraulic dredge work. The date of completion will be eighteen months from the date of awarding of contract.

A certified check in the amount of $10,000.00, payable to the Joint Board of County Commissioners of Wayne and Holmes Counties, Ohio, must accompany each proposal. Checks of unsuccessful bidders will be returned within ten days of the awarding of the contract.

The said board reserves the right to reject any or all bids. Plans, specifications and proposals are on file at the Secretary's office at the Court House, Wooster, Ohio, or same will be mailed upon application when same is accompanied by a deposit of $20, which will be refunded if plans are returned in good condition.

By order of the Joint Board of
County Commissioners of Wayne
and Holmes Counties.
CHAS. F. SCHOPF,
Secretary.

OFFICIAL PROPOSALS

Bids: Aug. 10.

Covered Reservoir

Poughkeepsie, N. Y.

Sealed proposals will be received by the Board of Public Works at its offices in Eastman Park Mansion on or before 4 p.m. (Daylight Saving Time), Thursday, August 10th, 1922, for the construction of a Pure Water Reservoir.

Plans, specifications, form of proposal, bond and contract may be obtained at the office of the Superintendent of Public Works, Poughkeepsie, N. Y., and at the office of Hazen, Whipple and Fuller, Consulting Engineers, 30 East 42nd Street, New York City, upon the deposit of Twenty-five ($25.00) Dollars, which amount will be refunded upon the return of the plans and specifications in good condition.

Quantities of work to be done are approximately:

Item 1.	1,490	cubic yards of stripping.
Item 2.	24,500	cubic yards of general excavation.
Item 3.	125	cubic yards of trench excavation.
Item 4.	16,350	cubic yards of rolled embankment.
Item 5.	4,600	cubic yards of general fill.
Item 6.	81	cubic yards of concrete for filling.
Item 7.	1,217	cubic yards of piers and vaulting.
Item 8.	958	cubic yards of floors.
Item 9.	1,120	cubic yards of walls.
Item 10.	85,000	pounds of reinforcing steel.
Item 11.		Entrance building. Lump sum.
Item 12.		Placing cast iron pipes and gates. Lump sum.

The proposal shall be accompanied by a certified check drawn upon an incorporated State or National Bank or Trust Company in good credit, within this State, payable to the order of the City of Poughkeepsie for five per cent of the amount of the bid. The successful bidder will be required to give a satisfactory bond for the faithful performance of the agreement in amount equal to fifty per cent of the value of the contract.

The Board of Public Works reserves the right to reject any or all bids.

By order of the Board of Public Works.
THOMAS F. LAWLOR, Supt.
HAZEN, WHIPPLE & FULLER,
Consulting Engineers,
30 East 42nd Street,
New York City.

Bids: Aug. 15.

Sewer Arms

Springwells, Mich.

Sealed proposals will be received up to 8 p.m. August 15, 1922, by the Village Clerk at the Village Hall Springwells, Michigan, for the construction of the following approximate quantities of sewers:—

Section 10.	3447 ft of 42 in. to 72 in. sewer to be built in tunnel.
Section 14.	5058 ft. of 48 in. to 72 in. sewer to be built in tunnel.
Section 15.	3068 ft. of 36 in. to 81 in. sewer to be built in tunnel or open cut.

Plans and specifications are on file at the office of the Village Clerk and copies may be secured from the office of Clarence W. Hubbell, Consulting Engineer, 2348 Penobscot Bldg., Detroit. A deposit of $10.00 will be required on each set which will be refunded upon their return in good order on or before August 25, 1922.

Certified checks, made payable to the Village of Springwells, for the following amounts will be required to accompany each bid:— Section No. 10, $2500.00. Section No. 14, $3000.00. Section No. 15, $2000.00. In case of failure or neglect to enter into contract and furnish the required bonds within the time specified the certified checks shall be forfeited to the Village of Springwells as liquidated damages.

No proposals will be received unless made on the blanks furnished and delivered to the Village Clerk on or before 8 p.m. August 15, 1922.

The Village reserves the right to reject any or all bids,

By order of the Village Council.
B. P. ESPER,
Village Clerk.

Print August 3rd.

Bids: Aug. 16.

Steel Tower Tank

Sayreville, N. J.

Sealed proposals will be received by the Mayor and Borough Council of the Borough of Sayreville, N. J., at the Borough Council Chambers, Borough Hall, in the Borough of Sayreville on the 16th day of August, 1922 at the hour of 8 o'clock P. M., Daylight Saving Time and 7 o'clock P. M., Standard Time, for furnishing of 100,000 gallon steel tank on a tower sixty (60) feet high to the balcony, and erecting on foundations to be provided by the Borough of Sayreville.

All of said work to be done in accordance with the specifications prepared by Waldo S. Coulter, Consulting Engineer, 114 Liberty Street, New York, N. Y., and which said specifications were adopted by the Borough Council of the Borough of Sayreville, the meeting held Wednesday, March 15, 1922, which said specifications are now on file in the office of the Borough Clerk, Borough Hall, Sayreville, N. J., where they may be seen by bidders or a set of said specifications can be obtained from Waldo S. Coulter, Consulting Engineer upon the payment of two dollars ($2.00), which sal dsum of two dollars ($2.00) will not be refunded.

Each bidder shall submit with his proposal a drawing showing the sizes of the various members and the dimensions of the structure he proposes to furnish under this contract.

Each proposal must be in a sealed envelope and marked, "Proposal for Steel Tower Tank." Each bid must be accompanied by a certified check for five hundred dollars ($500) made payable unconditionally to the Treasurer of the Borough of Sayreville, which check must be presented with the bid as a guarantee that the bidder will within ten (10) days after receiving the award, enter into contract with the Borough of Sayreville for the performance of the work, and will also provide a Surety Company bond to be approved by the Borough Attorney in the sum of five thousand dollars ($5,000) for the faithful performance of the said contract.

The Mayor and Borough Council reserve the right to reject any and all bids.

The erection and construction of said steel tower tank must be completed within 150 consecutive working days from the date of the signing of the contract.

EDWARD E. CLARK,
Mayor.

Attest:
FRANK P. KOLB,
Borough Clerk.
Approved:
THOMAS H. HAGERTY,
Borough Attorney.

Bids: Aug. 23.

Pipe Sewers and Disposal Works

Rye, N. Y.

Sealed proposals will be received and opened publicly by the Trustees of the Village of Rye, N. Y., at the Village Municipal Hall, at 8.15 p.m., August 23rd, 1922.

Said proposals to cover construction (both materials and labor included) of certain pipe sewers and disposal works, according to plans and specifications filed with the Village Clerk.

Copies of plans and specifications may be seen also at office of City-Wastes Disposal Co., 45 Seventh Ave., New York City. Sets may be borrowed upon deposit of $15 of which $10 will be refunded if papers are returned in good condition before Sept. 1st., 1922.

Approximately the proposed work consists of:

About 29,000 feet of 8-inch and 600 feet of 15-inch vitrified pipe sewers, with manholes and flushtanks, much of it in rock excavation;
About 6,600 feet of iron pipe sewers, siphons and force-mains, 8-inch to 16-inch;
An indeterminate amount of drain-tile laid in sewer trench;
Sewage tanks, sprinkling filters and sand-beds, with appurtenances.

Each bid must be made on blank forms obtained from the Village Clerk or the Engineer, and must be accompanied by a certified check for $10,000 as a guarantee of good faith.

The Village reserves the right to reject any or all bids.

WILLIAM H. SELZER,
Village Clerk,
Rye, Westchester Co., N. Y.
G. EVERETT HILL,
Engineer,
45 Seventh Ave., New York.

Bids: Aug. 8.

Water Pump Equipment

Manasquan, N. J.

Sealed proposals will be received by the Borough Council of the Borough of Manasquan, N. J., at a public meeting to be held in the Council Chambers on Broad St., Manasquan, N. J., on Tuesday, Aug. 8, 1922, at 8.00 p.m. (daylight saving time), and then publicly opened and read for furnishing all the necessary labor and materials for the installation of Water Pumping Equipment in accordance with the plans and specifications of Runyon & Carey, Consulting Engineers, 845 Broad St., Newark, N. J.

All proposals shall be enclosed in a sealed envelope directed to the Borough Clerk, Manasquan, N. J., endorsed on the outside "Proposal for Water Pumping Equipment," and must be received by the Borough Clerk on or before the time above mentioned.

Each bidder must submit with his proposal a certified check or cash in the sum of Eight Hundred $800.00) Dollars. The certified check made payable to the order of the Borough of Manasquan, N. J., and if for any reason whatever, the bidder, after the opening of bids, withdraws from the competition or if he refuses to execute the contract and required bond in the event of said contract being awarded to him, then the cash or the proceeds of the check accompanying such proposal shall become the property of the Borough of Manasquan, N. J.

The check submitted by the successful bidder will be retained until the execution of the formal contract and bond, and the checks of the unsuccessful bidders will be returned immediately after the proposal of the succcessful bidder shall have been accepted.

A bond or security for the faithful performance of the contract and protection of the labor and materials furnished in said contract will be required of the successful contractor, according to statutory requirements, in a sum equal to the estimated cost of the work, which bond must be executed by an approved surety company duly authorized to become such surety by the laws of the State of New Jersey and each proposal must be accompanied by a proposition in writing whereby said surety company contracts to furnish on application bond as required.

All proposals shall comply in all respects with the "Instructions and Conditions for the Submission of Bids," accompanying the specification.

Plans and specifications will be on file in the office of the Borough Clerk.

For the convenience and use of prospective bidders, copies of the plans and specifications will be furnished upon application to the engineers and upon the deposit of cash or a certified check in the sum of Fifteen ($15.00) Dollars, made payable to the order of Runyon & Carey, which will be returned to the prospective bidder upon return of the plans and specifications.

The Borough Council reserves the right to reject any or all proposals submitted or to waive any defects therein.

All proposals must be made out on blanks furnished for that purpose by the engineers.

LLOYD C. RIDDLE,
Mayor.

Attest:
ANNIE B. APPLEGET,
Borough Clerk.

Bids: Aug. 16.

Water Main and Sewer Construction

Hyattsville, Md.

Sealed proposals for Contract 32-W & S will be received at the office of the Washington Suburban Sanitary Commission, Evans Bldg., New York Ave., Washington, D. C. until 3 P.M., Eastern Standard Time, Wednesday, August 16, 1922, for constructing 11,500 feet of 5 in. to 8 in. cast iron water mains and 33,500 feet of 6 in. to 10 in. sewers and appurtenances.

Plans obtainable from Robert B. Morse, Chief Engineer of District, Hyattsville, Md., on returnable deposit of $5.00.

T. HOWARD DUCKETT,
EMORY H. BOGLEY,
J. BOND SMITH,
Commissioners.

DITCHING CONTRACT WANTED

Anyone having work to sublet, suitable for a 30-ft. span Bay City Dryland Dredge.

Write to
N. B. MILLER, Milan, Tenn.

HARRIS
Bids: Aug. 16.

Street Paving

Nashville, Tenn.

Notice is hereby given that sealed proposals will be received at the office of the City Clerk until 10 o'clock a.m. Wednesday, August 16, 1922, for constructing street paving on the following streets, to-wit:

GRANITE BLOCK PAVING
(RESURFACE)

Buchanan Street from 9th Avenue to 18th Avenue, South Second Street from Woodland Street to Fatherland Street.

BITUMINOUS CONCRETE PAVEMENT
(RESURFACE)

Sixth Avenue, South, from Broadawy to Bell Street.

ASPHALTIC PAVEMENT (RESURFACE)

Hayes Street from 15th Avenue to Louise Avenue, Terrace Place from 20th Avenue to 21st Avenue, Villa Street from South Street to Tremont Street, McMillin Avenue from Church Street to Cedar Street, Heffernan Street from 18th Avenue to 21st Avenue, South Second Street from Fatherland Street to Shelby Avenue, Seventh Street from Woodland Street to Bienville Street, Foster Street from First Street to Seventh Street, Shelby Avenue from Second Street to Tenth Street, South Tenth Street from Woodland Street to Shelby Avenue.

ASPHALTIC PAVEMENT (NEW GRADING AND PAVING)

Highland Avenue from Twenty-fifth Avenue to Twenty-eighth Avenue, Glen Avenue from Ninth Avenue to Bradford Avenue, Halcyon Avenue from Ninth Avenue to Twelfth Avenue, Montrose Avenue from Ninth Avenue to Twelfth Avenue, Nineteenth Avenue, South, from Acklen Avenue to point 525 feet south, Twentieth Avenue, South, from Acklen Avenue to point 525 feet south, Heffernan Street from Twenty-first Avenue to Twenty-eighth Avenue, Evander Street from Woodland Street to Holly Street, Russell Street from Nineteenth Street to Twentieth Street, South Nineteenth Street from Shelby Avenue to Electric Avenue, South Nineteenth Street from Russell Street to Shelby Avenue, Ashworth Avenue from Eighteenth Street to Shelby Park, Alley No. 919 (between West Belmont Circle and Eighteenth Avenue) from Acklen Avenue to point 500 feet south.

Approximately 13,000 square yards of Granite Block Paving, 3,000 square yards of Bituminous Concrete Paving, 79,000 square yards of Asphaltic Paving (Resurface) and 50,000 square yards of Asphaltic Paving (New Grading and Paving) will be required. Separate proposals must be submitted for each street on blank forms accompanying specifications, which will be furnished by Wm. W. Southgate, City Engineer, upon application. A charge of fifty cents (50c.) per copy will be made for each specification and proposal furnished. Proposals must be accompanied by a certified check payable to the order of the City of Nashville in an amount equivalent to ten per cent of the aggregate bid, or an approved bond in a penal sum of like amount with a solvent surety indemnity insurance company authorized to do business in the State of Tennessee. The said checks and bonds will be returned to unsuccessful bidders upon award of contract, and to successful bidders when they shall have entered into contract and made approved bond for the faithful performance of said contract as required by law. The right is reserved to reject any and all bids.

By order of the Board of Public Works.

FELIX Z. WILSON,
Mayor.

Attest:
S. H. McKAY,
City Clerk.

Bids: Aug. 15.

Concrete Paving

Cape May, N. J.

Sealed bids will be received by the commissioners of the City of Cape May, N. J., until Tuesday, August 15, 1922, at ten o'clock standard time, for the laying of approximately 23,000 square yards of portland cement concrete paving, together with alternate bids for laying a like amount of a bituminous surface paving.

Bids must be accompanied by a certified check for an amount not less than five per cent of the total amount bid. Plans and specifications may be had on application to the City Engineer on making a deposit of five dollars, which will be refunded on return of plans and specifications in good condition. The commissioners reserve the right to reject any or all bids.

H. H. BELL,
City Engineer.

OFFICIAL PROPOSALS

Bids: Aug. 16.

Water Works System

Sayreville, N. J.

Sealed proposals will be received by the Mayor and Borough Council of the Borough of Sayreville, N. J., at the Borough Council Chambers, Borough Hall, in the Borough of Sayreville, on the 16th day of August, 1922, at the hour of 8 o'clock p.m., Daylight Saving Time and 7 o'clock p.m. Standard Time, for the construction of a Water Works System in the Borough of Sayreville. The work, will, in general, consist of:

Laying about 13,402 lin.ft. of 4 inch Cast Iron Pipe,

Laying about 30,715 lin.ft. of 6 inch Cast Iron Pipe,

Laying about 10,215 lin.ft. of 8 inch Cast Iron Pipe,

Laying about 14,780 lin.ft. of 10 inch Cast Iron Pipe together with other and appertaining construction.

All of said work to be done in accordance with the plans and specifications prepared by Waldo S. Coulter, Consulting Engineer, 114 Liberty Street, New York, N. Y., which said plans and specifications were adopted by the Borough Council of the Borough of Sayreville at the meeting held Wednesday, March 15th, 1922, and which said plans and specifications are now on file in the office of the Borough Clerk, Borough Hall, Sayreville, N. J., where they may be seen by bidders or a set of the said plans and specifications can be secured from Waldo S. Coulter, Consulting Engineer, by depositing ten dollars ($10.00), one half of which will be refunded upon the return of the plans and specifications in good condition within seven (7) days after the award of the contract. All bids must be on the form of proposal to be obtained from the Consulting Engineer.

Each bidder must accompany his bid by a certified check of five thousand dollars ($5,000), payable unconditionally to the Treasurer of the Borough of Sayreville, which said check must be presented with the bid as a guarantee that the bidder will within ten (10) days after receiving the award enter into and execute a contract for the faithful performance of the work to be done under said contract, and said bid must be in a sealed envelope and marked "Proposal for a Water Works System." The successful bidder will also be required to furnish a Surety Company bond to the Borough of Sayreville in the amount of Fifty Thousand Dollars ($50,000), for the faithful performance of the work to be done under said contract, said bond to be approved by the Borough Attorney.

In case of failure to execute the contract and furnish the required Surety Company bond within ten (10) days after due notice that the contract has been awarded to him, the successful bidder shall forfeit his deposit to the Borough of Sayreville as liquidated damages.

The right to reject any or all bids is reserved by the Mayor and Borough Council.

All of said work must be completed on or before December 1, 1923.

EDWARD E. CLARK,
Mayor.

Attest:
FRANK P. KOLB,
Borough Clerk.
Approved:
THOMAS H. HAGERTY,
Borough Attorney.

OFFICIAL PROPOSALS

Bids: Aug. 9.

Road Work

Hackensack, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders for the construction of Section 3, Route No. 10, from the Borough of Little Ferry to the Borough of Ridgefield, in the County of Bergen, with an 8-in. one course reinforced concrete pavement; estimated amount of surface pavement required is 17,680 sq. yds.; and opened and read in public at Court House, Hackensack, N. J. on Wednesday, August 9th, 1922, at 1.30 P. M. (daylight savings time).

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by the County Engineer, and approved by the State Highway Commission, have been filed in the office of the said Engineer at the Court House, Hackensack, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to the Board of Chosen Freeholders of the County of Bergen and must be accompanied by a certificate from the Bonding Company and a certified check for not less than 10 per cent of the bid and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

Work to be performed under County Reimbursement Act Chapter 183 Laws of 1918, and amended by Chapter 317, Laws of 1920.

By Order of Board of Chosen Freeholders, Bergen County, N. J.

JAS. M. HARKNESS,
Clerk.

Bids: Aug. 14.

Dam Construction

Newburgh, N. Y.

Sealed proposals will be received by the City Manager of Newburgh, N. Y., for the construction of dams at Silver Stream until 12 o'clock, noon, Monday, August 14.

The work comprises the construction of two adjoining dams, the total length of which is about 1,200 feet. The easterly dam is to be of earth with a concrete core wall, concrete spillway, small gate house and superstructure with a 48-inch blow-off pipe. Alternate bids are asked for the west dam, for earth embankment, with concrete core wall and also with a reinforced concrete center section to take the place of the earth embankment in the dam.

A certified check of $5,000 is required with each bid. A deposit of $15 is required for each set of plans and specifications, $10 of which will be returned upon the return of the plans and specifications.

Information regarding plans and specifications, etc., may be obtained at the offices of George W. Fuller and James C. Harding, 170 Broadway, New York City, and at the office of the City Engineer, at the City Hall, Newburgh, N. Y.

W. JOHNSTON McKAY,
City Manager.

OFFICIAL PROPOSALS

Bids: Aug. 16.

State Highway Work

Providence, R. I.

Sealed proposals for the reconstruction under the provisions of the Federal Aid Road Act of two sections of State Highway (Total length 1.8 miles) located upon the Boston Neck Road, so-called, in the Town of Narragansett, will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 m. (Daylight Saving) 11 a.m. (Eastern Standard), on Wednesday, August 16, 1922, at which time they will be opened and read in public.

The principal quantities involved are as follows:

Clearing and grubbing, 2 acres.
Earth Excavation, 8,300 cu. yds.
Borrow, 5,000 cu. yds.
Gravel Foundation, 2,700 cu. yds.
Wooden Guard Rail, 3,450 lin. feet.
Crushed Stone for Bitum. Macadam, 500 tons.
Hauling, Heating and Applying Asphalt, 4,000 gallons.
Cement Concrete Pavement in Place, 4,000 cu. yds.
Steel Reinforcement for Pavement, 166,000 pounds.
Cement for Pavement, 6,600 bbls.

Bids must be made upon blank forms to be furnished by the Board. No bids will be accepted unless accompanied by a certified check for the sum of $200.00 payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids, and to give preference to towns or cities, in accordance with Section V of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Wednesday, August 2nd, 1922, every week day (except holidays and Saturdays), between the hours of 9 a.m. and 5 p.m. Saturdays, 9 a.m. to 12 m.

State Board of Public Roads,
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
J. HENRY WOODARD
ALTON HEAD

Bids: Aug. 10.

Cast Iron Water Pipe or Steel Water Pipe

Poughkeepsie, N. Y.

Sealed proposals will be received by the Board of Public Works at its offices in Eastman Park Mansion on or before 4 p.m. (Daylight Saving Time), Thursday, August 10th, 1922, for furnishing Cast Iron Water Pipe and Specials, or Steel Water Pipe and Specials.

Specifications, form of proposal, bond and contract may be obtained at the office of the Superintendent of Public Works, Poughkeepsie, N. Y., and at the office of Hazen, Whipple and Fuller, Consulting Engineers, 30 East 42nd Street, New York City, upon the deposit of Ten ($10.00) Dollars, which amount will be refunded upon the return of the specifications in good condition.

The materials to be furnished are as follows:

Approximately 2,589 Tons of 20"-24" and 30" Cast Iron Bell and Spigot Pipe.

Approximately 165,000 lb. Bell and Spigot Standard Specials.

AND AS AN ALTERNATE TO THE ABOVE

Approximately 20,680 lineal feet of 24" Steel Pipe $\frac{5}{16}$" thick.

Approximately 250 lineal feet of 30" Steel Pipe $\frac{5}{16}$" thick.

Approximately 9,000 lbs. of Cast Steel Saddles and Fittings.

The proposal shall be accompanied by a certified check drawn upon an incorporated State or National Bank or Trust Company in good credit, within this State, payable to the order of the City of Poughkeepsie for five per cent of the amount of the bid. The successful bidder will be required to give a satisfactory bond for the faithful performance of the agreement in amount equal to fifty per cent of the value of the contract.

The Board of Public Works reserves the right to reject any or all bids.

By order of the Board of Public Works,
THOMAS F. LAWLOR, Supt.
HAZEN, WHIPPLE & FULLER,
Consulting Engineers,
30 East 42nd Street,
New York City.

Not What You Do, But—
How You Do It

¶Did you ever stop to think why one contractor makes a big success of a construction job while another will make just as huge a failure of the same type of work? ¶The answer is largely a matter of the method of handling because the plans, steel, bricks, mortar and men are the same in both cases. ¶The same thing is true of building a contractor's prestige with the underwriters. ¶This job can either be bungled or a complete, well-executed job of building his credit in the Bank of Underwriting will be the result. ¶It's all in the handling. ¶Swart Service has an outstanding reputation for leaving no stone unturned in properly preparing a contractor's case and intelligently presenting it to the Underwriters. ¶Your decision is an easy one when you realize that Swart Service costs no more than the ordinary sort. ¶—and it will cost you nothing to find out more about it.

HARMON V. SWART
Contract Bonds Compensation Insurance
92 William Street, New York

OFFICIAL PROPOSALS

Bids: Aug. 18.

Channel Work

Bloomington, Ill.

Sealed bids will be received by the Trustees of the Bloomington and Normal Sanitary District, at 404 Unity Building, Bloomington, Illinois, up to 2 o'clock p. m., August 18, 1922, for construction of the open channel work of the District as follows:

71,300 cubic yards excavation in open channel.
76,200 square yards hand dressed spoil bank.
150 lineal feet retaining wall requiring 56 cu. yd. concrete.
75 lineal feet reinforced concrete sewer crossing under channel.
1 manhole on 33-inch sewer.
1 manhole on 48-inch sewer to be repaired.
Supports for two sewers crossing proposed channel.

Open channel has bottom widths from 8 feet to 26 feet, with side slopes 1½ to 1, average depth 7 feet.

Separate bids will be received on the dredging and spoil bank work and on the incidental work above listed.

All bids must be on forms prescribed by the Trustees and bidding blanks may be obtained from Taylor & Woltmann, 428 Unity Bldg., Bloomington, Illinois, Engineers for the District.

Plans, profiles and specifications for the work may be obtained from the Engineers.

All bids must be accompanied by a check for 10 per cent of the amount of the bid, certified by a responsible bank, payable to John W. Harber, President of Board of Trustees.

The Trustees reserve the right to reject any and all bids.

Dated Bloomington, Illinois, July 8, 1922.

JOHN W. HARBER,
FRED D. BARBER,
JOHN J. CONDON,
Trustees, Bloomington and Normal Sanitary District.

Bids: Aug. 22.

Miami River Bridge

Miami, Fla.

Sealed proposals, to be filed with the City Manager, will be received by the City of Miami, Florida, up to nine o'clock a.m., August 22, 1922, at the regular meeting of the Commission, for the construction of a bridge over the Miami River at Southwest Second Avenue. The bridge is a double leaf steel bascule span with concrete piers and embankment approaches; clear span 115 ft., total length of improvement about 500 ft.; one 30 ft. roadway, two 6 ft. walks. Approximate structural metal and machinery 170 tons; concrete 2,700 cubic yards, reinforcing steel 26 tons.

The work will be let to one Contractor on a unit price contract. With each bid there shall be a certified check or bidder's bond for not less than five per cent of the gross bid, made payable to the City of Miami, to be forfeited as liquidated damages by any bidder who is awarded the contract, who fails to promptly execute the contract and bond. Checks of unsuccessful bidders will be returned upon execution of contract, or sooner, upon action of the Commission of the City of Miami. The contract will be awarded to the lowest responsible bidder, but the City Manager shall have the power to reject all bids and advertise again.

Plans and specifications may be examined in the office of Chas. W. Murray, Director of Public Service and Welfare, Miami, Florida, and in the office of Harrington, Howard and Ash, Consulting Engineers, Kansas City, Missouri. Copies may be secured from the Consulting Engineers by depositing $25.00. Such copies shall be returned and a refund of $15.00 made.

F. H. WHARTON, City Manager.

Bids: Aug. 18.

Brick and Stone Church

Madisonville, Ky.

The building committee of The Methodist Episcopal Church, South of Madisonville, Ky., will receive proposals for the erection of a brick and stone church up until 10 o'clock a.m., August 18th, 1922.

Plans and specifications may be had upon application to Rev. J. A. Baylor, Architect, 1115 Fourth Ave., Louisville, Ky., or the chairman of the committee.

A certified check for $2,500.00 payable to J. B. Scott, Treasurer, or a proposal bond executed by some good bonding company must be enclosed with each proposal.

The committee reserves the right to reject any or all proposals.

BASIL M. BROOKS, Chn. of Committee.

OFFICIAL PROPOSALS

Bids: Aug. 17.

Reinforced Concrete Street Paving and Appertaining Structures

Upper Nyack, N. Y.

Sealed proposals will be received by the Trustees and President of the Village of Upper Nyack, at the Village Hall, Upper Nyack, New York, at 2 p.m. standard time, August 17, 1922, for street improvements. Work will consist of approximately 14,000 square yards of reinforced cement concrete pavement.

All bids must be upon blanks provided in the proposal furnished to bidders.

Bids must be accompanied by a certified check for three per cent, (3%) of the amount of the bid. Plans and specifications will be on file at the Village Treasurer's office, Wyman & Polhamous store, Upper Nyack, and the office of the Engineer, 507 Fifth Avenue, Room 600, New York City.

Copies of the plans and specifications may be obtained on or after August 3rd, 1922, for three dollars, ($3.00), per set. No refund for specifications or plans returned. Bidding blanks will be furnished free.

The right is reserved to reject any or all bids.

FRANK R. ZWAHLEN,
Village Clerk.

H. ELTINGE BREED, Engineer,
507 Fifth Avenue,
Room 600,
New York City.

Bids: Aug. 15.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., on TUESDAY, the 15th day of August, 1922, at one o'clock p.m. advanced standard time, which is twelve o'clock noon, eastern standard time, for the improvement of the highways in the following counties:

CAYUGA..............(one highway: 4.13)
CORTLAND..........(one highway: 3.54)
ESSEX...............(one highway: 5.19)
ORANGE.............(one highway: 7.96)

Also for the reconstruction of the following:

COLUMBIA..........(one contract: 3.11)
DUTCHESS.........(two contracts: 0.24) and 3.04
LEWIS...............one contract: 3.00)
ORLEANS...........(one contract: 2.08)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The special attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.

J. C. FINCH,
Secretary.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, BALTIMORE, MD., Sealed proposals will be received here until 1 p.m., daylight saving time, August 21, 1922, and then opened for dredging in Baltimore Harbor and Channels, Md. Further information on application.

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y. Sealed proposals will be received here until 12 m., August 7, 1922 (daylight saving time), and then opened, for dredging and rock removal in Bronx River, N. Y. Further information on application.

TREASURY DEPARTMENT. Office of the Supervising Architect, Washington, D. C., July 18, 1922.—SEALED PROPOSALS will be opened in this office at 3 p.m., August 22, 1922, for construction of the United States Post Office at Spanish Fork, Utah. Drawings and specifications may be obtained from the custodian of the site at Spanish Fork, Utah, or at this office in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in Hudson River, N. Y., will be received here until 12 M., September 5, 1922, (daylight saving time) and then opened. Further information on application.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, Nashville, Tenn.—Sealed proposals will be received here until 11 a. m., Sept. 5, 1922, and then opened, for steel gates for Lock F, Cumberland River. Further information on application.

U. S. ENGINEER OFFICE, 815 Witherspoon Bldg., Philadelphia, Pa. Bids are wanted until Aug. 7, 1922, for dredging in Delaware River in front of Camden, N. J. Further information on application.

UNITED STATES ENGINEER OFFICE, Duluth, Minn., July 14, 1922. Sealed proposals will be received here until 10 o'clock a.m., August 14, 1922, and then opened, for constructing and delivering a steel derrick scow, complete with machinery and equipment. Further information on application.

U. S. ENGR. OFFICE, WILMINGTON, Del. Sealed proposals will be received here until 11 a.m., standard time, Aug. 15, 1922, and then opened, for excavating Inland Waterway from Delaware River to Chesapeake Bay, Del. and Md. (Chesapeake and Delaware Canal). Further information on application.

U. S. ENGINEER OFFICE, Providence, R. I. Sealed proposals will be received here until 11 o'clock a.m., Eastern Standard Time, August 15, 1922, and then opened, for rock removal in Stamford Harbor, Conn. Further information on application.

U. S. ENGINEER OFFICE, Galveston, Tex. Sealed proposals will be received here until 12 M., Aug. 15th, 1922, and then opened, for dredging the Houston Ship Channel, Texas. Further information on application.

PROPOSALS FOR PONTOON CATAMARANS.—U. S. Engineer Office, 2d District, Portland, Ore.—Sealed proposals for 80 all steel pontoon catamarans will be received here unti 11 a.m., August 21, 1922, and then opened. Further information on application.

U. S. VETERANS' BUREAU, Office of the Director, Washington, D. C., July 15, 1922. Sealed proposals will be received at this office until 3 o'clock p.m., on September 1, 1922, and then opened, for the purchase of 2 complete York 100-ton refrigerating plants in U. S. Veterans' Hospital No. 42, Perryville, Md. The sealed envelope must be plainly marked "Proposal for purchase of refrigerating machinery to be opened at 3 p.m., September 1, 1922," and addressed to U. S. Veterans' Bureau, Room 1027, Arlington Building, Washington, D. C. A description of the equipment to be sold, conditions, etc., can be had on application to the Medical Officer in Charge, U. S. Veterans' Hospital No. 42, Perryville, Md. L. B. Rogers, Acting Director.

PROPOSALS FOR STONE.—U. S. ENGINEER OFFICE, 329 Custom House, New Orleans, La.—SEALED PROPOSALS will be received here until 11 a.m., August 15, 1922, and then opened, for furnishing and delivering stone for Southwest Pass, Head of Passes and South Pass, Mississippi River. Further information on application.

U. S. ENGINEER OFFICE, 616 Army Building, New York City.—SEALED PROPOSALS will be received here until 11 a.m., Eastern Standard Time, August 19, 1922, and then opened, for dredging in Passaic River, N. J. Further information on application.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., July 27, 1922—SEALED PROPOSALS will be opened in this office at 3 p.m., Aug. 28, 1922, for remodeling in the United States Post Office, Raleigh, N. C. Drawing and specifications may be obtained from the Custodian of the building or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, BUFFALO, N. Y.—SEALED PROPOSALS will be received here until 11 a.m. (Eastern standard time) Aug. 25, 1922, and then opened, for constructing Office-Storehouse Building and six Operating Houses at Black Rock Lock and Storehouse at Ferry Street Bridge, Buffalo, N. Y. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office, Mississippi River Commission, 1st and 2d Districts, Customhouse, Memphis, Tenn.—Sealed proposals will be received here until 11 a.m., Aug. 14, 1922, and then opened, for constructing about 2,900,000 cubic yards of earthwork in the Upper and Lower St. Francis and White River Levee Districts. Further information on application.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Aug. 14	Northville, Mich.	Aug. 3
Aug. 14	Watertown, S. D.	Aug. 10
Aug. 15	Stevens Point, Wis.	Aug. 10
Aug. 16	Sayreville, N. J.	July 27
	Adv. July 27 to Aug. 10.	
Aug. 16	Glendive, Mont.	July 27
Aug. 16	Wash., D. C.	Aug. 3
	Adv. Aug. 3 and 10.	
Aug. 18	Sebring, O.	Aug. 10
	Adv. Aug. 10.	
Aug. 24	Sacramento, Cal.	July 27
Aug. 24	Quincy, Fla.	Aug. 3
Aug. 25	Mansfield, Mass.	Aug. 10
	Adv. Aug. 10.	
Aug. 29	Charlotte, N. C.	Aug. 10
Aug. 30	Scituate, R. I.	Aug. 3
	Adv. Aug. 3 and 10.	
Sept. 15	Grants Pass, Ore.	July 27
Sept. 15	Plaquemine, La.	Aug. 3
Oct. 1	Ponchatoula, La.	Aug. 3

SEWERS

Aug. 14	Northville, Mich.	Aug. 3
Aug. 14	Hondo, Tex.	July 27
Aug. 14	Pensauken, N. J.	July 27
Aug. 14	Trenton, Mich.	Aug. 10
Aug. 14	Alexandria, Minn.	Aug. 10
Aug. 15	Springwells, Mich.	Aug. 3
Aug. 15	Long Branch, N. J.	Aug. 10
	Adv. Aug. 10.	
Aug. 16	Sayreville, N. J.	July 27
	Adv. July 27 to Aug. 10.	
Aug. 16	Nashville, Tenn.	Aug. 3
Aug. 16	Montreal, Que.	Aug. 10
Aug. 18	Erie, Pa.	Aug. 3
Aug. 20	Colonie (Watervliet P. O.), N. Y.	Aug. 10
Aug. 21	Redwood City, Cal.	Aug. 10
Aug. 22	Newark, N. J.	July 27
Aug. 28	Rye, N. Y.	July 27
	Adv. July 27 to Aug. 10.	
Aug. 25	Milwaukee, Wis.	Aug. 10
	Adv. Aug. 10.	
Aug. 29	Newark, N. J.	Aug. 10

BRIDGES

Aug. 14	Missouri	Aug. 3
Aug. 15	West Virginia	July 27
Aug. 15	Bennettsville, S. C.	Aug. 3
Aug. 16	Ballston Spa, N. Y.	July 27
Aug. 16	Phila., Pa.	Aug. 10
Aug. 18	Denver, Col.	Aug. 10
Aug. 18	Virginia	Aug. 3
Aug. 18	Illinois	Aug. 3
Aug. 21	Mottville, Mich	Aug. 10
Aug. 22	Athens, Ga.	Aug. 10
	Adv. Aug. 10.	
Aug. 22	Miami, Fla.	Aug. 10
Aug. 24	Attelboro, Mass.	Aug. 10
	Adv. Aug. 10.	
Aug. 29	Wellington, New Zealand	July 13
Sept. 1	Knoxville, Tenn.	July 27
Sept. 5	Houston, Tex.	Aug. 10
Sept. 7	Nashville, Tenn.	Aug. 3
	Adv. Aug. 3 and 10.	
Oct. 1	Siam	July 13
Oct. 81	Sydney, Australia	Jan. 12
Sept. 1, 1923	Sydney, New South Wales, Australia	Aug. 3

DAMS

Aug. 14	Newburgh, N. Y.	Aug. 3

EXCAVATION AND DREDGING

Aug. 12	Kokomo, Ind.	July 20
Aug. 14	Benton, Mo.	July 20
Aug. 14	Montesano, Wash.	Aug. 10
Aug. 15	Varner, Ark.	Aug. 3
Aug. 15	Ft. Lauderdale, Fla.	July 13
Aug. 18	Bloomington, Ill.	July 20
	Adv. July 20 to Aug. 10.	
Aug. 19	Jefferson, Wis.	Aug. 10
Aug. 20	Port Frank, Ont.	Aug. 10
Aug. 21	Norwalk, Conn.	Aug. 10
	Adv. Aug. 10.	
Aug. 21	Naples, Ill.	Aug. 10
	Adv. Aug. 10.	
Aug. 25	Austin, Minn.	Aug. 10

STREETS AND ROADS

Bids Close		See Eng. News-Record
Aug. 12	Quebec	July 27
Aug. 12	Wheeling, W. Va.	July 27
Aug. 14	Ebensburg, Pa.	Aug. 3
Aug. 14	Scalp Level, Pa.	Aug. 3
Aug. 14	Ashville, Pa.	Aug. 3
Aug. 14	Missouri	Aug. 3
Aug. 14	Grandview Heights (Columbus P. O.), O.	Aug. 3
Aug. 14	Visalia, Cal.	Aug. 10
Aug. 14	Carrollton, Ala.	Aug. 10
Aug. 14	Ottumwa, Ia.	Aug. 10
Aug. 14	Mason City, Ia.	Aug. 10
Aug. 14	St. Paul, Minn.	Aug. 10
Aug. 14	Salisbury, N. C.	Aug. 10
Aug. 15	Oklahoma	Aug. 10
Aug. 15	Waseca, Minn.	Aug. 10
Aug. 15	Long Branch, N. J.	Aug. 10
	Adv. Aug. 10.	
Aug. 15	Wellington, Kan.	Aug. 10
	Adv. Aug. 10.	
Aug. 15	St. George, N. Y.	Aug. 10
Aug. 15	New York	Aug. 3
	Adv. Aug. 3 and 10.	
Aug. 15	Woodbury, N. J.	Aug. 3
	Adv. Aug. 3 and 10.	
Aug. 15	Pickens, S. C.	Aug. 3
Aug. 15	Santa Rosa, Cal.	July 27
Aug. 15	Beaumont, Tex.	July 27
Aug. 15	Wadsworth, O.	July 20
Aug. 15	Alabama	July 27
Aug. 15	Knoxville, Tenn.	July 20
Aug. 15	Columbus, O.	Aug. 3
Aug. 15	Maryland	Aug. 3
	Adv. Aug. 3 and 10.	
Aug. 15	Sequin, Tex.	Aug. 3
Aug. 15	Morris, Ill.	Aug. 3
Aug. 15	Cape May, N. J.	Aug. 10
	Adv. Aug. 3 and 10.	
Aug. 15	Charles City, Va.	Aug. 10
Aug 15	Sharon, Pa.	Aug. 10
Aug. 15	Michigan	Aug. 10
Aug. 15	Tahoka, Tex.	Aug. 10
Aug. 16	Verdun, Que.	Aug. 10
Aug. 16	Denver, Col.	Aug. 10
Aug. 16	Nashville, Tenn.	Aug. 3
	Adv. Aug. 3 and 10.	
Aug. 16	Rhode Island	Aug. 3
Aug. 16	Brooklyn, N. Y.	Aug. 10
Aug. 16	New York, N. Y.	Aug. 10
Aug. 17	Clearwater, Fla.	Aug. 10
Aug. 17	Henderson, N. C.	July 27
Aug. 17	Youngsville, Pa.	Aug. 3
Aug. 17	Halletsville, Tex.	Aug. 3
Aug. 17	Upper Nyack, N. Y.	Aug. 10
	Adv. Aug. 3 and 10.	
Aug. 17	Jonesboro, Ark.	Aug. 10
	Adv. Aug. 10.	
Aug. 17	Denver, Col.	Aug. 10
Aug. 18	Waterloo, Wis.	Aug. 10
Aug. 18	Mellen, Wis.	Aug. 10
Aug. 18	Illinois	Aug. 3
Aug. 18	Minnesota	Aug. 10
Aug. 19	Cleveland, O.	Aug. 10
Aug. 19	Rutledge, Kan.	Aug. 10
Aug. 21	California	Aug. 3
Aug. 21	Princeton, N. J.	Aug. 10
	Adv. Aug. 10.	
Aug. 21	Pella, Ia.	Aug. 10
Aug. 22	Orangeburg, S. C.	Aug. 3
Aug. 23	Two Harbors, Minn.	Aug. 3
Aug. 23	Delaware	Aug. 10
	Adv. Aug. 10.	
Aug. 23	Henderson, Ky.	Aug. 10
	Adv. Aug. 10.	
Aug. 23	Akron, O.	Aug. 10
Aug. 24	Charleston, S. C.	Aug. 3
Aug. 28	California	Aug. 10
Aug. 29	El Dorado, Kan.	Aug. 10
Aug. 30	North Carolina	Aug. 10
Aug. 30	North Carolina	Aug. 3
Aug. 30	Little Rock, Ark.	Aug. 10
	Adv. Aug. 10.	
Sept. 5	Washington	Aug. 10
Sept. 19	New Orleans, La.	July 6

WASTE DISPOSAL

Aug. 14	West Allis, Wis.	Aug. 10

BUILDINGS

Bids Close		See Eng. News-Record
Aug. 12	Akron, O.	July 27
Aug. 12	Louisville, O.	July 27
Aug. 14	Cleveland, O.	July 27
Aug. 14	Plymouth, Ind.	Aug. 10
Aug. 14	New York, N. Y.	Aug. 10
Aug. 14	London, Ont.	Aug. 10
Aug. 15	Grandview Heights (Columbus P. O.),	July 20
Aug. 15	Franklinton, N. C.	Aug. 10
Aug. 16	Owen Sound, Ont.	July 27
Aug. 17	Denver, Col.	Aug. 10
Aug. 17	London, Ont.	Aug. 10
Aug. 18	Shaker Heights, O.	Aug. 10
Aug. 18	Madisonville, Ky.	Aug. 10
	Adv. Aug. 3 and 10.	
Aug. 19	Kerman, Cal.	Aug. 10
Aug. 20	Erie, Pa.	July 13
Aug. 21	Oakland, Cal.	Aug. 10
Aug. 21	Plant City, Fla.	Aug. 10
Aug. 21	Oxford, N. C.	Aug. 10
Aug. 22	New York, N. Y.	Aug. 10
Aug. 22	Stateville, Ill.	Aug. 3
Aug. 23	Worcester, Mass.	Aug. 10
Aug. 23	Carlton, Minn.	Aug. 10
Aug. 31	New York, N. Y.	Aug. 3
Sept. 1	Knoxville, Tenn.	July 20
Sept. 5	Smyrna, Del.	Aug. 10
	Adv. Aug. 10.	
Sept. 11	Oakland, Cal.	Aug. 10
Sept. 30	Duluth, Minn.	July 13
Oct. 1	Duluth, Minn.	Aug. 3

FEDERAL GOVERNMENT WORK

Aug. 14	Scow—Duluth, Minn.	July 20
	Adv. July 20 to Aug. 10.	
Aug. 14	Levee Work — Memphis, Tenn.	Aug. 3
	Adv. Aug. 3 and 10.	
Aug. 15	Excavation — Wilmington, Del.	July 20
	Adv. July 20 to Aug. 10.	
Aug. 15	Rock Removal — Providence, R. I.	July 20
	Adv. July 20 to Aug. 10.	
Aug. 15	Dredging—Galveston, Tex.	July 20
	Adv. July 20 to Aug. 10.	
Aug. 15	Electric Pump — St. Louis, Mo.	July 27
Aug. 15	Lighthouse Tender — Wash., D. C.	July 27
Aug. 16	Wire Partition—San Diego, Cal.	July 27
Aug. 16	Remodeling—Wash., D. C.	Aug. 10
Aug. 18	Radial Gates, etc.—Riverton, Wyo.	July 13
Aug. 19	Dredging—New York, N. Y	July 20
	Adv. July 20 to Aug. 10.	
Aug. 21	Catamarans — Portland, Ore.	July 20
	Adv. July 20 to Aug. 10.	
Aug. 21	Dredging—Baltimore, Md.	July 27
	Adv. July 27 to Aug. 10.	
Aug. 22	Post Office—Spanish Fork, Utah	July 27
Aug. 22	Post Office—Fond du Lac, Wis.	July 27
Aug. 23	Retaining Walls — Quantico, Va.	July 27
Aug. 23	Quay Walls, etc.—Pearl Harbor, H. T.	July 20
Aug. 23	Dredging—Norfolk, Va.	July 27
Aug. 25	Extension to Workroom — Ft. Worth, Tex.	Aug. 3
Aug. 25	Office, Storehouse, etc.—Buffalo, N. Y.	Aug. 3
	Adv. Aug. 3 and 10.	
Aug. 28	Remodeling — Raleigh, N. C.	Aug. 3
Aug. 28	Dredging — Providence, R. I.	Aug. 10
Aug. 30	Circulating Loop — Mare Island, Cal.	July 27
Aug. 31	Canal—Klamath Falls, Ore.	July 27
Aug. 31	Dredging — Providence, R. I.	Aug. 10
	Adv. Aug. 10.	
Sept. 1	Sand and Gravel—New Orleans, La.	Aug. 10
	Adv. Aug. 10.	
Sept. 1	Refrigerating Plants—Perryville, Md.	July 20
Sept. 5	Dredging — New York, N. Y.	Aug. 3
	Adv. Aug. 3and 10.	
Sept. 5	Spur-dikes — New Orleans, La.	Aug. 10
	Adv. Aug. 10.	
Sept. 5	Steel Gates — Nashville, Tenn.	Aug. 3
	Adv. Aug. 3 and 10.	
Sept. 5	Dykes, etc.—New Orleans, La.	Aug. 3
	Adv. Aug. 10.	
Sept. 6	Motors, etc.—Yuma, Ariz.	July 27
Sept. 6	Dredging—Phila., Pa.	Aug. 10
	Adv. Aug. 10.	
Sept. 7	Stone—New Orleans, La.	Aug. 10
	Adv. Aug. 10.	

MISCELLANEOUS

Aug. 12	Paving Block — Buffalo, N. Y.	Aug. 3
Aug. 14	Broken Stone, etc.—St. George, N. Y.	Aug. 10
Aug. 14	Reinforcing Rods, etc. — St. Paul, Minn.	Aug. 10
Aug. 15	Lighting System—Warren, O.	Aug. 10
Aug. 15	Hydro-electric Development—Dothan, Ala.	June 29
Aug. 15	Transmission Line, etc.—Hobgood, N. C.	July 27
Aug. 15	Foundation — Minneapolis, Minn.	July 13

Bids Close		See Eng. News-Record
Aug. 15	Repairs, etc. — Albany, N. Y.	Aug. 10
Aug. 16	Refined Asphalt, etc.—Brooklyn, N. Y.	Aug. 10
Aug. 17	Intake Pier, Screens, etc.—Wheeling, W. Va.	Aug. 3
Aug. 21	Lighting System — Chicago Heights, Ill. Adv. Aug. 10.	Aug. 10
Aug. 22	Stone Jetty — Longport, N. J. Adv. Aug. 10.	Aug. 10
Aug. 28	Mechanical Equipment—Sacramento, Cal.	Aug. 3
Sept. 15	Fire Alarm System, etc.—Kansas City, Mo.	
Sept. 16	Strain & Pin Type Insulators—Melbourne, Australia Adv. July 27 to Aug. 10.	July 27

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Dundee—Plans waterworks, incl. storage reservoir, about 4 mi. from here. $15,000. Engineer not selected.

N. Y., Niagara Falls—Plans to enlarge filtration plant. $300,000. D. J. Fort, 251 2nd St., city mgr.

S. C., Laurens—Voted $65,000 bonds for filtration plant.

Ia., Hull—Having plans prepared 14,000 lin.ft. 4 in. c.i. pipe and appurtenances. $20,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

S. D., Salem—Soon takes bids filtration plant. $15,000. Chenoweth & Rettinghouse, 210 Boyce Greely Bldg., Sioux Falls, engrs.

Que., Montreal—Metropolitan Comn. soon takes bids watermains in Montreal North. $160,000.

BIDS DESIRED

Mass., Mansfield—Aug. 25, at office of E. E. Lothrop, town mgr., Town Hall, laying 10,100 ft. 6 and 8 in. pipe, in East Mansfield, and 8,700 ft. c.i. pipe in West Mansfield; adv. this issue.

N. C., Charlotte—Aug. 29, storage and settling basins, chemical house with laboratories, mixing house, filter building and pump reservoir, complete plant for handling water supply, 10,000,000 gal. per day. $400,000. W. M. Piatt, Durham, engr.

O., Columbus—See "Streets and Roads."

O., Sebring—Aug. 18, by J. G. Eardley, clk., water purification plant. Burgess & Niple, 223 East Broad St., Columbus, engrs.; adv. this issue.

Wis., Stevens Point—Aug. 15, for 30 in. well 32 ft. deep, constructing pump station, furnishing and installing one 1,000 gal. and one 1,500 gal. direct connected centrifugal pumps. $20,000. C. L. Pittsbury Co., 1200 2nd Ave., S., Minneapolis, Minn., engrs.

S. D., Watertown—Aug. 14, by City Auditor, extending watermains incl., 5,000 lin.ft. 4 in. c.i. pipe, 3,870 lin.ft. 6 in. c.i. pipe, 1,970 lin.ft. 8 in. c.i. pipe, also 1,540 lin.ft. 10 in. vitr. sewer pipe. $20,000. W. T. Cochrane, city engr.

BIDS RECEIVED

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas and Electricity, Municipal Bldg., opened bids Aug. 2, furnishing, delivering and laying mains and appurtenances in Baychester and Morris Park Aves., Boston Rd., East 177th, East 222nd and East 241st Sts., from J. O'Leary, 929 Pease St., Pelham Manor, $91,857; Knight & Demicco, Inc., 1448 East Tremont Ave., $97,089; Carmine & De Blasio, $97,334.

CONTRACTS AWARDED

Ill., Maywood—Drilling artesian well, to S. B. Geiger, 330-335 Old Colony Bldg., Chicago, $25,662. Noted June 22.

Cal., Dinuba—Erecting steel tank and tower for waterworks system, to Pittsburg-Des Moines Steel Co., Rialto Bldg., San Francisco, $13,425.

Cal., South San Francisco (San Francisco P. O.)—South San Francisco Water Co., concrete tank reservoir, 200,000 gal. capacity, and 1 mi. c.i. pipe, to Macdonald & Kahn, 130 Montgomery St., San Francisco, $40,000.

Sewers

PROPOSED WORK

N. Y., Gloversville—Rejected bids for 4,280 ft. sewers in Newman, Lawrence, Meadow and East State Sts. Noted Aug. 3.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., rejected bids sewers in Brown Pl. from Grand St. to Whitlock Ave., and Whitlock Ave. from Brown Pl. to Bittman St., etc. Will readvertise. Noted Aug. 3.

N. Y., Rochester — See "Streets and Roads."

Pa., Mercer—Soon receives bids 1.5 mi. interceptor sewer. $25,000.

W. Va., Clarksburg—See "Streets and Roads."

Fla., Umatilla—Aug. 15, to vote on $25,000 bonds for sewers. A. Armitage, bond trustee.

O., Bellaire—Making surveys sewers in business section between Crescent and 34th Sts., 2 main trunk sewers 24 in. each and 6 in. lateral sewers in alleys. H. C. Althar, city engr.

O., Marion—Takes bids about Aug. 15, sewage disposal plant and main outfall sewer. $550,000.

Mich., Detroit—Plans 6,539 ft. Ashland Ave. Sewer, Sect. 1 from Fox Creek to Waverly Ave., 13 ft. 6 in. diam.; 5,874 ft. 13 ft. 6 in. and 120 f t.7 ft. and 8 ft. 6 in. diam. in Ashland Ave. Sewer, Sect. 2 in Ashland Ave. from Warren Ave. to Alter Rd.; 5,583 ft. 4-11 ft. diam. and 2,239 ft. 9 ft. 6 in. diam., Clark Ave. Sewer, Sect. 5, in Lovett, McGraw, Tireman, Hartford and Scotten Aves.; 2,961 ft. 5 ft. 3 in. to 5 ft. 9 in. diam. Bates St. Sewer in Euclid Ave. from Brush St. to Guilloz Ave.; 2,662 ft. 5 ft. to 5 ft. 3 in. Bates St. Sewer in Holbrook Ave. Arm in Holbrook Ave. from Brush to Greeley Aves.; 543 ft. 3 ft. to 4 ft. 6 in. diam. Bates St. Sewer, Montcalm Ave. Arm in Montcalm Ave. from John R to Brush Sts. All above brick or concrete. J. W. Reid, city engr.

Mich., Ford—Having plans prepared sewer extensions in various streets, 10-30 in. vitr. crock pipe. $35,000. M. L. Brown & Son, Capitol Bldg., Detroit, engrs.

Mich., Lincoln Park (Wyandotte P. O.)—Plans prepared 4,240 ft. Sect. 2 trunk sewer in Arlington and Fort Sts., incl. 24, 30 and 33 in. segment block and vitr. crock; 3,004 ft. Sect. 3 in Garfield Ave., Fort St. and Lincoln Blvd., 18, 20 and 22 in. pipe; 3.480 ft. Sect. 4 in. Fort St. and Chandler Ave., 12, 15 and 22 in. crock, also concrete sewage pumping station, three units one 500 gal., one 1,500 gal. and one 3,000 gal. per minute. R. A. Murdoch, 603 Free Press Bldg., Detroit, engr.

Wis., West Milwaukee (Milwaukee P. O.)—Making plans and specifications sanitary sewers in various streets. $30,00 bond issue voted. Parsons & Orbert, 216 West Water St., Milwaukee, engrs.

Cal., Gilroy—Plan election to vote on bonds for sewage disposal plant. C. E. Sloan Co., Santa Fe Bldg., San Francisco, engrs.

Cal., San Mateo — City had plans prepared 1 mi. 12-18 in. sewers, incl. automatic lift for Pacific City Amusement Park. $25,000. G. S. Whitehead, city engr. Noted May 11.

Cal., Turlock—Having plans prepared 2 mi. 24 in. concrete pipe drains. $25,000. H. Hall, city engr.

BIDS DESIRED

N. Y., Colonie (Watervliet P. O.)—Aug. 20, by P. Best, clk., Stop 30½ Troy-Schenectady Rd., sewer extension in 1st St. westerly from 8th Ave. to lands of Delaware & Hudson R.R., known as Schuyler Park Sewer Dist.

N. J., Long Branch—Aug. 15, by Bd. Comrs. extending sewer and building pumping station. J. W. Seaman, city engr.; adv. this issue.

N. J., Newark—Aug. 29, by Passaic Valley Sewerage Comn., 128 Market St., Saybrook Pl. Local Sewer Connection. J. R. Van Duyne, ch. engr.

O., Columbus—See "Streets and Roads."

Mich., Trenton—Aug. 14, by L. Frebes, village clk., 8,400 ft. of 15-36 in. main trunk sewer and 260 ft. submerged corrugated iron pipe outfall sewer. Hoad, Decker & Drury, Ann Arbor, engrs.

Wis., Milwaukee—Aug. 25, by Metropolitan Sewerage Comn., 508 Market St., extending intercepting sewerage system to Shorewood and Whitefish Bay. J. H. Fowles, secy.; adv. this issue.

Wis., Waterloo—See "Streets and Roads."

Minn., Alexandria—Aug. 14, by city, sewage disposal plant. Former bids rejected. H. S. Campbell, clk. C. H. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs. Noted July 27.

S. D., Watertown—See "Waterworks."

Tex., Dallas—E. L. Douglass, mayor, taking bids chlorinator, disposal plant and 6 flush tanks.

Cal., Redwood City—Aug. 21, by E. M. Nash, clk. San Mateo Co., sewage disposal system at San Mateo Co. Hospital. W. H. Toepke, 742 Market St., San Francisco, engr.

Que., Montreal—Aug. 16, for 2,250 ft. sewer in Bernard Blvd. from Souligny to Marseilles Sts., and 937 ft. from Notre Dame to Du Buission Sts., 562 ft. Taillon St. from Notre Dame to Du Buission Sts. and 1,312 ft. from Souligny to Marseilles Sts., 3,000 ft. Paul Pan St. from Notre Dame to Marseilles Sts., and 562 ft. from Bellevue to Notre Dame Sts., 750 ft. Des Marteany St. from Notre Dame to Du Bussion Sts., and 2,250 ft. from Souligny to Marseilles Sts., 937 ft. Souligny St. from Bernard to Taillon Sts., all 2 x 3 brick. F. V. Dowd, asst. supt. sewer dept.

BIDS RECEIVED

Cal., Stockton—Outfall sanitary sewers for disposal plant, 4,518 ft. 27 in. and 12 ft. 8 in. pre-cast concrete pipe, etc., from Schultz Constr. Co., 46 Kearny St., San Francisco, $25,486; Heafey-Moore & McNair, 2030 High St., Oakland, $26,316; Frederickson & Shannon, Cory Bldg., Stockton, $29,705.

CONTRACTS AWARDED

Conn., Bridgeport—Sewer Comn., storm, sanitary and combined type sewers in Park, Essex, Horace, Bradley and Kent Sts., Ridge and Sage Aves., to Bridgeport Constr. Co., 983 Broad St., $30,092; in Harvard, 5th, Hope, Monroe, Clarkson, Dixon, Kelsey, Thorne, Willow and Hewitt Sts., Nash and Church Lanes, Garden Terrace, Davis and Jewett Aves., to Pierce Mfg. Co., 785 Housatonic Ave., $21,175. Noted July 20.

N. Y., Brooklyn—E. Riegelmann, boro. pres., Boro Hall, following sewers (1) Rochester Ave., (2) Ashford St., (3) Van Sicklen St., (4) Ave. Q. (5) 57th St., (6) Union St., (7) East 28th St., (8) Nostrand Ave., to F. Frey, 818 Ocean Parkway, (1) $23,150, (8) $2,006; Murphy Bros., 262 Bay 43rd St., (2) $6,570; J. J. Guinan Contg. Co., 2314 Gravesend Ave., (3) $3,761; Nazzarro & Querriero, 6712 11th Ave., New York, (4) $3,749, (5) $2,326, (6) $2,385, (7) $2,024. Noted Aug. 2.

N. Y., Mt. Kisco—N. J. Hayes, comr. Water Supply, Gas and Electricity, Municipal Bldg., New York, (1) resanding existing filter beds and (2) constructing new filter beds at Mt. Kisco sewage disposal plant, near here, Westchester Co., to Carroll Contg. Co., 103 Park Ave., New York, (1) $38,426, (2) $42,987. Noted July 27.

N. Y., New York—J. Miller, pres. Manhattan Boro., sewer on easterly side of Riverside Dr., from point about 141 ft. south of Plaza Lafayette (West 181st St.), etc., to M. Del Balso, University Ave. and 195th St., $11,842. Noted July 27.

N. Y., New York—See "Streets and Roads."

Pa., Erie—See "Streets and Roads."

Fla., Miami Beach—Vitr. clay sanitary and storm sewers, storage tank, 2 pumps, etc., to J. J. Quinn Co., Miami, $53,722. Noted July 13.

Fla., Miami—Sanitary sewers to Deer & Co., Miami, $150,000. Noted July 13.

Ky., Louisville—Speed Ave. sewer and drain, to H. Bickel Co., 443 Garden St., $64,470; 44th St. and Parker Ave. sewers, to J. H. Cahill, 1540 9th St., $27,999. Noted June 8.

Ky., Louisville—Comrs. of Sewerage, constructing Bardstown Rd. Dist. Trunk Sewer, to H. Bickel Co., 443 Garden St., $111,093. Noted July 13.

Mich., Detroit—To W. Blanck & Co., 823 Ford Bldg., Lateral Sewer 3515, in blocks bounded by Hawthorne, Russell, Lantz Aves. Seven Mile Rd., $9,945, 3673-A, bounded by Seven Mile Rd., Dequindre, Goddard, Nevada Aves., $36,561, 3678—bounded by Six Mile Rd., Arlington, MacKay, Nevada Aves., $10,490, 3683—bounded by Seven Mile Rd., Fleming, Conant, Emery Sts., $14,471, 3691—bounded by Seven Mile Rd., Dequindre, Fleming, Emery Sts., $11,892.

To Lennane & McIlvenna, 1205 Book Bldg., 3672—bounded by Grover, Chalmers, Houston, Young Sts., $15,500, 3685 — bounded by west of Nelson, Chalmers, Jane, Loretto Sts., $8,000, 3687—bounded by Wyoming, alley east of Falcon, Amos and Plymouth Sts., $3,000, 3693—bounded by Cherrylawn, Northlawn, Fullerton, Davidson Sts., $5,900, 3698—bounded by Gratiot, Nelson, Loretto and Filbert Sts., $6,900.

To Detroit Drainage Constr. Co., Penobscot Bldg., 3676—bounded by Conant, Ryan, Watko, Nevada Sts., $15,775.

Sewers (Continued)

To Coleman & Harding, Kresge Bldg., 3684—bounded by Pinehurst, Mendota, Grand River, Fullerton Sts., $1,234, 3688—bounded by Devan, Findlay, Minden Sts., $749, 3689—bounded by Murat, 550 ft. east of Murat, alley south of Knodell St., $1,346, 3692—bounded by French Rd., Gilbo, Elgin, Dubay Sts., $4,574, 3694—bounded by Chalmers, Seymour and Springarden Sts., $544, 3667—bounded by VanDyke, east of VanDyke, Jordan, Lynch Sts., $2,995.

To Western Constr. Co., 1208 Ford Bldg., 3690—bounded by Six Mile Rd., Windemere, Parkside, Grove Aves., $2,876.

Mich., River Rouge—R. Peters, city clk., 7,000 ft. trunk sewer in Jefferson and Stoner Aves., to Hannen & Co., Mankato, Minn., and G. B. Hoag, 806 Collingwood Ave., Detroit. This corrects report in June 15 issue.

Wis., Milwaukee — Sanitary and storm sewers in (1) Albert Pl. from Green Bay to Louis Aves., incl., 654 ft. 8-12 in. pipe, (2) Concordia Ave. from 21st to 22nd Sts., 228 ft. 8-12 in. pipe, (3) 44th St. from Locust to Chambers Sts., 66 ft. 8 in. pipe, (4) 45th St. from Locust to Chambers Sts., 1,407 ft. 8-12 in. pipe, (5) 48th St. from Chambers St. to point 120 ft. north, 142 ft. 8 in. pipe, (6) 14th Ave. from Arthur Ave. to point 260 ft. south, 273 ft. of 15 in. pipe, (7) Franklin St. from West 24th to 26th Sts., 435 ft. 8-12 in. pipe, (8) Jefferson St. from Green Bay Ave. to Port Washington Rd., 320 ft. 8 in. pipe, (9) Melvina St. from 15th St. to St. Louis Ave., 346 ft. 8-12 in. pipe, (10) Montana Ave. from Pine to Lenox Sts., 223 ft. 8-12 in. pipe, (11) Thomas St. from Farwell to Cramer Sts., 1,265 ft. 18-30 in. pipe, (12) Vienna Ave. from 3rd St. to Port Washington Rd., 387 ft. 8-12 in. pipe, (13) Weil St. from Keefe Ave. to Brattle St., 588 ft. 12-15 in. pipe, to A. Kehrein, 918 24th St., (1) $1,503, (3) $1,548, (4) $2,990, (7) $1,275, (8) $2,257, (10) $1,052, (13) $1,895; Wenzel & Henoch, 498 27th St., (2) $818; T. Szukalski, 1089 American Ave., (5) $702; G. E. Zimmerman, 3402 Grand Ave., (6) $1,415, (11) $37,292, (12) $1,506; E. O'Donnell, 1218 Clybourn St., (9) $834.

Ia., Mason City—For 7,926 lin.ft. 8 in., 660 ft. 10 in. and 2,372 ft. 15 in. tile sewer, to Royer-Craig Constr. Co., St. Ansgar, $23,431.

Ia., Oelwein—For 2.5 mi. sewer to Sieg Constr. Co., Waterloo, 6 in. at $0.67, 8 in. $0.81, 10 in. $0.98, 12 in. $1.35, manholes $75, deep house connections $3. Noted June 8.

Cal., Modesto—Sewers in Dist. 1, to Frederickson & Shannon, Cory Bldg., Fresno, $63,215. Noted July 6.

Waste Disposal

BIDS DESIRED

Wis., West Allis—Aug. 14, by Bd. Pub. Wks., 15 ton garbage incinerator, complete with building, to be of sufficient size to permit an additional 15 ton unit when required.

Bridges

PROPOSED WORK

North Carolina — State Hy. Dept., Raleigh, rejected bids opened July 25, rein.-con. bridges and culverts on State Project 131, Gates Co. $27,000. Will readvertise at once. C. M. Upham, state highway engr. Noted Aug. 3.

Ohio—See "Streets and Roads."

Cal., Babgy—Mariposa Co. (Mariposa), having plans prepared 275 ft. steel bridge, 16 ft., over Merced River, incl. 180 ft. span, concrete piers. A. Cowell, 639 19th St., Merced, engr.

Ont., Walkerville—Plans to widen bridge and build new approaches on both sides, Sandwich St. $30,000. C. Forrester, Grand Trunk Ry. office, London, engr.

BIDS DESIRED

Mass., Attelboro—Aug. 24, by Dept. Pub. Wks., constructing 2 concrete bridges, one on Bank St. over Bungay River, other on Water St. over Ten Mile River. J. O. Taber, Jr., supt.; adv. this issue.

Pa., Phila.—Aug. 16, by F. H. Caven, dir. pub. wks., 95.6 ft. steel girder bridge encased in concrete, 50 ft., Front St. and Phila. & Reading R.R. $175,000. S. A. Noyes, city engr.

Ga., Athens—Aug. 22, by Bd. Comnrs. of Roads and Revenues, Clarke Co., steel bridge on River St. T. Wright, clk.; adv. this issue.

Fla., Miami—Aug. 22 (change of date), bridge over Miami River, at Southwest 2nd Ave. F. H. Wharton, city mgr. Harrington, Howard & Ash, Orear-Leslie Bldg., Kansas City, Mo., engrs. Noted July 27.

Mich., Mottville—Aug. 21, by State Hy. Dept., Lansing, Bridge 781102, 270 ft. long, 20 ft. roadway, three 90 ft. concrete girders, here.

Tex., Houston—Sept. 5, at office City Secretary, bridge across Buffalo Bayou at Sabine St. O. F. Holcombe, mayor.

Col., Denver—Aug. 18, by Dept. Impvts. and Parks, 122 ft. rein.-con. bridge 63 ft., on Federal Blvd. and West 13th Ave. $35,000. A. K. Vickery, City Hall, engr.

BIDS RECEIVED

Delaware — State Hy. Dept., Dover, Smyrna Bridges, Contr. 25-A, (a) 500 cu. yd. excav., (b) 2,000 cu.yd. borrow, (c) 560 cu.yd. Class A concrete, (d) 150 cu.yd. Class B concrete, (e) 45,000 lb. reinforcement, (f) 120 lin.ft. test piles, (g) 1,850 lin.ft. concrete piles, (h) 4,000 ft. b.m. sheet piling, from Baton Constr. Co., Phila., (a) $2.50, (b) $1, (c) $25, (d) $22, (e) $0.05, (f) $2, (g) $4.20, (h) $125, total $31,310; S. S. Jones Contg. Corp., Grand Central Terminal, New York, (a) $3, (b) $1, (c) $27.50, (d) $23, (e) $0.07, (f) $6, (g) $7, (h) $150, total $39,770; L. J. Sieling, Red Bank, N. J., (a) $15, (b) $1, (c) $27, (d) $25, (e) $0.07, (f) $2, (g) $6, (h) $250, total 43,860. Noted July 13.

Delaware—See "Streets and Roads."

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids July 31, bridges in following counties:

Ashtabula Co., Sect. "R" Cleveland-Buffalo Rd., rein.-con. viaduct, 1,115.2 ft. long, from Pittsburgh Constr. Co., Diamond Bldg., Pittsburgh, Pa., $348,034; Koss Constr. Co., 2818 5th St., Des Moines, Ia., $355,732; C. Shutrump Co., Youngstown, $360,472.

Clark Co., Sect. "N" National Rd., repairing bridge, from C. J. Fox, Brookville, $2,286.

Union Co., Sect. "H" Marysville-Kenton Rd., concrete girder, from G. A. Lofgren, Marysville, $3,756.

Holmes Co., Sect. "B-1" Mansfield-Millersburg Rd., concrete beam bridge, from Shrimplin & Lewis, Killbuck, $5,772.

Knox Co., Sect. "A" Columbus-Wooster Rd., concrete girder, from Logsten & Breckler, Danville, $4,308.

Knoxville Co., Sect. "E" Columbus-Wooster Rd., concrete girder, Logsten & Breckler, Danville, $3,857.

Muskingum Co., Sect. "R" National Rd., rein.-concrete bridge and approaches, from Adams Co., Muskingum Ave., Zanesville, $9,684.

Hancock Co., Sect. "F" Lima-Sandusky Rd., standard concrete girder and abutments, from P. Alge, Arlington, $3,044; Orville Cramer, Findlay, $3,225. Noted July 20.

Minnesota—State Hy. Dept., St. Paul, opened bids Aug. 1, Bridge 3252 on State Project 34-24, steel, one lift span and three 60 ft. approaches, over Mississippi River, Itasca Co., from Minneapolis Bridge Co., Metropolitan Life Bldg., Minneapolis, $45,445, Great Northern Bridge Co., 225 Kasota Bldg., Minneapolis, $48,335. Noted Dec. 16, under "Grand Rapids."

CONTRACTS AWARDED

Maine—State Hy. Dept., Augusta, to Frissell Eng. Co., Gardner, Mass., concrete arch, concrete foundation, over Sunkhaze Stream, in Milford, $14,709, over Costigan Brook, Milford, $10,572; to Smith & Tweedle, Westfield, concrete arch, concrete foundation, over Salmon Stream, Medway, $18,138, Kings Grove Bridge, concrete, Mars Hill, $6,833; foundations of latter, to McCabe & Giovanni, 24 East Concord St., Boston, $1,500; to United Constr. Co., Albany, N. Y., steel superstructure over Dead River, Eustis, $6,992, steel superstructure of Stinchfield Bridge, Leeds, $17,525; stone foundations for latter, to Sanders Eng. Co., Portland, $20,444; to Hunt & Palmer, Island Falls; concrete and stone bridge over Mill Brook, New Limerick, $5,137; Titcomb Bridge, concrete, New Limerick, $8,611; to Roach Bros., Fort Fairfield, concrete and stone bridge over East Branch, Smyrna, $12,384; to T. I. Ellis, 86 Weybosset St., Providence, R. I., Mapleton Bridge, steel, Mapleton, $34,856.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., masonry piers for bridge over Hook Creek Canal on Rockaway Blvd., to P. T. Cox Contg. Co., 154 Nassau St., New York, $38,880.

N. Y., Long Island City—G. A. Whalen, comr. Plant & Structures, Municipal Bldg., New York, reconstructing center pier fender of Meeker Ave. Bridge over Newtown Creek, to Shelbourne & Blake Co., 74 Bway., New York, $19,407. Noted July 20.

N. Y., Long Island City—G. A. Whalen, comr. Plant & Structures, Municipal Bldg., New York, piers for bridge over Beach Channel, Jamaica Bay Blvd., Boro of Queens, to P. T. Cox Contg. Co., 154 Nassau St., New York, $268,900. Noted July 6.

Ohio—See "Streets and Roads."

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, for following bridges: (1) 1 rein.-con. and 1 substructure for steel span, Route 3, Sect. 28-B, McDonough Co., (2) 1 superstructure for steel, Route 3, Sect 38-C, McDonough Co., (3) 5 concrete, Route 3, Sect. 56-B, Greene Co., (4) 1 superstructure for steel, Route 3, Sect. 56-C, Greene Co., (5) 1 concrete Route 11, Sect. L-2, Effingham Co., (6) substructure for steel Route 11, Sect. H-1, Cumberland Co., (7) superstructure for steel Route 11, Sect. H-2, Cumberland Co., (8) 4 concrete, Route 14, Sect. 9-B, Hamilton Co., (9) substructure for steel bridge Project 6, Sect. K-1, Mason-Menard Co., (10) steel superstructure Project 6, Sect. K-2, Mason-Menard Co., (11) 5 concrete, Project 26, Sect. 17-B, McLean Co., (12) 3 concrete Project 34, Sect. 26-B, Clinton Co., (13) 2 concrete Project 34, Sect. 27-B, Clinton Co., (14) substructure for steel, Project 37, Sect. 22-B, Clinton Co., (15) steel superstructure, Project 37, Sect. 22-C, Clinton Co., (16) substructure for steel, Project 39, Sect. 1-B, Carroll Co., (17) superstructure for steel, Project 39, Sect. 1-C, Carroll Co., to D. Alford, Cuba, (1) $12,169; Mississippi Valley Structural Steel Co., Decatur, (2) $6,650, (4) $10,284, (7) $7,518; Herrick Constr. Co., Carlinville, (3) $38,730; W. Behrendt & Co., St. Peter, (5) $12,184, (8) $8,782; W. H. Shons, 109 Spring St., Freeport, (6) $13,128, (12) $12,671; Ferguson Constr. Co., Rockford, (9) $82,982; Ililnois Steel Bridge Co., Jacksonville, (10) $14,773, (15) $12,951; E. H. Riebe, Lincoln, (11) $23,266; Zimmerley Bridge Co., Paris, (13) $26,666, (14) $59,312; B. Harrison, Decatur, (16) $2,615; Rochester Bridge Co., Rochester, Ind., (17) $8,294. Noted Aug. 3.

California—State Hy. Dept., Sacramento, 200 ft. steel bridge, concrete floors and piers, over Bear River, Placer and Nevada Counties, to Security Bridge Co., Odgen, Utah, two 100 ft. steel spans erected in place and painted complete, except rein.-con. floor $18,990, 205 cu.yd. Class A Portland cement concrete in place in pier, abutments, wing walls and floor of steel spans $16.40, 470 cu.yd. Class C Portland cement concrete in place in pier, abutments and wing walls $12.55, total $28,260. Noted July 13.

Cal., San Francisco—City and San Francisco Co., constructing bridge at Six Bit Gulch on Hetch Hetchy R. R., furnishing, delivering and erecting 9 single track, deck plate girder bridge spans, each 65 ft. long with appurtenances, 470,000 lb. structural steel, from Union Constr. Co., Balfour Bldg., $26,132, J. G. Williams Constr. Co., 519 California St., $27,260, Dyer Bros., 17th and Kansas Sts., $27,965; constructing piers and abutments, 500 cu. yd. earth and 200 cu. yd. rock excav., 2,200 cu. yd. concrete, from Schultz Constr. Co., 46 Kearney St., $32,940, A. W. Kitchen & Co., 110 Market St., $40,300, M. J. Lyons, 512 Mission St., $40,510; grading roadway for relocation of Hetch Hetchy R. R. at Six Bit Gulch, 4,000 cu. yd. rock, 1,600 cu. yd. loose rock and 2,000 cu. yd. common excav., etc., from M. J. Lyons, 512 Mission St., $7,900, F. Bryant, San Jose, $9,070, General Constr. Co., Sharon Bldg., $9,895. Contracts awarded to lowest bidders. Noted June 29, under Hetch Hetchy.

Dams

PROPOSED WORK

Mich., Menominee—Wisconsin Pub. Service Corp., 559 Marshall St., Milwaukee, plans to improve rein.-con. dam on Menominee River, and construct additional flood capacity in dam in form of tainter gates. $25,000. Mead & Seastone, State Journal Blk., Madison, engrs.

CONTRACTS AWARDED

N. H., Bennington—Monadnock Paper Mills, rein.-con. dam, to Aberthaw Constr. Co., 27 School St., Boston, Mass., $50,000.

Railways

PROPOSED WORK

California—Union Pacific Ry., 610 South Main St., Los Angeles, plan shops and classification yards on 516 acre site adjoining south city boundary of Los Angeles. Work will be supervised from local office. $29,000,000. M. De Brabont, local mgr.

Ontario—Kitchener Street Ry. Co., 67 Joseph St., Kitchener, plans additional trackage, new car barns and three new cars. $70,000. E. Fries, 67 Joseph St., Kitchener, engr. Prices wanted on materials.

CONTRACTS AWARDED

New York—See "Miscellaneous" under New York.

Excavation and Dredging

PROPOSED WORK

Cal., Manteca—South San Joaquin Irrigation Dist., election Aug. 22, to vote on $150,000 bonds for ditch lining and drainage work.

BIDS DESIRED

Conn., Norwalk—Aug. 21, by C. L. Barton, mayor, dredging about 250,000 cu.yd. in Norwalk Harbor; adv. this issue.

Ill., Naples—Aug. 21, by Comrs. Valley City Drainage and Levee Dist., placing 20,000 cu.yd. earth on levee. Randolph-Perkins Co., Naples, or 1210 1st Natl. Bank Bldg., Chicago, engrs.; adv. this issue.

Wis., Jefferson—Aug. 19, by Jefferson Co. Farm Drainage Bd., 6,410 lin.ft. 15-20 in. tile and 7,090 lin.ft. 6-14 in. tile in Farm Drain 2. Private plans.

Minn., Austin—Aug. 25, by O. J. Simmons, aud. Mower Co., Judicial Ditch 5, Sect. O-13, 700 lin.ft. open main ditch, 78,054 cu.yd. excav., 17 floor water inlets, 1 weir and spillway containing 18 cu.yd. concrete, 1 bulkhead; Sect. T-133, 498 lin.ft. of 6-34 in. tile, clay or cement; Sect. L, trenching, laying, backfilling, constructing seventy-nine 24 in. intakes and 2 equalizing wells. G. Cox, Waseca, engr.

Wash., Montesano—Aug. 14, by Comrs. Grays Harbor Co., constructing 28 mi. ditch, 2½ mi. dike, outlets and 100 acres clearing, 150,000 cu.yd. dry earth excav., Diking Dist. 4, Grays Harbor Co.

Ont., Port Frank—Aug. 20, by N. Sitter and O. Walden comrs. Bosanquet, Stephen, West Williams and McGillivray Twps., Lambton Co., dredging and constructing drainage system to reclaim swamp lands, incl. concrete and tile work. $75,000. G. A. McCubbin, 135 King St., Chatham, engr.

BIDS RECEIVED

Ind., Boonville—Warrick Co., 77,650 ft. Cypress Creek Dredge Drain, 1,374,025 cu. yd. earth excav., from R. H. McWilliams, Exch. Bldg., Memphis, Tenn., $123,272. Engrs. est. $150,000. Noted May 18.

Ind., Laporte—For 50 mi. Tuesburg Ditch in Laporte, Pulaski, St. Joseph, Starke, Elkhart, Marshall and Kosciusko Counties, 3,152,000 cu.yd. earth excav., from McWilliams Dredging Co., 332 South Michigan Ave., Chicago, $0.097 per cu.yd.; H. W. Nelson Co., 2088 LaSalle St., Chicago, $0.0971 Pollard & Campbell, 348 Brandeis Theatre Bldg., Omaha, Neb., $0.1095.

Cal., Merced—Merced Irrigation Dist., constructing Le Grande Lake-Yosemite Canal, from C. R. Adams, Biggs; S. D. Miller, Manteca; Blumenkranz & Vernon, Stockton; C. Thompson, Fresno; J. Phillips, Oakland; Isbell Constr. Co., Fresno; Hewitt & Felch, La Habra; Ross Constr. Co., Forum Bldg., Sacramento; G. Pollock Co., Forum Bldg., Sacramento; P. L. Burr, 512 Mission St., San Francisco; Utah Constr. Co., Phelan Bldg., San Francisco; D. A. Foley & Sons, Aitken, Minn. Unit bids on this project will appear in Aug. 17 issue. Noted July 20.

CONTRACTS AWARDED

N. Y., Brooklyn—C. L. Cadle, supt. Pub. Wks., Albany, dredging portion of Henry St. Slip at Gowanus Bay, here, Terminal Contr. 90, to Taylor Dredging Co., Communipaw Ave., Jersey City, N. J., $19,085. Noted Aug. 3.

Ia., Pocahontas—Pocahontas Co., D. D. 114, Sects. 1 and 2, 231,333 cu.yd. excav., to L. Davis, Mason City, $0.084 per cu.yd. excav., $0.01 per cu.yd. leveling banks; D. D. 59, 11,100 cu.yd. excav., to Rude & Wold, Pomeroy, $0.22. Noted June 22.

Cal., Oroville—Excavating 80,000 yd. in main canal of Recl. Dist. 833, to G. Pollock Co., Forum Bldg., Sacramento, $0.35 per yd.

Streets and Roads

PROPOSED WORK

N. Y., Jamestown — Bd. Estimate and Revenue, will pave curb and gutter 2,475 ft. Thayer St., 220 ft. York St., 254 ft. Fulton St., 226 ft. Euclid Ave., 451 Cowden Pl., 442 ft. Grant St., 550 ft. 8th St., 1,206 ft. Stowe St., 1,478 ft. Cook Ave., 1,535 ft. Hall Ave., 1,497 ft. Park St., 1,903 ft. West 6th St., 2,258 ft. Water St., brick on 5 in. concrete, concrete curb and gutter. Work will be done by day labor. L. Bergman, city engr.

N. Y., Rochester—Bd. Contract and Supply soon receives bids asphalt paving Thurston Rd. $25,600, Cummings St. $42,200, Probert St. $12,200, Hillside Ave. $16,000, Zorn St. $11,000, Merchants Rd. $9,200; extending Mazda Terrace $10,000, Weyrich St. $4,000; sewers, grading and walks on Maxwell St. $14,500; sewers Woodbine Ave., $11,000; walks and grading Goodwill St. $2,900; asphalt surface treatment on Tremont St. $3,250, Lake View Park $3,000; opening La Grange Ave. $5,000. C. A. Poole, city engr.

N. Y., Mayville—Chautauqua Co., State and Federal Government plan paving 6 mi. Frewsburg-Fentonville Rd., 16 ft., brick or similar material on concrete, $170,468. S. E. Fitch, Westfield, co. engr.

N. Y., Niagara Falls—Plans paving La Salle Ave. from 24th to Sugar Sts., granite or wood block $43,350, asphalt or brick $40,700, bitulithic or concrete $35,400. W. B. Bennett, Convention Hall, city engr.

W. Va., Clarksburg—Plans concrete paving 1,525 ft. North, Peck, Locust and Faris Sts., 18 ft.; constructing 600 ft. 20 in. vitr. pipe storm sewers in North St., $25,000 and $3,192 respectively. T. S. Lang, city engr.

W. Va., Moundsville — Liberty Dist., Marshall Co., election Aug. 21, to vote on $200,000 bonds for road work. A. Purdy, Moundsville, engr.

W. Va., Ripley—Jackson Co. election Aug. 26, to vote on $150,000 bonds to build roads in Ravenswood Dist. A. W. Paine, Ripley, engr.

North Carolina — State Hy. Dept., Raleigh, rejected bids opened July 25, clearing, grading, topsoiling and corduroy 13.5 mi. State Project 131, Gates Co. $100,000. Will readvertise. C. M. Upham, state highway engr. Noted Aug. 3.

N. C., Durham—New Hope Realty Co. plans grading various streets, draining large park, 1½ mi. concrete street paving, etc. $100,000. J. D. Spinks, Winston-Salem, engr.

N. C., Goldsboro—Plans extending and paving Ashe St. from George to Virginia Sts., and from Herman St. to city limits. $30,000. Contract will probably be let to Union Paving Co., Kinston.

S. C., Laurens—Voted $40,000 bonds for improving and extending various streets.

Fla., Marianna—Plan grading and paving Cambellton Rd., Jackson and Caledonia Sts. $40,000. Engineer not selected.

Fla., Umatilla — Aug. 15, to vote on $37,000 bonds improving various streets. A. Armitage, bond trustee.

Tenn., Knoxville—Knox Co. making plans grading, surfacing, etc., 2.97 mi. Kingstons Pike from city limits west, 18 ft., rock asphalt. $100,000. D. Z. McComb, Nashville, engr.

Ohio — Dept. of Highways and Pub. Wks., Columbus, received no bids July 31, grading, bridging and paving with rein.-con. 1.42 mi. Sect. "K" Columbus-Millersburg Rd., Knox and Licking Counties; grading, bridging and paving with brick or bituminous macadam 0.984 mi. Sect. "L-1" Bucyrus-Upper Sandusky Rd., Wyandot Co.; rein.-con. bridge over Sugar Creek, Sect. "E", Logan-Athens Rd., Athens Co. Noted July 20.

Ohio—Dept. Highway and Pub. Wks., Columbus, cancelled bids which were to be opened July 31 for excavating and paving with brick 3.355 mi. Sect. "O" Wooster-Mansfield Rd., Wayne Co.; grading and bridging 1.187 mi. Sect. "C" Stryker-Evansport Rd., Williams Co.; grading and paving with bituminous macadam 1.549 mi. Sect. "B" Perrysburg-Fosteria Rd., Wood Co.; grading and bridging 2.58 mi. Sect. "D" Stryker-Evansport Rd., Williams Co., constructing 11 ft. bridge Sect. "P" Milford-Hillsboro Rd., Brown Co. Noted July 20.

Ind., Ft. Wayne—Allen Co. plans grading and gravel surfacing 2.67 mi. Klopfenstein Rd., and 2.17 mi. Ruhl Rd., both 18 ft. $26,000 and $25,600 respectively. A. W. Grosevenor, Court House, engr.

Ind., South Bend—St. Joseph Co. plans paving 20,075 ft. C. A. Carlisle Rd., 16 ft., 35,667 sq.yd. concrete on concrete. $92,000. P. R. Gillin, Court House, engr.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and surfacing 5.721 mi. State Trunk Line Rd. 35-3, Delta Co., waterbound macadam; graveling 6 mi. Assessment Dist. Rd. 207, Huron and Tuscola Counties.

Michigan—State Hy. Dept., Lansing, soon takes bids grading 4.731 mi. State Trunk Line Rd. 51-2, Sect. A, Ottawa Co., 50,075 cu.yd. excav. Former bids rejected. Noted July 13.

Mich., St. Johns—Plans paving and curbing 12 blocks, 9,340 lin.ft. concrete curb and gutter, 15,500 sq.yd. concrete, 8,000 cu.yd. excav. $60,000. T. H. Townsend, city mgr.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, rejected bids paving 5.277 mi. Project 27, Sect. 36, Tazewell Co. Noted Aug. 3.

Ia., Sumner—Making plans paving 52 blocks. $165,000. Currie Eng. Co., Webster City, engrs.

Kan., Oskaloosa—Had plans prepared grading 0.603 mi. Golden Belt Rd., Sect. A, Federal Aid Project 133, 29½ ft., 41,205 cu.yd. earth excav., 41.7 cu.yd. concrete, etc. W. M. Irwin, Oskaloosa, engr.

Neb., York—Plans 40,000 yd. paving. A. B. Chatterlon, clk. Scott & Scott, 427 Banker Bldg., Lincoln, engrs.

Missouri—State Hy. Dept., Jefferson City, plans 1.041 mi. state road from Gainesville to Arkansas State Line, State Aid Project 20.187, Ozark Co., 8,956 cu.yd. earth and 1,315 cu.yd. rock excav., 305 cu.yd. borrow, 125.4 cu.yd. concrete, 9.245 lb. reinforcing; 3.274 mi. from Lamonte eastward and westward, State Air Project 20.172, Pettis Co.; 13,522 cu.yd. earth excav., 6,098 cu.yd. borrow, 1,188 cu.yd. concrete, 11,576 lb. reinforcing; 2.803 mi. from La Plata southward, State Aid Project 20.18, Macon Co.; 15,868 cu.yd. earth excav., 152.3 cu.yd. concrete, 10,729 lb. reinforcing; 2.102 mi. from Boonville southwestward, State Aid Project 20.162, Cooper Co.; 9,138 cu.yd. earth excav., 2,542 cu.yd. borrow, 25.6 cu.yd. concrete, 1,300 lb. reinforcing; 4.571 mi. from Monett to Eureka Springs, Federal Aid Project 151, Barry Co.; 19,635 cu.yd. earth excav., 785 cu.yd. borrow, 100 cu.yd. per 100 ft. overhaul, 125.7 cu.yd. Class B concrete, 8,909 lb. reinforcing; 4.116 mi. from Hermann to Drake, State Aid Project 20,185, Gasconade Co., 5,062 cu.yd. earth and 327 cu.yd. rock excav., 2,054 cu. yd. borrow, 68 cu.yd. concrete, 3,021 lb. reinforcing, 28,976 sq.yd. gravel surfacing, 12 ft. wide, 7 in. at center, 4 in. at edge. All above 24 ft. wide. B. H. Piepmeier, state highway engr.

Tex., Rio Grande—Starr Co. making plans grading and gravel surfacing 47 mi. Brownsville-Laredo Highway, 16-18 ft. $350,00. P. S. Devine, Pharr, engr.

Wash., Seattle—Plans paving Olive Way from Bellevue to John Sts. $200,000. A. H. Dimock, city engr.

Cal., Fresno—Had plans prepared improving Faris Ave. between Belmont and Olive Aves., 107,610 sq.ft. grading, 98,204 sq.ft. asphaltic pavement, 9,030 sq.ft. concrete gutter, etc. W. Stranahan, city engr.

Cal., Marysville—Yuba Co. having plans prepared and soon takes bids grading and macadamizing 2½ mi. Ostrom Station Rd. L. Crook, co. surv.

Cal., Merced—Having plans prepared improving 9 blocks 256,000 sq.ft. 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete, 8,500 lin.ft. concrete curbs, etc. C. D. Martin, city engr.

Cal., Reedley—Received no bids oil surfacing 1,931,700 sq.ft. varios streets. It is expected that new proceedings will be started and new bids asked. J. S. Bates, Rowell Bldg., Fresno.

Cal., San Diego—Had plans prepared improving Ft. Stockton Dr., Montecito, Palmetto and Plumosa Ways, Stephens, Randolph and Jackdaw Sts., 121,558 sq.ft. 1½ in. asphaltic concrete on 4 in. portland cement concrete, 6,636 sq.ft. cement concrete sidewalks, etc. F. A. Rhodes, city engr.

Cal., San Diego—Had plans prepared improving Imperial, Clinton, Wabash, Franklin, Woolman, Supurba, Superior, Ada, Gilmore and Milbrae Aves., 37th, 38th, 39th and 40th Sts., 21,320 lin.ft. cement curbing, 2,115 sq.ft. cement gutter, 104,265 sq. ft. cement sidewalks, 17,379 cu.yd. excav., 7,676 cu.yd. earth embankment; 30th St., Utah and Works Aves., 464 lin.ft. cement sidewalks, 4,177 sq.yd. 2½ in. asphaltic concrete base, 1½ in. top; Adams Ave., 4,860 lin.ft. cement curbing, 22,864 sq.ft. cement sidewalks, 10,972 sq.yd. 4 in. concrete base with 1½ in. asphaltic concrete top. F. A. Rhodes, city engr.

Cal., Santa Rosa—Sonoma Co. having plans prepared constructing 3 mi. Dillons Beach Rd. from D St., Petaluma city limits to Marin Co. line. R. P. Smith, co. surv.

Cal., Sausalito—Having plans prepared paving various streets, 1 mi. with 5 in. concrete and 1 mi. with 5 in. asphalt macadam. Howe & Peters, 24 California St., San Francisco, engrs.

Cal., Yreka—Supervs. Siskiyou Co. rejected bids opened July 3, constructing 3½ mi. McCloud-Bartle Rd. H. J. Sarter, co. surv. Noted June 29.

Que., Montreal—Plans paving with asphalt 750 ft. Belaine Ave. from Sherbrooke to Terrebonne Sts., 45 ft., $15,981; 187 ft. Fort St. from Sherbrooke to Comte Sts., 50 ft., $5,600; 937 ft. Closse St. from Sherbrooke to St. Catheine Sts., 50 ft., $21,121. E. Blanchard, Dept. Rds., engr.

Que., Montreal—Metropolitan Comn. soon takes bids sidewalks in North. $25,000.

Que., Montreal—Plans 2,437 ft. asphalt pavement, 65 ft. $104,212. E. Blanchard, road engr.

BIDS DESIRED

N. Y., Brooklyn—Aug. 16, by E. Riegelmann, boro pres., Boro Hall, regulating and paving Crown, East 2nd, East 15th and 59th Sts., Kermit Pl., Ave. L., Riverdale and 10th Aves., resurfacing Diamond St.;

Streets and Roads (Continued)

grading East 15th St.; grading, curbing and flagging 10th Ave., recurbing 66th St.; repaving De Kalb, Washington and 18th Aves.

N. Y., New York—Aug. 16, by H. Bruckner, pres. Bronx Boro, Municipal Bldg., Crotona Park, paving roadway, furnishing and adjusting curbs and sidewalks, building receiving basins, etc., East 178th St. from Anthony Ave. to Grand Blvd. and Concourse, asphalt on concrete; grading, setting curb, laying sidewalks, building inlets, receiving basins, etc., in Weiher Court from Washington Ave. to point about 144 west of 3rd Ave. and paving with bituminous concrete on cement concrete, from Washington to 3rd Aves.; Rochambeau Ave. from East 206th St. to northerly line of former Niles Estate, about 210 ft. south of Van Courtlandt Ave. E. and East 206th St. from Mosholu Parkway N., to Bainbridge Ave.; sewers and appurtenances in Mayflower Ave. between existing drain in Westchester Ave. and Middletown Rd. and in Roberts Ave. between existing drain in Westchester and Edison Aves., Pilgrim Ave. between Roberts Ave. and Middletown Rd.; Tyndall Ave. between West 261st and West 263rd Sts.; Kingsland Ave. between Boston Rd. and Chester St.; Delafield Ave. between end of existing sewer about 255 ft. north of West 261st and 263rd Sts.; Guion Pl. between Beach and St. Lawrence Aves.; Pierce Ave. between Sackett Ave. and point about 110 ft. west of Ten Broeck Ave., Hering Ave. between Pierce and Van Nest Aves., and in Yates Ave. at Pierce Ave.

N. Y., St. George—Aug. 15, by J. A. Lynch, pres. Richmond Boro, concrete sidewalk on Patten St. from Elliott to Hopping Aves., on Amboy Rd. from point 840 ft. northeasterly from Page St. to Richmond Valley Rd.; concrete curb with steel guard, concrete gutters, etc., on Clove Ave. from Mosel Ave. to Fingerboard Rd.

N. Y., Upper Nyack—Aug. 17, by Village Trustees and President, 14,000 sq.yd. rein.-con. pavement. H. E. Breed, 507 5th Ave., New York, engr.; adv. this issue.

N. J., Cape May—Aug. 15, by City Comrs., 23,000 sq.yd. portland cement concrete or bituminous surface; adv. this issue.

N. J., Long Branch—Aug. 15, by Bd. Comrs., paving Ocean Ave. from Sea View to Brighton Aves., etc. J. W. Seaman, city engr.; adv. this issue.

N. J., Princeton—Aug. 21, by Twp. Com., rein.-con. pavement with cement concrete surface on old macadam foundation. Sincerbeaux & Moore, 705 Amer. Mechanic Bldg., Trenton, and Asbury Park Trust Co. Bldg., Asbury Park, engrs.; adv. this issue.

Pa., Sharon—Aug. 15. by W. M. Stewart, city clk., paving 665 sq.yd. Porter Way, 3,000 sq.yd. cement sidewalks, 175 lin.ft. stone curb, 450 ft. reset stone curb, 1,550 sq.yd. South Dock St., 736 ft. stone curb; 2,815 sq.yd. George St.; brick on rolled slag or sheet asphalt on concrete. L. Burnside, city engr.

Delaware—Aug. 23, by State Hy. Dept., Dover, Laurel Bridge, steel superstructure, Contr. 41-A; 0.427 mi. road through Townsend, Contr. CN-8; 0.2 mi. road through St. Georges, Contr. CN-9; adv. this issue.

Va., Charles City—Aug. 15, by J. M. Gill, chn. Bd. Highways, Charles City Co., gravel surfacing 7.24 mi. road from forks of road near Charles City to fork of roads at Graves Shop, 20 ft.; 4.33 mi. road from Mt. Pleasant Church to Henrico Co. line, 20 ft. State Highway Dept., Richmond, engrs.

North Carolina—Aug. 30, by State Hy. Comn., Raleigh, grading and paving 9.87 mi. State Project 460, Orange Co., 11,600 cu.yd. excav., 104,230 sq.yd. concrete or asphaltic paving. $280,000. C. M. Upham, state highway engr.

N. C., Salisbury—Aug. 14, by Mayor and Bd. Aldermen, 1,584 sq.yd. asphaltic concrete on 5 in. concrete, 13,135 ft. granite curb 5 x 18 in., 865 ft. circular granite curb 5 x 18 in., 12,100 ft. combined concrete curb and gutter, 7,500 cu.yd. excav., etc. J. W. Webb, Salisbury, engr.

Fla., Clearwater—Aug. 17, by Bd. Comrs. Pinellas Co., improving Haines Rd. from St. Petersburg to Dellwood, relaying 65,750 sq.yd. brick with bituminous filler, 11,800 sq.yd. cut or pressed brick with bituminous filler, 55,550 sq.yd. 6 in. compacted rock, shell or marl base for shoulders, 10,200 sq.yd. rock, shell or marl shoulders taken up and relaid, 700 cu.yd. added to shoulders, 65,700 sq.yd. sheet asphalt, 1 in. binder, 1½ in. wearing surface, or 65,700 sq.yd. bituminous macadam penetration, 30,000 lin.ft. 4 x 10 in. concrete curb to be relined or 74,330 sq.yd. vitr. brick with bituminous filler, 168,890 lin.ft. 4 x 12 in. concrete curb. $232,000. C. E. Burleson, Clearwater, engr.

Ala., Carrollton—Aug. 14, by Comrs. Pickens Co., improving 8 mi. roads between here and Pickensville, and between Aliceville and Pickensville, 28,000 cu.yd. excav., 9,800 cu.yd. gravel haul 1 mi., 11,200 units gravel overhaul ½ mi., 158 cu.yd. concrete, 10,200 lb. reinforcing.

Tenn., Rutledge — Aug. 19, by Comrs. Grainger Co., grading 50 mi. and macadam paving 25 mi. various roads, 22 ft. $204,000. W. Bewely, Rutledge, engr. Noted Aug. 3.

Ky., Henderson—Aug. 23, by Comrs. of Pub. Wks. and Property, improving 5,115 ft. 2nd St. C. F. Hall, mayor; adv. this issue.

O., Akron—Aug. 23, by M. P. Tucker, service dir., grading and paving 534 ft. Lakemont Ave., 26 ft., 1,585 sq.yd. vitr. brick on 6 in. concrete, 1,000 lin.ft. stone curbing, 4,800 sq.ft. cement sidewalk, 1,600 cu.yd. earth excav., $12,000, Newman St., 2,375 sq.yd. vitr. brick or asphalt on 6 in. concrete, 2,500 cu.yd. earth excav., 1,715 lin.ft. stone curbing, $16,000, 150 ft. Delbeth Rd., 26 ft., 800 sq.yd. vitr. brick or asphalt on 6 in. concrete, 290 lin.ft. stone curbing, 18,500 lin.ft. cement sidewalk, 600 cu.yd. earth excav., $6,300, 500 ft. Carpenter St., 24 ft., 1,200 sq.yd. vitr. brick or asphalt on 6 in. concrete, 884 lin.ft. stone curbing, 3,000 cu.yd. earth excav., $8,500; grading and walks on 3,000 ft. Pitkin Ave., 6 ft., 36,700 sq.ft. cement sidewalk, 11,700 cu.yd. earth excav., 1,900 cu.yd. cinders or gravel, $16,900, 1,200 ft. Carlye St., 6 ft., 17,000 sq.ft. cement sidewalk, 4,400 cu.yd. earth excav., 750 cu.yd. cinders or gravel, $7,800, 1,300 ft. McKinley Ave., 6 ft., 2,000 sq.ft. cement sidewalk, 2,000 cu.yd. earth excav., 8,000 cu.yd. cinders, $5,400; grading, paving and sewers in 740 ft. School St., 24 ft., 2,050 sq.yd. vitr. brick or asphalt on concrete, 1,400 lin.ft. stone curbing 7,800 sq.ft. cement sidewalk, 2,000 cu.yd. earth excav., 740 lin.ft. 30 in. trunk sewer, $18,000. C. A. Kemmler, Delaware Bldg., engr.

O., Cleveland—Aug. 19, by Comrs. Cuyahoga Co., Court House, paving Lee Rd. 4, $51,512; grading and paving Royalton Rd. 5 and Huffman Rd., $25,495. F. J. Lander, County House, engr.

O., Columbus—Aug. 15, by W. H. Duffy, dir. Pub. Service, grading, paving and laying water and sewer connections, in Brunson Ave., from Broad St. to Clifton Ave., 1185 ft. long, 26 ft. wide, asphalt, $14,056, brick, $16,067; 5th Ave., from Perry St. to alley west of Parker St., 6485 ft., 36 ft. and 30 ft. wide, brick, $120,440, asphalt $108,193; 5th Ave., from Sunbury Ave. to 490 ft. east of Nelson Rd., 2099 ft., 30 ft. wide, brick, $37,158, asphalt $35,205; 4th Ave., from Washington to St. Clair Aves., 1487 ft. long, 26 ft. wide, brick $25,983, asphalt, $23,147; Mill St., from Scott to State Sts., 1585 ft. long, 26 ft. wide, brick, $20,210, asphalt $18,435; 16th Ave. from Lexington Ave. to Brooks Ave., 1913 ft. long, 26 ft. wide, brick $34,194, asphalt $29,983; Alley north of 9th Ave. from Hunter to Highland Sts., 299 ft. long, 20 ft. wide, brick, $2,347, concrete $1,761; Alley north of Maynard Ave., from Adams Ave. to alley west of Indianola Ave., 884 ft. long, 15 ft. wide, brick, 5,961; concrete, $4,048; sanitary sewer in Bynhild Rd., from Walhalla to Midgard Rds., etc., 1710 ft. long, 8 in. sewer, $3,697; sanitary sewer in Kian Ave. from first alley east of Parsons Ave. to second alley east of Parsons Ave., 480 ft. long, 24 in. sewer, $2,240.

O., Columbus — Aug. 16, by Comrs. Franklin Co. paving 1.34 mi. Boehm Rd., 16 ft. bituminous macadam, $30,182; grading and paving 0.492 mi. Belknap Rd., Plain Twp., 16 ft., waterbound macadam, $10,046. C. C. Lattimer, Courthouse, engr. Noted July 27.

Michigan—Aug. 15, by State Hy. Dept., Lansing, grading and surfacing 5.721 mi. State Trunk Line Rd. 35-3, Delta Co., 26,495 cu.yd. excav., 53,663 sq.yd. waterbound macadam.

Wis., Mellen—Aug. 18, by C. W. Macomber, clk., paving Bennett and Main Sts., 5,175 lin. ft. combined concrete curb and gutter, 11,700 sq.yd. rein-con., 1,600 cu.yd. gravel filling, 4,000 cu.yd. earth excav. Private plans.

Wis., Waterloo—Aug. 18, by E. H. Hagel, clk., paving North Monroe and Washington Sts., rein-con., amorplated concrete or vibrolithic method, incl., 5,980 lin. ft. concrete curb and gutter, 1,950 cu.yd. earth excav., 8,530 sq.yd. concrete, 470 lin.ft. 12-15 in. storm sewer. Parsons & Orbert, 216 West Water St., Milwaukee, engrs.

Ia., Mason City—Aug. 14, rein.-con. paving 1 mi. 4th St., S. E., and Commercial Alley. $30,000. H. W. Ewen, clk.

Ia., Ottumwa—Aug. 14, paving 1 mi. Fellows and Lincoln Aves., South McLean and Lamboth Sts., and alleys. $35,000. J. T. Brady, Ottumwa, engr.

Ia., Pella—Aug. 21 for (a) repair to present pavement (b) resurface 36,200 sq. yd. asphalt Class 1, asbestophalt Class 2 or tarvia Class 3, 1 in. thick, 109 ton asphaltic concrete binder. $30,000. Former bids rejected. Price & MacCormack, Missouri Valley, engrs. Noted July 27.

Minnesota—Aug. 18, by State Hy. Dept., St. Paul, 12 mi. State Project 13-01, Federal Aid Project 294, 265,780 cu.yd excav., portable and monolithic culverts, Bridge 3874, 35 ft., and Bridge 3875, 50 ft., 20 ft. roadways, both concrete, $65,000; 1 mi. State Project 21-03, 21,000 cu.yd. excav., portable and monolithic culverts, $5,000, both in LeSueur Co. State Hy. Dept., engrs.

Minn., St. Paul — Aug. 14, by H. W. Austin, city purch. agt., paving about 57,786 sq.yd. various streets, 3 in. creosoted wood blocks. $200,000. O. Claussen, city engr.

Minn., Waseca—Aug. 15, by Waseca Co., for 11 mi. State Rd. 3, Job 2205, 13,800 cu.yd. gravel surfacing. Former bids rejected. J. W. Krusks, Waseca, engr. Noted July 6.

Kan., El Dorado—Aug. 29, by Comrs. Butler Co., paving 5.192 mi. Kellogg Rd., Sect. B, Federal Aid Project 90, 18 ft., brick or concrete. H. D. Barnes, El Dorado, engr.

Ark., Jonesboro — Aug. 17, by Comrs. Lake City Nettleton and Bay Road Impvt. Dist. 1, Craighead Co., at office of E. E. Randolph, secy., surfacing 120, 750 sq.yd. various streets. Klyce & Kackley, 720 4th and 1st Natl. Bank Bldg., Nashville, Tenn., engrs.; adv. this issue.

Ark., Little Rock—Aug. 30, by Bd. Comrs. Pulaski Road Impvt. Dist. 10, at auditorium of Bd. Commerce, 40 mi. streets and roads. D. A. MacCrea, 215 Gazette Bldg., engr.; adv. this issue.

Tex., Tahoka—Aug. 15, by J. R. Singleton, mayor, paving 1 mi. Main St., 20 333 sq.yd (a) concrete, (b) 3 in. vertical fibre brick on rolled stone or natural foundation, (c) natural rock asphalt on rolled stone base, incl., 3,846 lin. ft. concrete curbing, 1,222 lin.ft. gutter, 8,054 cu.yd. earth excav., 20,333 sq.yd. bituminous macadam. $50,000. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Tex., Wellington—Aug. 15, by City Clerk, for 10,500 sq.yd. concrete, brick, vibrolithic or bitulithic pavement. Mackintosh Co., Oklahoma City ,engrs.; adv. this issue.

Oklahoma — Aug. 15, by E. Alderman, state highway engr., 6.958 mi. Federal Aid Project 60, Sects. A, B and D, Oklahoma Co., Sect. A involves 21,069 cu.yd. excav., 2,745 cu.yd. borrow, 317.91 cu.yd. concrete, 24,340 lb. reinforcing steel, 53,133 sq.yd. wearing surface; Sect. B, 7,015 cu.yd. excav., 4,035 cu.yd. borrow, 123.21 cu.yd. concrete, 11,028 lb. reinforcing, 16,120 sq. yd. wearing surface; Sect. D, 77,153 cu. yd. earth borrow, 4,270 sq.yd. wearing surface.

Col., Denver—Aug. 16, by Dept. Impvts. and Parks, paving 12 blocks Alley Paving Dist. 85, 16-20 ft., 14,025 sq.yd. concrete. $29,467. A. K. Vickery, City Hall, engr.

Col., Denver—Aug. 17, by Dept. Impvts. and Parks, paving 1¼ mi. Sante Fe Dr. Paving Dist. 1, 36 ft., 22,750 sq.yd. asphalt. $60,300. A. K. Vickery, City Hall, engr.

Washington—Sept. 5, by State Hy. Comn., Olympia, grading and graveling 20 mi. new location on Yakima Canyon section of Inland Empire Highway, from Yakima to Ellensburg. $700,000. J. Allen, state hy. engr.

California—Aug. 28, by State Hy. Comn., Sacramento, grading 8.4 mi. highway between ¾ mi. south of northern boundary line of Napa Co. and 1½ mi. west of Calistoga, Napa Co., 13.1 mi. road between Anderson Canyon and Sur River, Monterey Co.; grading and paving with bituminous macadam 2.7 mi. highway between south west ¼ Sect. 23 T. 11 N., R. 24 W., S. B. B. & M. and Maricopa, Kern Co.; paving with portland cement, concrete shoulders, 9.1 mi. road between Saugust and ¾ mi. northwest of Castaic School, Los Angeles Co. A. B. Fletcher, state highway engr.

Cal., Visalia—Aug. 14, by City Council, improving portions of Northeast 2nd, Northwest 2nd and Northeast 3rd Aves. L. H. Gadsby, city engr. Noted July 27.

Ont., Chatham—Takes bids about Aug. 29, asphalt pavements on Lorne Ave., Elizabeth, St. George and Queen Sts. $55,000. C. H. Fuller, city engr.

Que., Verdun—Aug. 16, asphalt paving, 8,076 ft. Verdun Ave. from Tail Race Bridge to Woodland Ave., 40 ft., and 2,287 ft. Mullarky St. from Wellington St. to Verdun Ave., 32 ft., $125,000. M. A. Hadley, city engr.

Streets and Roads (Continued)

BIDS RECEIVED

Connecticut—C. J. Bennett, state highway comr., Hartford, opened bids July 26, paving 20,125 ft. Willimatic Rd. in Coventry, 1,800 sq.yd. cobble gutter, 15,540 cu.yd. earth and 3,060 cu.yd. rock excav., 41,300 sq.yd. 3 in. bituminous macadam on 7,900 cu.yd. native stone base, from L. Suzio Constr. Co., State and Brooks Sts., Meriden, $96,918, Arborio Road Constr. Co., 408 Main St., Hartford, $104,774, A. Vito Constr. Co., Norwich, $108,703; 2,650 ft., Fox Hill Rd., 20 ft. in Norwich, 3,530 sq.yd. vitr. brick, 620 cu.yd. concrete, 1,100 sq.yd. cobble gutter, 2,400 cu.yd. earth and 300 cu.yd. rock excav., 590 cu.yd. concrete base, from A. G. Bianchi, Norwich, $28,288, A. Vito Constr. Co., Norwich, $32,228, F. D. Miller Co., R. F. D. 6, Norwich, $32,702. Noted July 20.

N. Y., New York—H. Bruckner, boro pres. Bronx Boro, Municipal Bldg., Crotona Park, adjusting curb and sidewalks, and paving roadway Valentine Ave. from Burnside Ave. to Kingsbridge Rd. at East 192nd St. asphalt on concrete, to Regan-Towers Co., 124 West 121st St., $132.389; grading, setting curb, sidewalks, building inlets, receiving basins, approaches, etc., East 228th from Paulding to Laconia Aves., to M. De Balso, 660 East 221st St., $8,031; sewers and appurtenances in Middletown Rd. between Westchester and Edison Aves. to J. L. Sigretto & Co., Woodhaven, Long Island, $10,993. Noted July 27.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., opened bids Aug. 2, (1) widening and repaving widened portion roadway West 57th St. from 6th to 7th Aves., asphalt on concrete, (2) repaving roadway South St. and Marginal St. wharf or place on East River from Peck Slip to Montgomery St., (3) roadway of West St. and Marginal St. wharf or place on North River from Cortlandt to Duane Sts., granite block on concrete; (4) alterations and improveemnts to sewer in West 57th St. between 5th and 6th Aves., from Asphalt Constr. Co., 208 Bway., (1) $14,818, (2) $444,180, (3) $354,311; Regan-Towers Co., 124 West 121st St., (1) $17,945, (2) $442,564; Interboro Asphalt Co., 233 Bway., (1) $19,615; W. J. Fitzgerald, 547 West 45th St., (2) $413,317, (3) $355,154; J. Meehan & Son, 74 Cortlandt St., (3) $355,845; J. Burns, 103 East 125th St., (4) $36,467; T. A. Reilly Co., 48 East 41st St., (4) $44,615; P. J. Kearns Contg. Co., 2306 Creston Ave., (4) $49,041. Noted July 27.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., widening and repaving widen end portion (1) Madison Ave. from 60th to 61st Sts. (2) roadway 57th St. from 5th to 6th Ave., repaving (3) roadway 50th St. from Madison to 6th Aves. (4) roadway 51st St. from point 50 ft. west of westerly house line Park Ave. to 8th Ave. (5) constructing sewers and reconstructing existing sewers Carmine St. from Varick St. to point 106 ft. east of east building line of Bleecker St., asphalt on concrete, from J. E. Gaffney, 438 East 91st St., (1) $2,715 (3) $24.314; Interboro Asphalt Co., 233 Bway, (1) $2,758 (2) $38,382 (4) $52.919; Brusstar Constr. Co., Harlem River and 150th St. (1) $2,832 (2) $33,133 (3) $22,916 (4) $50,244; Asphalt Constr. Co., 208 Bway. (2) $30,480 (3) $22,480; W. J. Fitzgerald, 547 West 45th St., (3) $22.636 (4) $48,847; P. McGovern, 50 East 42nd St., (5) $235,700; Necaro Co., Inc., 97 Court St., Brooklyn, (5) $249,000; Carroll Contg. Co., 103 Park Ave., (5) $257,000. Noted Aug. 3.

N. Y., Brooklyn—E. Riegelmann, pres. Brooklyn Boro, Boro Hall, opened bids Aug. 2, repaving (1) roadway Church Ave. from Flatbush to Rogers Aves., (2) roadway Porter Ave. from Johnson Ave. to Ingraham St., (3) roadway 17th Ave. from 86th St. to Cropsey Ave., asphalt on 6 in. concrete, (4) roadway Ralph Ave. from Macon St. to Atlantic Ave. and from Bergen St. to St. Marks Ave., (5) roadway Ralph Ave. from Atlantic Ave. to Bergen St., asphalt and grade 1 granite on 6 in. concrete, from Borough Asphalt Co., 1301 Metropolitan Ave., (1) $27,013, (2) $3,563, (3) $26,341; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (1) $27,908, (3) $28,462; Cranford Co., 52 9th St., (1) $27,930, (2) $3,383, (3) $25,646, (4) $58,766; Sicilian Asphalt Paving Co., 41 Park Row, New York, (2) $3,215, (4) $56,340; J. Meehan & Son, 74 Cortlandt St., New York, (5) $22.347; M. J. O'Hara, 717 65th St., (5) $25,528. Noted July 27.

Pa., Erie—Opened bids Aug. 1, paving Chestnut St., asphalt, from Mayer Bros. Constr. Co., Erie, $22,541, J. and M. Doyle Co., Erie, $23,552, engrs. est. $25,000; also 12 in. sanitary tile sewer in Elmwood Ave., from V. Calabreese, Erie, $4,755, J. McCormick, Erie, $5,706, engrs. est. $5,900. Noted July 27.

Delaware—State Hy. Dept., Dover, 1.5 mi. limestone road, Contr. CN-5, (a) 13,500 cu.yd. excav. (b) 1,200 cu.yd. borrow, (c) 800 cu.yd. rock excav., (d) 160 ton base course, (e) 2,880 cu.yd. concrete pavement, (f) 1,700 sq.yd. concrete gutter, from A. H. McDowell, Marshallton, (a) $0.90, (b) $1, (c) $2, (d) $4.25, (e) $13, (f) $2, total $72,848; F. Gillespie, Oakview, Pa., (a) $0.85, (b) $0.80, (c) $2, (d) $5.50, (e) $14.25, (f) $2.52, total $75,164; Sherman & Rhodes, Frederica, (a) $0.85, (b) $0.85, (c) $2, (d) $4, (e) $14, (f) $2, total $75,460. Noted July 13.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids July 31, grading and paving roads with (a) rein.-con., (b) asphalt macadam, (c) tar macadam, (d) Kentucky rock asphalt, (e) bituminous macadam oil, (f) brick, (g) bituminous macadam asphalt, (h) bituminous macadam asphalt oil or lake, (i) asphalt macadam oil, (j) monolithic brick in following counties:

Allen Co., Sect. "Elida" Lima-Delphos Rd., 0.494 mi., from F. A. Frobase & Co., 628 West North St., Lima, (a) $15,091, Allen Co., Sect. "F" Lima-Delphos Rd., 4.178 mi., from N. B. Putnam, Van Wert, (b) $89,799, (c) $89,574, (d) $112,814, (e) $116,167; F. A. Probase & Co., 628 West North St., Lima, (b) $99,968, (c) $100,869, (d) $122,284, (e) $119.863; E. L. Reeb, Lima, (b) $103,273, (c) $103,273, (d) $123,738, (e) $129,311.

Ashtabula Co., Sect. "R" Cleveland-Buffalo Rd., 0.371 mi. from Pittsburgh Constr. Co., Diamond Bldg., Pittsburgh, (f) $31,508; C. Shutrump Co., Home Savings & Loan Bldg., Youngstown, (f) $31,508; S. Rae, Oliver Bldg., Pittsburgh, (f) $31,508; Koss Constr. Co., 2818 5th St., Des Moines, Ia., (f) $31,508.

Fulton Co., Sect. "C" and "Wauseon," Waseon-Napoleon Rd., 0.998 mi. from La Boiteaux & Hayes, Toledo, (a) $28,903; J. E. Karch & Son, Celina, (a) $29,797.

Fulton Co., Sect. "L-1" Archibald-Fayette Rd., 1.018 mi., from La Boiteaux & Hayes, Toledo, (a) $20,300, (b) $18,036; J. E. Karch & Son, Celina, (a) $21,382.

Harrison Co., Sect. "1-2" and "K" Bridgeport-Cadiz Rd., 5.165 mi., from Curry & Hayes, Easton, (g) $153,804, (c) $154,848; R. H. Shafer Co., Chamber of Commerce Bldg., Columbus, (g) $154,502; Kane Bros., Youngstown, (c) $153,459; Wilson-Miller Co., Barnesville, (c) $155,546.

Jefferson Co., Sect. "A" Mingo-Smithfield Rd., 3.714 mi., from E. A. Hetcher, Mingo Junction, (g) $105,467, (c) $105,465; Jones Constr. Co., Salem, (g) $109,213; H. F. Daugherty, Steubenville, (c) $100,344; Wilson-Miller Co., Barnesville, (c) $107,165.

Jefferson Co., Sect. "New Alexandria" Mingo-Smithfield Rd., 0.227 mi., from E. A. Hatcher, Mingo Junction, (h) $7,688, (c) $7,688; Jones Constr. Co., Salem, (h) $8,138; H. F. Daugherty, Steubenville, (c) $7,698; Wilson-Miller Co., Barnesville, (c) $8,180.

Mercer Co., Sect. "Celina" Celina-Wabash Rd., 0.261 mi. from Hinton & Smalley, Celina, (a) $12,521, (f) $17,575; Lynn Constr. Co., Paulding, (a) $12,556; J. E. Karch & Sons, Celina, (a) $13,061, (f) $17,585.

Morgan Co. Sect. "C" McConnellsville-Zanesville Rd., 2.1 mi., from Wilson Contg. Co., Newark, (i) $56,233.

Muskingum Co., Sect. "F-2" Zanesville-New Lexington Rd., 1.648 mi., from Adams Bros. Constr. Co., Zanesville, (f) $82,426; Daley & Border, Sonora, (d) $74,295; J. Wroe, 54 Davies St., Dayton, (d) $24,460.

Putnam Co., Sect. "N" Lime-Ottawa Rd., 2.718 mi., from Acton Bros., Vaughansville, (d) $59,969; O. L. Smith, Leipsic, (d) $60,629; J. Wroe, 54 Davies St., Dayton, (d) $70,990.

Seneca Co., Sect. "Attica" Columbus-Sandusky Rd., 0.35 mi., from R. M. Myers, Attica, (f) $29,219; Central Paving Co., Hamilton, (f) $30,350.

Shelby Co., Sect. "Anna" Sidney-Wapakoneta Rd., 0.516 mi. from Roth & Schafer, Botkins, (a) $17,008; J. Franz, Sidney, (a) $17,312; Elass & Meyer Co., Anna, (a) $17,627.

Shelby Co., Sect. "Botkins" Sidney Wapakoneta Rd., 0.507 mi. from Roth & Schafer, Botkins, (a) $13,974; Elass & Meyer Co., Anna, (a) $14,064; J. Franz, Sidney, $14,236.

Tuscarawas Co., Sect. "P-2" Newcomerstown-Uhrichsville Rd., 1.338 mi., from W. M. Bode Co., Newcomerstown, (j) $53,483. Noted July 20.

Indiana—State Hy. Dept., Indianapolis, opened bids July 27, paving 18,480 ft. State Rd. 33, 16 ft., 32,833 sq.yd. concrete on concrete, from J. C. O'Connor & Sons, Ft. Wayne, $71,686; Public Constr. Co., Hammond, $78,991; W. J. Meese & Co., Frankfort, $80,966. Engrs. est. $75,000.

Ind., Indianapolis—Comrs. Marion Co. opened bids July 27 paving 16,200 ft. Claypool Rd., 16 ft., 28,782 sq.yd. concrete on concrete, from C. O'Hair, 901 North East St., $75,550; W. J. McKee, 3336 East Vermont St., $86,000. Engrs. est. $125,000.

Michigan—State Hy. Dept., Lansing, grading and waterbound macadam surfacing 2.064 mi. Assessment Dist. Rd. 235, Saginaw Co., from J. W. Ederer & Co., Saginaw, $33,215. Noted July 20.

Michigan—State Hy. Dept., Lansing, opened bids July 21, grading and surfacing 5.383 mi. Federal Aid Project 84, Sects. A and B, Monroe Co., from Bartling & Dull, Pontiac, $129,925; R. D. Baker Co., 1454 Penobscot Bldg., Detroit, $136,054. Noted July 13.

Michigan—State Hy. Dept. opened bids July 28, grading and concrete surfacing 2.564 mi. State Trunk Line Rd. 13-16, Kent Co., from Whiting Constr. Co., Grand Rapids, $49,137; New Era Road Building Co., New Era, $51,289; C. Marsman, Grand Rapids, $51,687. Noted July 20.

Minnesota—State Hy. Dept., St. Paul, opened bids Aug. 1, 11 mi. State Project 9-29, Federal Aid Project 289, Houston and Fillmore Counties, Div. A, grading, from A. F. Lehrer, Melrose, $8,334, Winston Bros. Co., 801 Blobe Bldg., Minneapolis, $8,828; Div. B, grading, from J. J. and M. S. Mergens, 403 Kasota Bldg., Minneapolis, $67,066. Monolithic culverts, J. J. and M. S. Mergens, 403 Kasota Bldg., Minneapolis, $3,440.

State Project 11-21, Federal Aid Project 252, 10.8 mi., Roseau Co., grading, A. Guthrie & Co., 366 Jackson St., St. Paul, $49,634; monolithic culverts, Valley Constr. Co., Stephen, $8,004.

State Project 7-28, Federal Aid Project 233, 2 mi., Brown and Nicollet Counties, grading, Divs. A and B, F. R. Hupp, 1450 West Lake St., Minneapolis, $5,796 and $19,453 respectively, Div. C, D. Ryan, Marshall, $7,054. Monolithic culverts, Sanitor Constr. Co., 3050 4th Ave. S., Minneapolis, $5,260, A. Guthrie & Co., 366 Jackson St., St. Paul, $5,457.

State Project 8-30, Federal Aid Project 280, 17 mi., Itasca Co., grading, Divs. A and B, J. Moberg, Bemidji, $43,706 and $77,730, Reader & Co., 209 Kasota Bldg., Minneapolis, $43,712 and $74,124. Monolithic culverts, A. Guthrie & Co., 366 Jackson St., St. Paul, Div. A, $4,636, Div. B, $4,844.

State Project 12-21, Federal Aid Project 256, 8 mi., Carver Co., grading, J. R. Leach, Lakeville, $31,529, Gould & Huntington, Glencoe, $33,742. Monolithic culverts, Wessell Bros., Guardian Life Bldg., St. Paul, $9,227, S. J. Groves & Sons Co., 306 Globe Bldg., Minneapolis, $9,601.

State Project 42-21, Federal Aid Project 207, 6 mi., Olmsted Co., grading, Cameron, Joyce & Co., Keokuk, Ia., $38,277. Monolithic culverts, A. Beckman, Lake City, $13,022, S. J. Groves & Sons Co., 306 Globe Bldg., Minneapolis, $14,074.

State Project 53-23, 9 mi., Dakota Co., 12,940 sq.yd. one course concrete paving, from Campbell Constr. Co., 3050 Hennepin Ave., Minneapolis, $27,612. Bitulithic & Contg. Co., Plymouth Bldg., Minneapolis, $27,871.

State Project 7-30, Federal Aid Project 269, 4.5 mi., Waseca Co., grading, J. Brown Constr. Co., Madison Lake, $14.422, D. Ryan, Marshall, $14,904. Monolithic culverts, S. J. Groves & Sons Co., 306 Globe Bldg., Minneapolis, $3,491.

State Project 15-29, 8.7 mi. Watonwan Co., grading, Minnesota Rural Express Co., Montevideo, $9,260, J. McKusick Co., Hibbing, $9,321; graveling, Minnesota Rural Express Co., $14,972, J. McKusick Co., Hibbing, $15,235.

State Project 4-25, 1.4 mi., Beltrami Co., grading, G. W. Clark, Minburn, Ia., $11,177, Winston Bros. Co., 801 Globe Bldg., Minneapolis, $11,371; graveling, M. Barrett, St. Cloud, $4,158, Beltrami Constr. Co., Bemidji, $4,478. Noted July 13.

Mont., Great Falls—Concrete paving 12 blocks 4th Ave., N., between 15th and 20th Sts., 16th and 18th Sts. between 3rd and 4th Aves. N., sections 17th and 19th Sts., from Leighland & Kleppe, 24 Stanton Bank Bldg., $34,422; Hansen & Hoag, Great Falls, $34,920; S. Birch & Sons, 314 Ford Bldg., $36,107.

Missouri—State Hy. Dept. at div. office Bowling Green, opened bids July 18, .25 mi. road from Peno North, Federal Aid Project 188, Pike Co., from Riley & Bailey Constr. Co., International Life Bldg., St. Louis, $20,499; A. P. Munsen, Marion, Ia., $20,909; Missouri Bridge & Iron Co., Fullerton Bldg., St. Louis, $21,688. Noted July 13.

AVERAGE ACCEPTED BID PRICED ON FEDERAL AID PROJECTS DURING MAY, 1922

Following is statement issued on June 30 by U. S. Department of Agriculture, Bureau of Public Roads, Washington, D. C., showing average accepted bid prices on Federal Aid Projects during May. Prices are given for items and materials furnished in place on the project. Gravel bids are listed by square or cubic yards, depending on the specifications of the various states. Prices of items or materials containing state-furnished cement and bitumen which was not included in total cost of the item are marked *. A table showing the average accepted bid prices for June is published in the Business Side of Construction, this issue.

	Surfacing										Steel			
	Gravel		Bit. Macadam		Bit. Concrete		Pl. Cement Conc.		Rein. Cement Conc.		Reinforcing Bars		Structural	
Geographic Divisions and States	Sq. Yd.	Rate	Sq. Yd.	Rate	Sq. Yd.	Rate	Sq. Yd.	Rate	Sq. Yd.	Rate	Lb.	Rate	Lb.	Rate
Totals for all states	1,531,790	$0.39	509,810	$1.73	284,599	$2.22	1,636,239	$2.21	724,959	$2.60	9,079,617	$0.04	2,939,504	$0.06
New England	11,034	1.90	99,751	1.43					170,760	2.02	1,270,355	0.04		
Maine	11,034	1.90							90,850	1.69	785,904	0.04		
New Hampshire											50,123	0.06		
Vermont											28,028	0.05		
Massachusetts			99,751	1.43					79,910	2.37	406,300	0.03		
Rhode Island														
Connecticut														
Middle Atlantic			23,550	1.12					103,596	2.90	3,691,466	0.03	412,600	0.03
New York			23,550								3,685,800	0.03	412,600	0.03
New Jersey														
Pennsylvania											5,666	0.05		
East North Central			152,953	2.19	111,949	2.65	93,308	2.62	20,418	3.16	284,078	0.04	62,030	0.05
Ohio			152,953	2.19	111,949	2.65	92,639	2.62	20,418	3.16	226,488	0.04	4,030	0.11
Indiana														
Illinois														
Michigan														
Wisconsin							669	2.28			57,590	0.05	58,000	0.05
West North Central	1,491,423	0.38					551,807	2.53	272,101	2.50	939,967	0.06	484,770	0.06
Minnesota														
Iowa							27,365	2.36	272,101	2.50				
Missouri	697,572	0.42					516,196	2.52			667,507	0.06	435,060	0.06
North Dakota											48,874	0.05	2,103	0.06
South Dakota											237	0.03	300	0.06
Nebraska	793,851	0.34					8,246	3.12			167,259	0.05	47,307	0.05
Kansas											56,090	0.05		
South Atlantic			233,556	1.63	135,875	1.78	489,086	2.32	118,964	2.98	503,433	0.05	168,000	0.07
Delaware														
Maryland							107,050	1.49			3,485	0.08		
Virginia					84,395	2.13	35,260	2.10			7,072	0.08		
West Virginia					51,480	1.20					3,050	0.06		
North Carolina							316,880	2.60	112,090	2.98	186,720	0.05		
South Carolina							29,360	2.66	6,874	2.96	166,948	0.05	168,000	0.07
Georgia			49,083	0.89			536	*1.00			136,158	0.05		
Florida			184,473	1.82										
East South Central					34,425	2.40					240,921	0.04		
Kentucky											69,394	0.05		
Tennessee														
Alabama					34,425	2.40					100,531	0.05		
Mississippi											70,996	0.03		
West South Central					2,007	3.25	145,125	2.38			1,367,812	0.05	1,482,656	0.06
Arkansas														
Louisiana														
Oklahoma					2,007	3.25	51,408	2.37			715,144	0.05	1,315,126	0.06
Texas							93,717	2.39			652,668	0.05	167,530	0.05
Mountain	29,333	0.61			343	2.00	168,113	1.76			342,285	0.06	329,448	0.06
Montana											2,500	0.07	155,000	0.07
Idaho														
Wyoming											106,500	0.07		
Colorado					343	2.00	61,050	2.32			194,581	0.05	174,448	0.06
New Mexico							45,413	1.92			38,704	0.08		
Arizona														
Utah							61,650	1.10						
Nevada														
Pacific	29,332	0.61					188,800	1.18	39,120	3.37	439,300	0.04		
Washington														
Oregon											7,000	0.09		
California							188,800	1.18	39,120	3.37	432,300	0.04		

Streets and Roads (Continued)

Missouri—State Hy. Dept. at div. office Bloomfield, opened bids July 26, 4,256 mi. road from Cairo to Poplar Bluff, 24 ft., Federal Aid Project 179, Stoddard Co., from Novaculite Constr. Co., Marion, Ill., $17,780, T. E. Hubbard, Dexter, $20,481, Neal & Gladden, Dexter, $24,286. Noted July 20.

Missouri—State Hy. Dept. at div. office Shelbyville, opened bids July 27, 4,529 mi. road from Shelbyville northward and southward, 24 ft., State Aid Project 20,129, Shelby Co., from W. J. Dungan, Shelbina, $17,183, J. P. Sparks, Mastow Mills, $25,772, H. Washam, Jacksonville, $25,809. Engrs. est. $28,699. Noted July 20.

Missouri—State Hy. Dept. at div. office Moberly, opened bids 0.678 mi. road from Moberly to Huntsville, 24 ft., Federal Aid Project 186, Randolph Co., from Lynch McDonald Constr. Co., Moberly, $24,628. Engrs. est. $25,000. Noted March 16.

Tex., Cameron—Milam Co., grading, gravel surfacing, etc., 17.94 mi. State Highway 36, Federal Aid Project 222, incl. 91,035 cu.yd. borrow, 46,343 cu.yd. roadway excav., 1,114 cu.yd. concrete, 96,008 lb. reinforcing, 37,241 cu.yd. schist and 2,523 cu. yd. gravel surfacing, from Thomas & Radcliff, Rogers, $80,743; W. T. Hutto & Sons, Gonzales, $87,787; F. P. McElwrath, Corsicana, $92,044.

Tex., Houston—Harris Co. grading and surfacing 5.3 mi. State Highway 2, (a) crushed rock and shell, (b) ¾ in. asphalt topping, (c) 1½ in. bituminous topping, from Starkey, Smith & Brown, 303 Stewart Bldg., (a) $17,982; Haden & Austin, Hill and Marsch Sts., (a) $18,393, (b) $13,656, (c) $26,071; Houston Constr. Co., 3102 McKinney Ave., (a) $25,865, (b) $14,251, (c) $26,768. Noted July 13.

Colorado—State Hy. Dept., Denver, gravel surfacing (1) 3.144 mi. road beginning 4 mi. east of Grand Junction and extending easterly toward Palisades, Federal Aid Project 208-A, (2) road beginning ½ mi. west of Granada and extending westerly 5.668 mi., Federal Aid Project 168-A, (3) road beginning at eastern city limits of Canon City and extending easterly through Florence 10.773 mi., Federal Aid Project 165; sand clay surfacing (4) 3.995 mi. road beginning 8½ mi. east of Peyton and extending easterly through Callien, Federal Aid Project 532; concrete paving (5) 2.938 mi. road beginning 1½ mi. east of Pueblo and extending east on Sante Fe Trail, Federal Aid Project 217, (6) 8.228 mi. road beginning north of Brighton and extending northward through Ft. Lupton toward Platteville, Federal Aid Project 226 A; rubble cement flume and culverts on (10) near Nighthawk and Blackhawk on State Highway 54, State Project 653, Gilpin Co., from F. L. Hoffman, Mining Exch. Bldg., Denver, (1) $30,587, (2) $37,579, (3) $65,488; W. B. Check, Box 187, Grand Junction, (1) $32,570; Standard Eng. Co., Ernest & Crammer Bldg., Denver (2) $36,573, (3) $69,291; W. A. Colt & Son, Las Animas, (2) $38,109; G. A. Allen, Morrison, (3) $63,343, (4) $16,173; E. Lindsey, 521 Chamber Commerce Bldg., Denver, (4) $15,739, (5) $85,605; Monaghan & Cunningham, 1710 Market St., Denver, (4) $16,704: Colorado Constr. Co., 802 Railroad Bldg., Denver, (5) $88,637; Orman Constr. Co., Pueblo, (5) $89,534; White & Johnson, 521 Chamber Commerce Bldg., Denver, (6) $219,212; Brodie & Anderson, Interstate Trust Bldg., Denver, (6) $221,800; Colorado Bridge & Constr. Co., Gas & Electric Bldg., Denver, (6) $225,191; Acme Bridge Co., 1319 Champa St., Denver, (7) $8,255; T. J. Hostetter, Littleton, (7) $8,499; J. Finger, Ft. Collins, (7) $8,814.

California—State Hy. Comn., Sacramento, grading and gravel surfacing 9.39 mi. highway between Hopland and El Robles, Mendocino Co., (1) 62,000 cu.yd. excav., (2) 5,350 cu.yd. gravel surface, (3) 80 cu.yd. Class A Portland cement concrete, culvert and monuments, from Murdock Bros., Oakland and Ukiah, (1) $0.825 per cu.yd., (2) $1.60, (3) $20, total $62,284; Frederickson & Shannon, Cory Bldg., Fresno, (1) $0.75, (2) $2.52, (3) $22.50, total $63,445; M. J. Lyons, San Francisco, (1) $0.85, (2) $2.50, (3) $20, total $69,382. Noted July 13.

Cal., Clovis—Improving De Witt and Pollasky Aves., 4th, 5th and 10th Sts., from Clark & Henery Constr. Co., 38 South Sutter St., Stockton, 159,713 sq.ft. 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete pavement at $0.229, 3,597 cu.yd. grading $1.37, 5,456 lin.ft. concrete gutter $0.75, 7,112 lin.ft. concrete curb $0.80, etc., total $64,402.

Cal., Marysville — Improving various street intersections from Warren Constr. Co., Bacon Bldg., Oakland, 7,424 sq.ft. 3½ in. warrenite bitulithic pavement at $0.218, 22,078 sq.ft. 4 in. bituminous base 1½ in. warrenite bitulithic surface $0.18, 29,502 sq.ft. grading $0.013, etc.

CONTRACTS AWARDED

Massachusetts—State Hy. Dept., Boston, constructing 4,350 ft. State Road, in Amesbury, 18 ft., 8,700 sq.yd. bituminous macadam, to J. E. Watkins, 1 Fern Ave., Amesbury, $26,592.

Mass., Westfield—Bd. Pub. Wks., paving 4,400 ft. Franklin St., 20 ft., rein.-con., bituminous macadam shoulders, to W. C. Tannatt, Jr., Easthampton, $33,517. Noted July 13.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, repaving roadway of Bway., from Kent to Bedford Aves., new granite blocks, to J. Meehan & Son, 74 Cortlandt St., New York, $43,372. Noted July 13.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading and paving Bell Ave., also setting curb on easterly side of Wainscott (Warburton) Ave., etc., to R. A. Hess, Corona, $45,701. Engrs. est. $50,000. Noted July 20.

N. Y., Long Island City—Park Bd., Municipal Bldg., New York, sidewalks along Woodhaven Ave. in Forest Park, Boro of Queens, to T. Di Rona, 33 Evelyn Pl., New York, $14,321.

N. Y., Niagara Falls—To Read-Coddington Eng. Co., 238 Portage Rd., concrete

Streets and Roads (Continued)

paving alleys, Contr. 249, $5,404; Contr. 255, $8,838; Contr. 256, $6,258; Contr. 257, $3,449. Noted June 29.

N. Y., Rochester—Asphalt paving (1) Edmonds St., (2) Evangeline St., (3) Webster St., (4) Hyde Park, asphalt resurface and widening (5) North Union St., cement walks on (6) Otis St., to J. Petrossi Co., Rochester, (1) $27,457, (3) $4,435; Whitmore, Rauber & Vicinus, 279 South Ave., (2) $12,759, (5) $21,397; Rochester Vulcanite Pavement Co., Rochester, (4) $10,531; W. Bailey Co., Rochester, (6) $1,452. Noted June 29.

N. J., Barnegat—Ocean Co., Court House, Toms River, constructing State Highway Route 4, Sect. 17, Main St., here, to Pub. Service Production Co., Terminal Bldg., Newark, 95.4% of engineers estimate or $43,932. Noted June 22.

N. J., Newton—Sussex Co., paving Fredon-Newton Rd., to Pub. Service Production Co., 80 Park Pl., Newark, $24,442. Branchville-Dingmans Rd., to C. T. Kavanagh, 32nd St., Bayonne, $49,652. Noted June 29.

N. J., Tuckerton—Ocean Co., Court House, Toms River, constructing State Highway Route 4, Sect. 18, here, cement concrete, to Pub. Service Production Co., Terminal Bldg., Newark, 1.0287% of engineers estimate or $59,924. Noted June 22.

Pa., Ebensburg—Cambria Co., 18,600 ft. Dunlo-Salix Highway, vitr. brick on concrete, to McClure & Bingler, Johnstown, $136,917, 1,330,000 bricks to Windber Clay Mfg. Co., Windber, $49,300; 4,000 ft. Park Hill Rd., East Taylor Twp., to J. S. Elder, Ebensburg, $32,299, 280,000 bricks to Windber Clay Mfg. Co., Windber, $10,800; 2,500 ft. Carrolltown Rd., to Gifford & Pritchard, Philipsburg, brick $23,483, concrete $17,638; 3,481 ft. Main St. in Nanty-Glo, to Owen & Plummer, Otto Bldg., Johnstown, $46,684.

Maryland—State Roads Comn., Baltimore, building state highway in Carroll Co., Contr. CL-39, to Thomas, Bennett & Hunter, Westminster, $55,444; in Frederick Co., Contr. F-55, to Bester-Long Co., 40 East Baltimore St., Hagerstown, $11,964; in Howard Co., Contr. HO-22, to Ward & O'Connell, New Amsterdam Bldg., Baltimore, $23,243; in St. Marys and Charles Co., Contrs. SM-17 and CH-24, to H. S. Swann, La Plata, $32,101; in Baltimore Co., Contr. B-52, to K. M. Livingstone, 135 F St. N. W., Wash., D. C., $33,267. Noted June 22.

W. Va., Ripley — Comrs. Jackson Co., grading road from Ripley to Union Dist. line, Project 3074 A, to C. E. Price, Huntington, $28,670. Noted July 13.

N. C., Graham—Comrs. Alamance Co., grading and concrete paving 4 mi. road, to Elliott, Sholes & Co., Durham, $97,700. Noted June 22.

South Carolina—Richland Co. Permanent Rds. Comn., at Room 31, Arcade Bldg., Columbia, grading and hard surfacing 15 mi. Two Notch Rd., Richland Co., to Chatham Paving Co., Savannah, Ga. $380,773. Noted July 20.

S. C., Columbia—Paving various streets, asphaltic concrete, to Powell Paving Co., Palmetto Bank Bldg., $2.05 per sq.yd., total $46,861. Noted July 20.

Fla., Quincy — Improving Jefferson, Roberts, King and Washington Sts., 21,800 sq.yd. asphaltic concrete on 4 in. rock, 16,075 lin.ft. concrete curb, 5,320 lin.ft. sewers, to W. P. Kennedy Constr. Co., King St., $77,582. Engrs. est. $80,000. Noted June 22.

La., New Orleans — Paving St. Claude Ave. to Inner Harbor Navigation Canal, incl. 6,500 sq.yd. concrete, to Dahlgren Constr. Co., Maison Blanche Bldg., $34,743.

Tennessee—State Hy. Dept., Nashville, paving 9.47 mi. road from Union City to Troy, Federal Aid Project 54, Obion Co., to Y. Y. Phillips, Martin, $254,548, bridges over 20 ft. span on above project to Estes-Williams-Ragsdale Co., Scim Bldg., Memphis, $26,450; surfacing 10.04 mi. road from Rockwood to Kingston, Federal Aid Project 85, Roane Co., to J. F. Marcum & Co., Knoxville, $277,309. Noted July 20.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving with brick, 10.297 mi. Sect. "C-1" Painesville-Warren Rd., Ashtabula Co., to T. P. Fitzgerald, Ashtabula, $299,077. Noted July 27.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties:

Hancock Co., Sect. "Arlington" Findlay-Kenton Rd., 0.362 mi., bituminous concrete, brick gutters, Thompson-O'Roark Co., Toledo, $30,598.

Hocking Co., Sect. "G-2" Logan-Lancaster Rd., 1.292 mi., brick, E. N. Turner, Logan, $51,360.

Hocking Co., Sect. "L" Logan-Lancaster Rd., 1.776 mi., brick, E. N. Turner, Logan, $71,300.

Muskingum Co., Sect. "R" Zanesville-McConnelsville Rd., 0.96 mi., grading and constructing drainage structures, Blodgett & Greiner, Zanesville, $11,228.

Tuscarawas Co., Sect. "New Comerstown" Uhrichsville-New Comerstown Rd., 0.63 mi., semi-mono brick, to W. M. Bode Co., Newcomerstown, $31,543. Noted July 27.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties:

Hardin Co., Sect. "L" Lima-Kenton Rd., 2.966 mi., bituminous concrete, oil, to Smith Constr. Co., Youngstown, $70,395.

Huron Co., Sect. "E" Barberton-Greenwich Rd., 4.124 mi., rein.-con., Rice & Rice, Shelby, $99,616.

Huron Co., Sect. "Greenwich" Barberton-Greenwich Rd., 0.1619 mi., rein.-con., Rice & Rice, Shelby, $3,961.

Lorain Co., Sect. "D" and "E" Cleveland-Elyria Rd., 6.230 mi., brick, M. A. Ryan, 870 Eddy Rd., Cleveland, $187,852.

Marion Co., Sect. "H" Marion-Galion Rd., 3.077 mi., bituminous macadam, asphalt, Malloy & Seckel, Marion, $93,947.

Marion Co., Sect. "K" Marion-Galion Rd., 3.481 mi., bituminous macadam asphalt, F. F. Walton, Upper Sandusky, $91,007.

Noble Co., Sect. "J" Caldwell-Marietta Rd., 3.257 mi., plain concrete, Gaty Constr. Co., Central Natl. Bank Bldg., Columbus, $146,948.

Ottawa Co., Sect. "L" Toledo-Elmore Rd., 0.992 mi., brick, H. G. Witte & Son, Elmore, $39,700.

Sandusky Co., Sect. "A" Toledo-Elmore Rd., 2.278 mi., brick, H. G. Witte & Son, Elmore, $96,558.

Scioto Co., Sect. "R-2-b" Ohio River Rd., 2.815 mi., mono-brick, Harper-Ruel Co., Portsmouth, $99,212.

Trumbull Co., Sect. "C" Painesville-Warren Rd., 2.62 mi., rein.-con., Mahoning Contr. Co., Warren, $85,534.

Trumbull Co., Sect. "Newton Falls" Ravenna-Warren Rd., 0.756 mi., brick, J. DeJute, Niles, $30,975.

Erie Co., Sect. "H" Cleveland-Sandusky Rd., constructing timber retaining wall, H. A. MacDonald, Norwalk, $4,335.

Mahoning Co., Sect. "V" Canfield-Poland Rd., 1.21 mi., resurfacing with bituminous macadam, tar, Smith Constr. Co., Youngstown, $22,304.

Athens Co., Sect. "E," "C" and "J" Logan-Athens Rd., reconstructing bridge over Sunday Creek, O. R. Couch, Kent, $13,732.

Wayne Co., Sect. "O" Wooster-Mansfield Rd., 3.395 mi., grading and constructing drainage structures, Stein & Geisel, Niles, $46,892.

Ottawa Co., Sect. "L" Toledo-Elmore Rd., constructing concrete bridge, H. G. Witte & Son, Elmore, $7,535.

Vinton Co., Sect. A" McArthur-Gallipolis Rd., 0.341 mi., constructing bridge, C. A. Lumsford, Logan, $6,768. Noted July 27.

Michigan — State Hy. Dept., Lansing, grading and surfacing 6.46 mi. Assessment Dist. Rd. 209, Bay, Saginaw and Tuscola Counties, to J. W. Ederer & Co., Saginaw, incl. 14,455 cu.yd. excav. $0.40, 288.4 cu.yd. 1:2:4 concrete $17, 508.8 cu.yd. 1:2½:5 concrete $16, 195.7 cu.yd. 1:3:6 concrete $15, 60,567 sq.yd. waterbound macadam $1.24, etc., total $108,126. Noted July 20.

Michigan—State Hy. Dept., Lansing, grading and gravel surfacing 9.299 mi. Assessment Dist. Rd. 6, Sects. A and B, to Smith & Eesley, Plainwell, $45,215; Sect. C, to Walker, Webster & Williams, Galesburg, $23,354.

Michigan—State Hy. Dept., Lansing, grading and surfacing 1.362 mi. State Trunk Line Rd. 36-3, Lapeer Co., 3,523 cu.yd. excav., 15,714 sq.yd. concrete, to Bartling & Dull, Pontiac, $25,737, plus state cement, $12,054.

Mich., Detroit—To Detroit Asphalt Paving Co., 20 McGraw Bldg., sheet asphalt paving on concrete, C St. from Vinewood to Hubbard Sts. $5,182, Elsemere Ave. from Fort to Chamberlain Sts. $19,128, 14th Ave. from Euclid to Clairmount Sts. $35,780, Frontenac Ave. from Harper to Strong Aves. $7,302, Jameson Ave. from McClellan to Pennsylvania Aves. $8,736, Lyman Ave. from Crystal to Russell Sts. $11,347, Sharon Ave. from point 889 ft. south of Michigan Ave. to Michigan Ave. $13,152; Cleveland Trinidad Paving Co., 402 Hammond Bldg., Fullerton Ave. from Pere Marquette R. R. to Linwood Ave. $17,411, Richton Ave. from Linwood to Dexter Aves. $38,930, Sturtevant Ave. from Linwood to Dexter Aves. $37,793, Waverly Ave. from 12th St. to lots 52 and 100 $11,440; G. R. Cooke, 1260 Penobscot Bldg., Rosedale Court, $19,735.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, concrete paving (1) 6.324 mi. Route 2, Sect. 50, Macon Co., (2) 3.644 mi. Route 3, Sect. 48, Greene Co., (3) 3.209 mi. Route 8, Sect. 14, Peoria Co., (4) 2.858 mi. Route 8, Sect. 15, Peoria Co., (5) 4.825 mi. Route 14, Sect. 9, Hamilton Co., (6) 4.616 mi. Route 17, Sect. [illegible], Marshall Co., (7) 4.128 mi. Route 37, Sect. 11, Franklin Co., (8) 4.599 mi. Route 37, Sect. 12, Franklin-Williamson Co., (9) 1.9 mi. Route 37, Sect. 13, Williamson Co., (10) 10.484 mi. Route 44, Sect. 18, Will Co., (11) 0.882 mi. Project 9, Sect. Y, Bond-Fayette Co., (12) 6.488 mi. Project 26, Sect. 16, McLean Co., (13) 5.175 mi. Project 26, Sect. 17, McLean Co., (14) 5.278 mi. Project 22, Sect. 18, McLean Co., (15) 3.141 mi. Project 27, Sect. 31, Woodford Co., (16) 5.277 mi. Project 27, Sect. 36, Tazewell Co., (17) 5.71 mi. Project 34, Sect. 26, Clinton Co., (18) 3.814 mi. Project 35, Sect. 17, Marion Co., (19) 3.682 mi. Project 35, Sect. 18, Clinton Co., (20) 4.81 mi. Project 40, Sect. 29, Hancock Co., (21) 5.033 mi. Project 41, Sect. 16, Winnebago Co., (22) 6.853 mi. Project 42, Sect. 161, Cook Co., (23) 0.302 mi. Project 8, Sect. V-4, Macoupin Co.; grading (24) 137,120 cu.yd. Route 3, Sect. 58-A, Greene Co., (25) 6,400 cu.yd. Project 2, Sect. 11, Will Co., (26) 66,590 cu.yd. Project 34, Sect. 27-A, Clinton Co., (27) 42,420 cu.yd. Project 37, Sect. 22-A, Clinton Co., (28) 34,900 cu.yd. Project 39, Sect. 1-A, Carroll Co., (29) $17,375 cu.yd., Project 39, Sect. 2A, Carroll Co., to

McMahon Constr. Co., Rochester, Ind., (1) $159,902.

J. Kesl, Edwardsville, (2) $94,404, (17) $153,559.

McElwee & Ragy, Peoria, (3) and (4) $176,926.

C. J. Moritz, Effingham, (5) $140,973, (10) $271,321, (11) $33,770 (pending).

Jaicks Bros., 232 East Pearson St., Chicago, (6) $133,648.

Cole & Fauber, Marion, (7) $111,234, (8) $132,199, (9) $50,856.

Cameron & Joyce, Keokuk, Ia., (12), (13) and (14) combined $472,818, (15) $86,011.

Keokuk Quarry and Constr. Co., Keokuk, Ia., (20) $130,336.

J. W. Etchison Cc., Casey, (18) and (19) $187,352.

Milburn Bros., Rockford, (21) $134,572.

A. Ward & Sons, Oak Glen, (22) $228,552.

A. M. Boatman, Carlinville, (23) $9,165.

C. M. Hanes, Jerseyville, (24) $36,082.

J. M. Pearson & Co., 1622 Ralsted St., Chicago Heights, (25) $5,509.

B. Keffmeyer, Carlyle, (26) $19,210.

Kertung Bros., Auburn, (27) $10,532.

Lord & Talbot, Monmouth, (28) and (29) $24,117. Noted Aug. 3.

Wis., Shullsburg — Paving Main and Water Sts., 1 course rein.-con., concrete curb and gutter, to J. J. Leonard, 3rd and Main Sts., Dubuque, Ia., $25,000. Noted Jan. 12.

Wis., Watertown—Paving 1 mi. various streets, 1 course rein.-con., concrete curb and gutter, to Lehmann Bros. Co., 900 8th St., $29,272. Engrs. est. $30,000. Noted July 13.

Ind., Crown Point—Paving 26,400 ft. Gleason Rd., 16 ft., 46,904 sq.yd. concrete on concrete, to J. C. Sunderman, 2360 Connecticut St., Gary, $220,374. Engrs. est. $240,000.

Ind., Warsaw—Kosciusko Co., 15,858 ft. S. S. Eiler Rd., 16 ft., 28,042 sq.yd. concrete on concrete, to E. A. Gast, Warsaw, $67,500. Engrs. est. $98,000.

Minn., Chisholm—Paving 12 blocks, one-course rein.-con., to Winslow & Co., Chisholm, $40,500.

Minn., Waseca—Waseca Co., 9 mi. State Rd. 5, Job 2201, 11,880 cu.yd. gravel surfacing, to C. F. Sculley Equipment Co., 300 Dakota Bldg., St Paul, $13,434. Bids rejected on Job 2205, new bids called. See "Bids Desired." Noted July 6.

New Mexico—State Hy. Comn., Santa Fe, grading and building structures on 10.59 mi. Silver City-Cliff Rd., Grant Co., 8.05 mi. Santa Rita-Lorenzo Rd., Grant Co.; grading, surfacing and building structures on 9.32 mi. Pecos-Rowe Rd., San Miguel Co., 4.84 mi. Las Cruces-Berino Rd., Dona Ana Co., 16.42 mi. Laguna-Cubera Rd., Valencia Co., to Lee Moor Contg. Co., 204 Two Republics Bldg., El Paso, Tex., $94,908. Noted June 8.

Idaho—Comr. Pub. Wks., Boise, grading and crushed rock surfacing 7.78 mi. Idaho Pacific Highway, Sect. A, Federal Aid Project 60, Bannock Co., to W. Devlin, Mountain Home, $46,565. Noted July 6.

Wash., Tacoma—Pierce Co. clearing, etc., 4.8 mi. Gig Harbor-Long Branch Highway, 15½ acres clearing, 4,600 yd. of 100 ft. overhaul, 6,400 yd. gravel surfacing, 1,896 ft. 12 and 18 in. concrete pipe, 8 acres

Streets and Roads (Continued)

grubbing, to Sweeney & Holz, Tacoma, $25,888. Engrs. est. $26,000.

Wash., Waterville—Douglas Co., grading and graveling 3 mi. Permanent Highway No. 10, Bridgeport to Mansfield, to Mohr Constr. Co., Waterville, $37,602. Engrs. est. $40,000.

California—State Hy. Dept., Sacramento, paving with bituminous macadam 16.68 mi. road from Auburn to ¾ mi. north of Colfax, Placer Co., to C. H. and A. W. Gerrill, Bacon Bldg., Oakland, $408,954. Noted July 27.

Cal., Fresno—To Thompson Bros., G and Divisadero Sts., improving Echo Ave. between Olive and Pine Sts., 63,576 sq.ft. grading, 57,470 sq.ft. asphaltic pavement, 3,326 lin.ft. concrete curbs, 16,593 sq.ft. concrete walks, 6,106 sq.ft. concrete gutter, etc., $25,532; Peralta Way between Lucerne Lane and Van Ness Blvd., Moroa Ave. between University and point 150 ft. south of Peralta Way, 70,645 sq.ft. grading, 61,060 sq.ft. asphaltic pavement, 6,145 sq.ft. concrete gutter, 1,760 lin.ft. concrete curb, 2,703 sq.ft. concrete walks, etc., $21,039. Noted June 22 and July 6.

Cal., Lodi—Improving Sacramento St., to Clark & Henery Constr. Co., 38 South Sutter St., Stockton, 49,682 sq.ft. 1½ in. warrenite bitulithic on 2½ in. asphaltic concrete at $0.185 per sq.ft., 55,125 sq.ft. grading $0.02, 3,110 lin.ft. concrete surb $0.26, 3,887 sq.ft. concrete gutter $0.50. Noted June 29.

Cal., Modesto—To Standard Paving Co., 1411 9th St., improving Kimble St., 97,984 sq.ft. grading, 90,272 sq.ft. 1½ in. warrenite bitulithic on 2½ in. asphaltio concrete, 7,687 sq.ft. concrete gutter, 5,037 lin.ft. concrete curb, etc., $27,945; Sycamore Ave., 37,728 sq.ft. grading, 34,832 sq.ft. 1½ in. warrenite bitulithic on 2½ in. asphaltic concrete, 1924 lin.ft. concrete curb, 2,896 sq. ft. concrete gutter, etc., $11,735.

Cal., Yuba City—**Supervs.** Sutter Co., resurfacing present oil macadam roads with E grade asphalt and crushed rock, to M. F. Sullivan, 1215 26th St., Sacramento, 1 mi. Nicolaus-Feather River Rd. $1,470, 5.42 mi. Live Oak-Pennington Rd., $6,540, 12.53 mi. road from Trowbridge to Riego $19,700; surfacing following roads to Heafey-Moore-McNair, 2030 High St., Oakland, 2 mi. O'Banion Corners Lateral $8,640; 2.12 mi. Oswald Lateral $9,120; to M. C. Hillard, 2500 Q St., Sacramento, grading 1.2 mi. Live Oak-Pennington Rd. from 9 mi. west of Stafford to north end of Hagama Pl. $5,850. Noted June 22.

Ont., Cornwall—Glengarry Co., 1½ mi. Rd. 16; waterbound macadam, to Clothier & Grenon, Casselman, $1.50 per cu.yd.

Que., Montreal—To B. Brault, Ltd., Bleury St., asphalt pavements on Des Erables St. $21,361, St. Donat St. $15,627, incl, cement sidewalks; Quinlan, Robertson & Janin Ltd., 50 Notre Dame St., asphalt pavement on Monkland St. from Walkeley to Montclair Aves. $3,572, cement sidewalks $646, sidewalks on Monkland St. from Melrose to Grand Blvd. $4,305; F. Lapau, 601 Lacordaire St., sidewalks on Des Carrieres St. $2,938. Noted Aug. 3.

Industrial Works

PROPOSED WORK

Conn., Bridgeport—Chamber of Commerce, Court Exchange Bldg., having sketches made by Fletcher-Thompson, Inc., engrs. and archts., 542 Fairfield Ave., 5 story 60 x 130 ft. industrial "incubator" building, West End. $250,000.

Conn., Bridgeport—General Warehousing Co., 1337 Seaview Ave., having plans prepared by W. Schmidt, archt., 1188 Main St., 2 story, rein.-con. addition to warehouse, also smaller building. $60,000.

N. Y., Buffalo—Office—Hotel Statler Co., Inc., Hotel Statler, Washington and Swan Sts., having preliminary sketches made by H. J. Cook, archt., 408 Pearl St., converting Iroquois Hotel, (10 story, 99 x 200 ft.), into office and bank building. Cost to exceed $200,000.

N. Y., Jamestown—Niagara, Lockport & Ontario Power Co., Hinman Rd., Lockport, plans power plant, 20 mi. transmission line from Athol Springs to Dunkirk, double 50 mi. circuit transmission line from Dunkirk to Falconer, 30 mi. line from Athol Springs to Westfield. $942,626.

N. Y., Jamestown—Western New York Electric Co., 316 North Main St., plans to increase capacity of Washington St. substation, transformer and frequency station at Falconer, (suburb of Jamestown), and high powered insulation lines throughout Chautauqua Co. $453,886.

N. Y., New York—O. K. Building Corp., c/o J. De Hart, archt. and engr., 1939 Fox St., having plans prepared 1 story, 110 x 135 ft., rein.-con., brick and steel garage, Bryant Ave. and 161st St. $50,000.

N. Y., New York—Republic Storage Warehouse, 45th St. and 12th Ave., soon lets contract brick, steel and concrete warehouse. $200,000. R. G. Cory, 30 Church St., archt. and engr.

N. Y., Rochester—Powertown Tire Corp., Ridgeway Ave., plans 40 x 125 ft. service station and salesroom, on East Ave. $40,000. Architect not announced.

Pa., Freedom—Freedom Oil Wks. having plans prepared by J. E. Martsolf, archt., 513-3rd Ave., New Brighton, 2 story, 48 x 75 ft., rein.-con., brick and steel addition to garage and repair shop, here.

Pa., Monessen—S. S. Jones, 30 6th St., Belle Vernon, soon lets contract 2 story, 64 x 99 ft. rein.-con. and brick garage, Donner Ave. and 9th St. Austin Co., Union Arcade, Pittsburgh, archts. and engrs.

Pa., Oil City—Citizens Light & Power Co., plans additions and improvements to power plant and system. $95,000.

Pa., Williamsport — Williamsport Bldg. Product Co., c/o E. Dittmar, archt., 1603 Erie Ave., had plans prepared 1 story, 57 x 160 ft. factory. To exceed $40,000.

W. Va., Beckley — Raleigh Motor Co. having plans prepared by H. M. Miller, archt., Roanoke, Va., 3 story, 49 x 146 ft., brick and steel garage, East Main St. $60,000.

W. Va., Wheeling—Greer & Laing Hardware Co., 1215 Main St., plans 5 story, 89 x 138 ft., concrete, brick and tile warehouse and store, 1327 Main St. $150,000.

W. Va., Wheeling—McGraw Co., Bellaire, O., having plans prepared by Ford Motor Co. Architectural Dept., Highland Park, Detroit, Mich., 2 story, 85 x 125 ft., brick and stone, garage, 2011 Main St., here.

Ala., Magazine—Alabama Saw Mills plans to rebuild portion of plant, recently destroyed by fire. $50,000. Architect not announced.

La., Alexandria—Soon takes bids constructing gas plant and distributing system. $110,000 bonds voted for project. V. M. Ake, clk.

Ky., Summit—Pittsburgh Brick & Tile Co., c/o S. S. Willis, Ashland, plans brick plant, here. $200,000. Architect not announced.

O., Cleveland—D. Round & Son, Shop 3, Bway., had plans prepared by H. W. Maurer, archt., Schofield Bldg., 2 story, 52 x 275 ft., brick and steel foundry and shop. $50,000.

O., Cleveland Height (Warrenville, P. O.)—W. Van Bergan, Stop 14, Mayfield Rd., Cleveland, had plans prepared 1 story, 74 x 109 ft., brick and steel garage, plain foundation, 2204 Lee Rd., here. $45,000. Private plans.

O., Columbus—Clark Show Case Co., 31 West Chestnut St., having plans prepared 4 story, 40 x 120 ft. factory, Naghten St. $80,000. Private plans.

O., Youngstown—Penn-Ohio Power & Light Co., 2521 East Boardman St., making plans brick and steel sub-station, 8,000 h.p., Market St. Extension.

Ind., Connersville—Hydro-Electric Light and Power Co., plans to extend and improve its plant and various lines. $200,000. Engineer not announced.

Ind., Hartford City—Paramount Wheel & Engineering Co. plans 1 story, brick and steel factory. $100,000. Architect not selected, probably private plans.

Ind., Indianapolis—United Brotherhood of Carpenters and Joiners of America, 222 East Michigan St., plans 3 story, brick printing plant, East Michigan St. $100,000. Architect not selected.

Ind., Indianapolis—Gem Laundry Co., 241 Indiana Ave., having plans prepared by W. H. Albersmeier, archt., 508 Rauh Bldg., 2 story, 67 x 202 ft. brick laundry, North Senate Ave. $40,000.

Ill., Chicago — Chicago Butchers Calf Skin Assn., Inc., 205 Milwaukee Ave., had plans prepared by H. C. Christensen, archt., 7256 Union Ave., 3 story, 24 x 140 ft., fertilizer plant, rein.-con., brick and steel, 3208 South Robey St., $50,000.

Wis., Appleton — Hermann Motor Co., 680 College Ave., plans 2 story, 80 x 80 ft., garage and repair shop, brick, plain foundation, College Ave. $40,000. Architect not selected.

Wis., Appleton—Valley Dairy Co. plans 2 story, 60 x 100 ft. dairy, brick, rein.-con. and steel, plain foundation. $50,000. Architect not selected.

Wis., Black Earth—R. A. Hermann plans 1 story, 50 x 70 ft. garage and repair shop, brick and rein.-con., plain foundation, Main St. $40,000. Architect not selected.

Wis., Eagle River—Strong & Manley had plans prepared 1 story, 120 x 130 ft., brick and concrete garage, plain foundation. $45,000. Private plans.

Wis., Fredonia—Gilson Bros. plan 1 story, 36 x 120 ft., concrete and steel foundry. $45,000. Architect not selected.

Wis., Green Bay—Northern Paper Mills Co., c/o K. McNaughton, purch. agt., Madison and Day Sts., plans 2 story, 70 x 200 ft. unit to paper mill, brick, rein.-con. and steel, plain foundation. $100,000. Architect not selected.

Wis., Madison—J. Feldman Paper Box Co., 515 Regent St., having plans prepared by J. R. and E. J. Law, archts., Strand Theatre, 1 story, 60 x 182 ft., brick, rein.-con. and steel factory, Charter St. $100,000.

Wis., Milwaukee — Standard Victoria Steam Laundry, 69 Ogden Ave., rejected bids 2 story, 40 x 114 ft. laundry addition, brick and concrete or mill construction, plain foundation. Will readvertise. Lesser & Schutte, 82 Wisconsin St., archts.

Wis., Rosendale—Central Wisconsin Canning Co., having plans prepared 2 story canning plant, incl. main building, warehouse and viner, brick and timber, plain foundation. $100,000. J. R. Hatch, Rosendale, secy. Private plans.

Minn., Minneapolis—City plans 2 story warehouse, shops, etc., 5th St. and East Hennepin Ave. $60,000. W. R. Young, Water Dept., City Hall, registrar. Architect not selected.

Wyo., Casper—Fargo Oil Co. plans gasoline compression plant, in Poison Spider Oil Field, near here. $100,000. Casper Supply Co., Casper, engrs.

Okla., Oklahoma City—Apco Refining Co., Colcord Bldg., plans refining, 700 bbl. daily capacity. $50,000. Architect not announced.

Cal., Los Angeles—See "Railways."

Cal., Oakland—Chevrolet Motor Co. of California, 69th Ave. and Foothill Blvd., had plans prepared addition to plant. $150,000. Architects name withheld.

Cal., Oakland—See "Buildings."

Cal., San Francisco—L. R. Lurie, Flat-iron Bldg., plans 1 story, 92 x 200 ft., rein.-con. warehouse, 19th and Harrison Sts. Architect not selected.

N. B., St. Johns—Nasgwak Paper Mills, Ltd., plans addition to plant, increasing capacity from 60-80 ton per day. $500,000. Engineer not announced.

Ont., Welland—S. L. Lambert plans to rebuild planing mill recently destroyed by fire. $40,000.

Mex., Tampico—Pierce Oil Corp. having plans prepared rebuilding portion refinery recently destroyed by fire. $100,000. Architect not announced.

BIDS DESIRED

Pa., Munhall—Miller Motor Co., 228 West 7th Ave., Homestead, taking bids 2 story, 74 x 108 ft., concrete, brick, steel and stone garage, 8th Ave. $40,000. J. E. Dwyer, 5808 Forbes St., Pittsburgh, archt.

Pa., Phila.—Breyer-Sharpless Milk Co., 9th and Cumberland Sts., taking bids 2 story, 70 x 120 ft. dairy, and 1 story, 92 x 106 ft. wagon and motor building, brick and steel, plain foundations, 3325 York Rd. $100,000.

Pa., Lancaster—E. A. Wilson, archt., 1208 Chestnut St., taking bids 3 story, 80 x 176 ft. rein.-con. and steel factory, plain foundation, for Bayuk Bros., 3rd and Spruce Sts. $70,000.

Wis., La Crosse—Nelson Garment Co., 111 South 2nd St., taking bids 2 story, 92 x 160 ft., brick, rein.-con. and steel, factory, plain foundation, Cameron St. $60,000. O. J. Sorenson, 216 Main St., archt.

Wis., Milwaukee—Byrne Bros. Co., 3112 Burleigh St., taking bids and opens same about Aug. 14, 1 story, 58 x 180 ft., concrete garage, plain foundation, Kinnickinnic Ave. $40,000. Private plans.

Wis., Nennah—Jaeger-Dowling Co., 214 South Commercial St., taking bids and opens same about Aug. 14, 1 story, 75 x 120 ft., brick, tile and concrete garage plain foundation, North Commercial St. $45,000. Private plans.

Wis., Racine—Wisconsin Gas & Electric Co., 305 6th St., taking bids 1 story, 50 x 95 ft., addition to gas plant, rein.-con., steel and brick, plain foundation. $40,000. Private plans.

BIDS RECEIVED

Cal., Oakland—Oakland Tribune, 13th and Franklin Sts., 18 story, plant and office building, 13th and Franklin Sts., concrete work from Schuler & MacDonald, 308

Industrial Works (**Continued**)

12th St., $85,000; F. E. Nelson, c/o Builders Exchange, $89,800; R. W. Littlefield, 351 12th St., $97,000. Contract for structural steel awarded to Dyer Bros., 17th and Kansas Sts., San Francisco. Receiving bids for 175 ton reinforcing steel bars. Noted June 8.

CONTRACTS AWARDED

Mass., Fall River—Amer. Thread Co., Kerr Mills, foot of Kerr St., 2 story, brick and timber factory addition, containing 54,000 sq.ft. floor space, to Aberthaw Constr. Co., 27 School St., Boston, $125,000.

Mass., Palmer—M. J. Whittall and associates, Brussels St., Worcester, will build 2 story, 70 x 210 ft. mill addition, and 1 story storage building, both brick and timber, also rein.-con. coal pockets, by day labor. $80,000. Private plans.

Conn., Branford—Military Emergency Bd., State Armory, Hartford, 1 story, 85 x 150 ft. brick and steel mechanical building, adjoining state armory, here, to Connor & Haggerty, Inc., 172 Norton St., New Haven. Archts. est. $40,000. Noted July 13.

Conn., Danbury—Mallory Hat Co., River and Beaver Sts., 6 story, 40 x 60 ft. and 3 story, 60 x 160 ft. rein.-con. factory, to Aberthaw Constr. Co., 27 School St., Boston, $100,000.

N. Y., Elmira—Elmira Water, Light and R.R. Co., addition to gas plant incl. gas holder, 95 ft. high, 125 ft. diameter, concrete foundation, 1,000,000 cu.ft. capacity, Madison Ave., holder to Stacey Bros. Gas Constr. Co., 5535 Carthage Pike, Cincinnati, O.; all other work to Gas Mchy. Co., 1900 Euclid Ave., Cleveland, O. Engrs. est. $350,000. Noted July 27.

N. Y., New York—S. Hirschorn, c/o F. S. Parker, archt. and engr., 44 Court St., Brooklyn, 3 story, rein.-con., brick and steel factory, Southern Blvd. and 140th St., to Ettinger Contg. Co., 44 Court St., Brooklyn. Archts. est. $100,000.

N. Y., New York—G. A. Whalen, comr. Plants & Structures, Municipal Bldg., housing station 132nd St. west of Willow Ave. Bronx, to Lustig & Weil, 103 Park Ave., for Dept. Street Cleaning. $70,047. Noted July 20.

N. Y., Rochester—Gallagher Motor Co., Inc., 72 x 159 ft., brick and steel garage and salesroom, 32 ft. high, Monroe Ave., to H. Stallmans Sons Co., Arlington Bldg. Archts. est. $50,000. Noted July 13.

N. J., Camden—C. W. Brennan, 1306 Sansom St., Phila., 4 story, 40 x 200 ft. rein.-con. and brick factory, plain foundation, 6th and Jefferson Sts., to F. H. Smith, 1035 Reibold Bldg., Dayton, O.

Pa., Bellevue—Duquesne Light Co., 435 6th Ave., Pittsburgh, sub-station, Maryland and Forest Aves., to D. P. Robinson, 125 East 46th St., New York. Engrs. est. $300,000.

Pa., Phila.—A. H. Fox Gun Co., 18th and Windrim Sts., 1 story, 100 x 100 ft. brick and steel factory, plain foundation, to Austin Co., Bulletin Bldg.

Pa., Pittsburgh—Duquesne Light Co., 435 6th Ave., sub-station, Sandusky and North Diamond Sts., to D. P. Robinson Co., 125 East 46th St., New York. Engrs. est. $300,000.

Pa., Wilkinsburg—Duquesne Light Co., 435 6th Ave., Pittsburgh, sub-station, Penn and Swissvale Aves., to D. P. Robinson Co., 125 East 46th St., New York. Engrs. est. $300,000.

W. Va., Montgomery—Coal Valley Machine & Electric Mine Car Co., 1 story, 50 x 100 ft. plant, to C. H. Williamson & Co., Montgomery.

S. C., Greenville—Judson Mills, Judson Village, addition to cotton warehouse, 15,000 sq.ft. floor space, to Gallivan Building Co., West Washington St.

S. C., Greenville—Norris Bros., Inc., Birnie St., 2 story, 40 x 128 ft. factory, to Gallivan Building Co., West Washington St.

Ind., Hammond—Calumet Baking Co., bakery addition, to J. W. Reed, Hammond. Archts. est. $50,000.

Ill., Chicago—S. Malty c/o Dubin & Eisenberg, archts., 19 West Washington St., 1 story, 125 x 200 ft., rein.-con., brick and steel garage, Taylor St. and Independence Blvd., to Lepavsky & Kout, 1330 South Lawndale Ave. Archts. est. $60,000.

Wis., Eau Claire—Dells Paper & Pulp Co., Dells Dam, 1 story, 40 x 70 ft., brick, concrete and steel power house, plain foundation, to C. R. Meyer & Sons Co., 50 State St., Oshkosh. Engrs. est. $70,000.

Wis., Milwaukee—Edwards Motor Car Co., 2713 Grand Ave., 2 story, 108 x 200 ft., brick and concrete garage, plain foundation, Grand Ave. and 36th St., to Coddington Eng. Corp., 290 3rd St. Engrs. est. $100,000.

Wis., Milwaukee—M. Froehlig, 779 6th St., 1 story, 50 x 125 ft., brick and concrete garage, plain foundation, Center and 29th Sts., to Constr. Service Corp., 848 3rd St. Engrs. est. $40,000.

Wis., Milwaukee — Holeproof Hosiery Co., 404 Fowler St., 4 story, 64 x 64 ft., addition to textile mill, rein.con. and brick, plain foundation, to Dahlman Constr. Co., 456 Bway. Engrs. est. $60,000.

Wis., Milwaukee—Harley-Davidson Motor Co., 3732 Chestnut St., structural steel for 1 story, 74 x 128 ft. factory addition, brick and steel, plain foundation, Chestnut St., to Worden-Allen Co., Port Washington Rd., Federal Eng. Co., engrs., 444 Milwaukee St., preparing plans for balance of work. Engrs. est $40,000.

Wis., Milwaukee—Pittsburgh Plate Glass Co., 213 Lake St., 5 story, 86 x 140 ft. laboratory and storage building, rein.-con. and brick, plain foundation, Lake and South Water Sts., to Dahlman Constr. Co., 456 Bway. Engrs. est $225,000. Noted July 13.

Wis., Wausau—Marathon Motor Car Co., 210 McClellan St., 4 story, 60 x 120 ft., addition to garage, rein.-con. and brick, plain foundation, to F. Seefeldt, 612 Fulton St. Engrs. est. $80,000.

Cal., Sacramento—Crane Co., 4 story, rein.-con. warehouse, Front and M Sts., general contract to McGillivray Constr. Co., Capitol Natl. Bank Bldg., $136,800. Noted July 27.

Cal., Turlock—Hunt-Jewett-Bontz Co., (California Sweet Potato Corp.), 1 and 4 story alcohol and vinegar plant, brick and rein.-con., South 1st St., to O. Krenz Copper & Brass Wks., 812 Bryant St., San Francisco, $180,000.

Ont., St. Marys—Hurlbut Shoe Co., 3 story, 50 x 60 ft. rein.-con. and steel factory, Cadzow Park, to J. Patterson, Queen St. Archts. est. $65,000. Noted June 8.

Buildings

PROPOSED WORK

Mass., Fall River—High School—School Bd. having plans prepared by N. S. Chase, archt., 583 Center St., and R. C. Sturgis, associated archt., 100 Boylston St., Boston, 3 story, North Park Distr. $400,000.

Mass., Somerville — High School — Bd. School Comrs. having plans prepared by Ritchie, Parsons & Taylor, archts., 15 Ashburton Pl., Boston, 3 story brick and steel, in western section. $800,000.

Conn., Norwalk—Theatre, etc.—J. Tracy, 274 Main St., having plans prepared by Fletcher-Thompson, Inc., archts. and engrs., 542 Fairfield Ave., Bridgeport, 2 story, 80 x 125 ft., brick and steel, Main St. $150,000.

Conn., Winsted—School—Boro having preliminary sketches made by I. A. Allen, Jr., Inc., archts., 100 Farmington Ave., Hartford, 2 story, brick. $200,000. Noted July 27.

N. Y., Amityville—School—Bd. Educ. plans brick, steel and stone school. $200,000.

N. Y., Brooklyn—High School—Bd. Educ., 500 Park Ave., New York, having plans prepared by C. B. J. Snyder, archt. and engr., Concord St., brick, steel and stone high school, Clason Ave. and Eastern Parkway, here. $450,000.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, having sketches made by C. B. J. Snyder, archt. and engr., Concord St., for P. S. 177, brick, steel and stone, Ave. P and Dahill Rd., here. $500,000.

N. Y., New York—Museum—Park Bd., Municipal Bldg., rejected bids opened July 20, new wing to be known as southeast wing and court building known as Hall of Ocean Life. Will readvertise. Noted July 6.

N. Y., New York—School—Bd. Educ., 500 Park Ave., having plans prepared by C. B. J. Snyder, archt. and engr., Concord St., Brooklyn, 5 story, brick, steel and stone, 126 East 105th St. $625,000.

N. Y., Rochester—Research Laboratory—University of Rochester, School of Medicine, plans 2 story, 101 x 107 ft. rein.-con. and red brick, Elmwood Ave. To exceed $150,000. Architect not announced.

N. J., Hightstown—Administration—Peddie Institute plans administration building. $200,000. R. W. Swetland, head master. Architect not selected.

Pa., Altoona—School—J. Millard, archt., Hutchison Bldg., Altoona, takes bids about Aug. 15, 3 story, 224 x 232 ft. rein.-con. and steel, for Bd. Educ.

Pa., Brackenridge—High School—Bd. Educ. Harrison Twp., plans high school and athletic field. $245,000. J. H. Phillips, P. O. Box 977, Pittsburgh, archt.

Pa., Charleroi—School—Bd. Educ. having plans prepared by J. C. Brenton, archt., Charleroi, 2 story, 100 x 200 ft., [illegible] and Meadow Sts. $175,000.

Pa., Easton—High School—Bd. Educ. having revised plans prepared by W. M. Michler and J. M. Snyder, archts., Easton, 2 story, brick school, 12th and Northampton Sts. $200,000. Noted March 30.

Pa., Monongahela—High School—School Bd. having plans prepared by W. G. Eckles, archt., New Castle, 2 story, brick and steel. $250,000.

Pa., Mt. Airy (Phila. P. O.)—Seminary—Lutheran Theological Seminary, 7301 Germantown Ave., plans 1 and 2 story. $250,000. Day & Klauder, Franklin Bank Bldg., Phila., archts.

Pa., Phila.—Bank—Corn Exch. Natl. Bank, 1510 Chestnut St., soon takes bids 6 story, 40 x 138 ft. brick, steel and marble. $1,500,000. A. H. Brokie, 254 South 15th St., archt.

Pa., Phila.—Office—Chestnut St. Realty Co., c/o Ritter & Shay, archts., North Amer. Bldg., soon takes bids 24 story, 72 x 230 ft. limestone, 15th and Chestnut Sts. $5,000,000.

Pa., Pittsburgh—Home—Salvation Army, 324 Diamond St., plans 7 story, 60 x 75 x 120 ft. Cherry Way, 2nd and 3rd Aves. $500,000. Architect not selected.

Pa., Pittsburgh—Office—Chinese Pittsburgh Merchants Assn. plans 5 story, 100 x 120 ft., stone, steel and concrete, 4th Ave. $150,000. L. Sing, pres. Architect not selected.

Pa., Pittsburgh—Restaurant, Cafeteria and Office—Fosters Restaurant and Cafeteria, 324-8 Diamond St., plans 4 story, brick and terra cotta, Diamond St. and Cherry Way. $200,000. E. P. Mellon, 52 Vanderbilt Ave., New York City, archt.

Pa., Vandergrift—High School—School Dist. having revised plans prepared by W. G. Eckles, archt., New Castle, 2 story, brick and stone. $155,000. Former bids rejected. Noted July 13.

Pa., Wilkinsburg — Apartment-Hotel — Wilkinsburg-Plaza Hotel Corp., c/o A. A. Rockoff, 323 South Ave., plans 9 story, Penn and Hays Sts. $800,000. Architect not selected.

Va., Norfolk—Apartment—Garden Terrace Corp. had plans prepared by H. W. Simpson, archt. Bd. Trust Bldg., brick, stone and terra cotta, Armstead Bridge Rd., Baldwin Ave. and West Ghent Blvd. $200,000.

Va., Richmond—Temple—C. L. Williams, chn. Building com. of Acca Temple, A. A. O. N. O. M. S., soon takes bids 5 story, Main and Laurel Sts. $1,000,000. M. E. Wright, Amer. Natl. Bk. Bldg., Richmond, archt.

N. C., Gastonia—Schools—Voted $150,000 bonds for 2 schools.

La., Gretna—Schools—Jefferson Parish having plans prepared by E. Weil, archt., Whitney Bldg., New Orleans, for 2 grammar schools, $142,000, also having plans prepared by W. T. Nolan, archt., Canal Commercial Bldg., New Orleans, 3 high schools, brick and joist construction. $230,000.

Tenn., Knoxville — Apartment — General Building & Finance Co., having plans prepared by Barber & McMurry, archts. and engrs., Burwell Bldg., 2, 3 and 4 story, 100 x 169 ft., West Clinch St. $175,000.

O., Dayton—Church—Second Church of Christ Scientist, having plans prepared by Schenck & Williams, archts., 908 Mutual Home Bldg., 2 story, 74 x 175 ft. brick and stone, plain foundation, Grand Ave. $182,000.

O., Lakewood (Cleveland P. O.)—Church and School—St. Lukes Catholic Parish, Warren Rd., plans 2 story, concrete, brick and steel, Clifton Blvd. $250,000. J. A. Nolan, pastor. Architect not selected.

O., Marion—Lodge—Knights of Columbus having plans prepared modern fireproof construction. $150,000. Architect not announced.

O., Rocky River—Commercial, Theatre and Apartment—N. T. Bishop, Frazier Dr., having plans prepared by A. W. Harris, archt., Cleveland Discount Bldg., Cleveland, 5 story, brick, steel and concrete, Detroit Rd. and Blount Ave. $300,000.

Ind., Anderson—School—Bd. Educ. plans 2 wing addition to school, 2 story, 44 x 110 ft. brick $150,000. E. R. Watkins, 441 Union Bldg., archt.

Ind., Bloomington — Apartment — Tibbs-Bose Realty Co., Amer. Central Life Bldg., Indianapolis, plans 3 story, brick and stone. $175,000. Architect not selected.

Ind., Bloomington—Theatre—H. L. Vondersmith, Washington, having plans prepared by Shrouds-Stoner & Co., archts.,

BRIDGE—CLARKSVILLE, TENN.

Following are lowest three bids opened July 14 by State Highway Dept., Nashville, for constructing bridge over Cumberland River near Clarksville, Cumberland Co., (A) Gould Contg. Co., Nashville, (awarded contract); (B) Henley Constr. Co., Louisville, Ind.; (C) Foste & Creighton, Nashville. The unit bids were as follows:

	A	B	C
2,650 cu.yd. dry excavation	$2 00	$2 25	$5 00
1,854 cu.yd. wet excavation	16 00	12 50	25 00
4 cu.yd. rock excavation	20 00	14 00	25 00
3,975 lin.ft. timber piles treated	65	70	.25
3,816 lin.ft. penetration of timber piles treated	40	1 00	.75
150.37 cu.yd. special concrete	40 00	50 00	39 00
3,035.64 cu.yd. class A concrete	23 50	22 00	24 00
3,018.48 cu.yd. class B concrete	19 20	22 00	18 00
369,907 lb. deformed steel bars	05	05	05
5,520 lb. fabricated structural steel	07	08½	06
1,987 lb. steel castings	10	08½	[illegible]
1,340 sq.yd. rock asphalt surface 2½ in.	2 50	3 00	2 00
Extended totals	$196,892	$199,655	$220,261

ROAD WORK—ARIZONA

Following are lowest three bids opened July 6 by Arizona Highway Dept., Phoenix, for constructing 5.1929 Federal Aid Project No. 3, Florence-Superior Highway, Sect. F, (A) Goodman & Merrill, St. David; (B) M. Ryan, Superior; (C) O. C. McElrath Constr. Co., Mesa. The unit bids were as follows:

	A	B	C
14,786 cu.yd. roadway excavation, unclassified	$0 65	$0 84	$0 80
12,893 cu.yd. borrow excavation, unclassified	35	40	50
432 cu.yd. excavating structures	1 00	1 25	1 00
1,277 cu.yd. overhaul (100 ft.)	.05	.015	03
Structures over 20 ft. clear span			
82 cu.yd. class A concrete (includes haul, bend and place steel)	20 00	17 00	20 00
44 cu.yd. class B concrete	18 00	16 00	20 00
141 cu.yd. rubble concrete	8 00	4 50	8 00
Structures over 20 ft. clear span or less			
231 cu.yd. class A concrete in bridges and culverts (includes haul, bend and place steel)	20 00	16 00	20 00
190 cu.yd. class B concrete in bridges	18 00	15 50	20 00
53 cu.yd. class B concrete in headwalls	18 00	12 00	20 00
68 cu.yd. class B concrete in fords	20 00	15 00	20 00
15 cu.yd. class C concrete in fords	17 00	15 00	20 00
163 lin.ft. 24 in. C.M.P. (haul and place)	.70	1 00	1 00
84 lin.ft. 30 in. C.M.P. (haul and place)	.75	1 25	1 00
Extended totals, including state furnished materials, less alternates	$57,608	$58,371	$62,905
Extended totals, including state furnished materials, substituting alternates	$55,341	$56,662	60,644

Buildings (Continued)

Tribune Bldg., Terre Haute, 1 story, 64 x 130 ft. brick and steel, here. $150,000.

Ind., Elkhart—School and Gymnasium—Bd. Educ. plans 2 story, 104 x 120 ft. brick, steel and stone. $150,000. E. H. Turnock, Monger Bldg., archt.

Ind., Indianapolis—Apartment—D. O. Kearby, 422 Amer. Central Life Bldg., having plans prepared by F. B. Hunter, archt., State Life Bldg., 3 story, 75 x 85 ft. brick and rein.-con., 611 Pennsylvania St. $150,000.

Ind., Indianapolis—Club—Columbia Club, Monument Circle, plans 12 story, brick, steel and stone, Monument Circle. $900,000. Rubush & Hunter, Amer. Central Life Bldg., archts.

Ind., Indianapolis—Office—T. O. Gasaway, 1108 Central Ave., plans 4 story, 100 x 205 ft. brick. and stucco, North Meridian St. $200,000. F. B. Hunter, State Life Bldg., archt.

Ind., Terre Haute—Apartment—Wabash Apartment Co., c/o J. D. Palmer & Co., archts., McKeen Natl. Bank, having plans prepared 4 story, 82 x 140 ft. brick. $400,000.

Ind., Terre Haute—Hotel and Store—J. D. Palmer & Co., archts., McKeen Natl. Bank, preparing plans 6 story, brick and steel. $1,000,000. Owner's name withheld.

Mich., Dearborn—Hotel—Dearborn Hotel Co., c/o Kohner & Seeler, archts., 1402 Kresge Bldg., Detroit, having plans prepared 4 story, 100 x 160 ft. brick, steel and terra cotta, plain foundation, Michigan Ave. and Porter St. $150,000.

Mich., Detroit — Apartment — Apartment Development Co., 2631 Woodward Ave., having plans prepared by R. H. Marr, archt., 2631 Woodward Ave., 3 and 5 story, 175 x 185 ft. rein.-con., brick and steel, plain foundation, Seward Ave. $200,000.

Mich., Detroit—Clubhouse—Women's City Club, c/o Stratton & Snyder, archts., Union Trust Bldg., having plans prepared 8 story, 66 x 100 ft. rein.-con., brick and steel, plain foundation, incl. rein.-con. swimming pool, Park Blvd. and Elizabeth St. $350,000.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., having plans prepared by Malcolmson, Higginbotham & Palmer, archts., 405 Moffat Bldg., 2 story, 100 x 190 ft., rein.-con., brick and steel, plain foundation, Emerson Ave. $150,000.

Mich., Hamtramck—School—Bd. Educ. having plans prepared by G. J. Haas, archt., Kresge Bldg., Detroit, 2 story, 80 x 300 ft. rein.-con. brick and steel, plain foundation. $175,000.

Ill., Paris—Hotel—Paris Hotel Co., c/o G. W. North, 601 North Willis St., Champaign, having revised plans prepared by Johnson, Miller & Miller, archts., 30 North 5th St., Terre Haute, Ind., 4 story, 60 x 130 ft., brick hotel, here. $200,000. Noted Jan. 6, 1921.

Wis., Ableman—High School—Bd. Educ., c/o Secretary, having plans prepared by Claude & Starck, archts., Badger Annex, Madison, 2 story, 60 x 100 ft., brick, rein.-con. and stone, plain foundation. $150,000.

Wis., Beloit — Lodge — Knights of Pythias Lodge 40, c/o W. L. Odett, 405 Moore St., having preliminary plans prepared by Hetherington & Krieg, archts., Goodwin Blk., 2 and 3 story, brick and concrete, plain foundation, Bluff St. 150,000.

Wis., Madison—Church—Bethel Lutheran Congregation, 729 East Gorham St., plans 2 story, 75 x 150 ft., brick, rein.-con. and stone, plain foundation, Gorham St. $150,000. O. J. Siljan, pastor. Architect not selected.

Wis., Mauston—Hospital—Mauston Hospital Assn., c/o A. Hess, having plans prepared by A. F. Billmeyer, archt., Wisconsin Rapids, 2 and 3 story, 75 x 100 ft., brick, rein.-con. and stone, plain foundation. $150,000.

Wis., Milwaukee — Club — Northwest Home Asn. of G. U. G. G., c/o P. Ebert, 1251 1st St., chn. building com., plans 2 story, 60 x 80 ft. and 40 x 42 ft., brick and concrete, plain foundation, Center and 25th Sts. $150,000. Architect not selected.

Ia., Atlantic—Hotel—Community Hotel Financing and Building Co., 723 Plymouth Bldg., Minneapolis, Minn., having plans prepared by C. W. Farnham, archt., 1037 Lumber Exch. Bldg., Minneapolis, Minn., 3 story, 100 x 140 ft., rein.-con., brick, tile and stone, here. $250,000.

Ia., Cedar Rapids—Hospital—Mercy Hospital Assn., Cedar Rapids, plans 4 story, rein.-con., brick, tile and stone. $250,000. W. L. Steele, 502 United Bank Bldg., Sioux City, archt.

Minn., Minneapolis—Hospital—State Bd. Control, Capitol St. Paul, plans 3 story rein.-con., brick and tile, State University Campus. $190,000. D. F. Mullen, secy. C. H. Johnson, 715 Capitol Bank Bldg., St. Paul, archt.

Minn., St. Paul — High School—Dept. Educ. rejected bids opened June 19, and having revised plans prepared by F. X. Lewes, (new city architect), City Hall, 3 story, 150 x 250 ft., with 1 story, 48 x 90 ft. wing, rein.-con., brick and tile, Isabel and Congress Sts., $325,000. Noted June 29.

Kan., Atchison—Academy—E. Brielmaier & Sons Co., archts., 432 Bway., Milwaukee, Wis., opens bids about Aug. 20, 4 story, brick and concrete, plain foundation, for Mt. Scholastic Academy, 8th and Eccher Sts. $500,000. Noted March 9.

Mo., Kansas City—Clubhouse and Hotel —Marquette Council 1698, Knights of Columbus, purchased 137 x 150 ft. site, and plans lodge to include 2 floors of bachelor apartments, roof garden, gymnasium, swimming pool, lounging room, banquet rooms, library and study rooms on Forest Ave. and Armour Blvd. $350,000-$400,000.

Mo., Kansas City—Commercial and Market House—H. B. Schoolfield, c/o W. S. Ferguson Co., archts., 1900 Euclid Ave., Cleveland, having plans prepared 5 or 6 story, brick, steel and concrete. $200,000.

Tex., San Antonio—Schools—Sold $1,000,000 bonds of recently voted $2,000,000 bond issue for new schools and equipment. F. Hargis, pres. School Bd. Noted June 8.

Wash., Seattle—Club—King Co. Assn. of Graduate Nurses plans 7 story, 90 x 120 ft. brick and steel. $400,000. A. H. Albertson, Henry Bldg., archt.

Cal., Berkeley—Bank and Office—Mercantile Trust Co., c/o J. W. Plachek, archt., 2014 Shattuck Ave., having sketches made 5 story, Shattuck Ave. and Center St. $150,000.

Cal., Fresno—Amusement—See "Miscellaneous."

Cal., Oakland—Recreation, etc.—State having plans prepared by G. B. McDougall, state archt., Forum Bldg., Sacramento, 3 brick buildings, incl. 1 story recreation building, 2 story employes' building, 1 story women's shop, also power house, 3601 Telegraph Ave.

Cal., San Anselmo—Orphanage—Presbyterian Orphanage, c/o Bliss & Faville, archts., Balboa Bldg., San Francisco, having plans prepared five 2 story, frame, stucco and tile buildings. $150,000-$200,000.

Cal., San Francisco—Apartment—F. W. Quandt, archt., Monadnock Bldg., preparing plans 68 x 137 ft., Bway. near Laguna St. To exceed $150,000. Owner's name withheld.

Cal., Stockton—Hospital—State having plans prepared by G. B. McDougall, state archt., Forum Bldg., Sacramento, 1 and 2 story, on State Hospital Grounds. $150,000.

Ont., Kingston — Hospital — Kingston Hospital Bd. takes bids isolation hospital. $150,000. J. C. Newlands, secy.

Ont., Ottawa — Schools — Bd. Trustees Grant Consolidated Schools of Carleton Co., at Britannia, soon takes bids school in Britannia $100,000, high school in Westboro $200,000, School No. 16 in Nepean $35,000. A. L. Stackhouse, Britannia, chn.

BIDS DESIRED

Mass., Worcester—High School—Aug. 23, by School Comn., 3 story, 181 x 268 ft. concrete and brick, plain foundation, Grafton and Dorchester Sts. $700,000. J. D. Leland Co., 41 Mt. Vernon St., Boston, archts. Noted Oct. 27.

N. Y., Albany—Armories—Aug. 15, by State Armory Bd., Telephone Bldg., for repairs, improvements at following State Armories, Buffalo, 174th Reg., masonry, plumbing, etc., 106th Field Artillery, painting. Cavalry Armory, repairing stonework, liquid and plastic roof coating; Elmira, furnishing boiler, etc.; Walton, masonry, tin roof, painting. Separate proposals for work at each armody. F. W. Ward, secy.

N. Y., New York—Bath—M. Z. F. Corp., c/o S. N. Polis, archt. and engr., 115 Broad St., 2 story, brick, steel and stone, Webster Ave. $200,000. Work will be done by separate contracts under supervision of architect.

N. Y., New York—Drill Shed—Aug. 14, by Armory Bd., Municipal Bldg., drill shed of armory, 142nd St. between Lenox and 13th Aves., for 15th Infantry. Former bids withdrawn. Noted July 20.

N. Y., New York—High School—Aug. 22 by C. B. J. Snyder, supt. schools, Concord St. Brooklyn, addition to Julia Richman High School, brick, steel and stone, plain foundation, 67th to 68th Sts. near 2nd Ave. $1,750,000. Noted Dec 29.

N. Y., New York—Hotel—J. Goldstein, c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., 9 story, 50 x 100 ft., brick, steel and stone, 23 West 64th St. Work will be done by separate contracts.

N. Y., New York—Synagogue—Aug. 22, by S. B. Eisendrath, archt. and engr., 18 East 41st St., 4 story, brick, steel and stone, plain foundation, 28 West 68th St., for Congregation of Free Synagogue, c/o architect. $200,000. Noted May 4.

N. J., Atlantic City — Hotel — W. M. Stanton, archt., 1524 Chestnut St., Phila., Pa., taking bids 6 story, 40 x 70 ft. rein.-con., brick and steel addition, caisson foundation, Kenteray Ave., for S. B. Boniface, Kenteray Ave. $200,000.

N. J., Collingswood—High School—P. A. Davis, archt., Presser Bldg., Phila., taking bids 3 story, 135 x 150 ft. brick and steel, plain foundation, for School Bd. $200,000.

Pa., Carrick (Pittsburgh P. O.)—School —Estep & Estep, archts., Century Bldg., Pittsburgh, taking bids 2 story, 150 x 260 ft. brick and steel, for School Dist. $150,000.

Buildings (Continued)

Pa., Johnstown — Auditorium and Gymnasium—Bd. Educ. taking bids 1 story, 110 x 115 ft. auditorium and 80 x 242 ft. gymnasium, rein.-con. and brick. Central Ave. $650,000. J. E. Adams, Nemo Bldg., archt.

Pa., Phila.—Apartment—C. Siegel, 47th and Larchwood Sts., taking bids 6 story, 160 x 385 ft. brick, steel and stone, plain foundation, 47th and Pine Sts. Private plans.

Pa., Phila.—Office—Ballinger Co., archts., 12th and Chestnut Sts., taking bids 3 story, 36 x 103 ft. brick, steel and stone, plain foundation, 13th and Spruce Sts., for Phila. Realty Co., 1126 Walnut St. $150,-000. Noted July 20.

Pa., Pittsburgh—Home—Little Sisters of Poor, c/o P. Wall, 705 Preble Ave., and R. M. Trimble, archt., Ferguson Bldg., taking bids 3 story, 53 x 220 ft., Benson Ave. $200,000. Noted Jan. 12.

Pa., Pittsburgh—School, etc.—Duquesne University, Bluff St., and A. F. Link, archt., 407 North Craig St., taking bids 3 story, school, gymnasium and power house, Bluff St. $150,000.

Del., Smyrna—High School—Sept. 5, by Bd. Educ. of Smyrna Special School Dist. and Delaware School Auxiliary Assn., at office of Delaware School Auxiliary Assn., Du Pont Bldg., Wilmington, for 1 and 2 story, 80 x 150 ft. high school, here. W. O. Hoffecker, pres. Bd. Educ. of Smyrna Special School Dist. J. H. Odell, pres. Delaware School Auxiliary Assn.; adv. this issue.

N. C., Franklinton—School—Aug. 15, by Bd. School Trustees, 2 story. $150,000. G. H. Kearny, chn. F. B. Simpson, 110 East Lane St., Raleigh, archt.

N. C., Oxford—Hospital—Aug. 21, by R. L. Brown, supt. Oxford Orphan Asylum, Wm. J. Hicks Memorial Hospital, 2 story, brick. $150,000.

Fla., Plant City—Hotel—Aug. 21, by Plant City Hotel Corp., 7 story, 105 x 105 ft., brick and steel, Reynolds and Evers Sts. $150,000. M. L. Elliott, 413 Curry Bldg., Tampa, archt. Noted April 13.

Ky., Madisonville—Church—Aug. 18, by Building Comr., Methodist Episcopal Church, South, brick and stone church. B. M. Brooks, chn. J. A. Baylor, 1115 4th Ave., Louisville, archt.; adv. this issue.

O., Shaker Heights—Grade School—Aug. 18, by Bd. Educ., 2 story, 136 x 152 ft., brick, steel and concrete, Woodbury Rd. $225,000. C. W. Bates, 77 12th St., Wheeling, W. Va., archt.

Ind., Plymouth—High School—Aug. 14, by Bd. Educ., 2 story, 163 x 179 ft. structural steel and cut stone. $300,000. E. Young, South Bend, archt.

Ill., Jacksonville—Bank—Puckey & Jenkins, archts., 6 North Michigan Ave., Chicago, receiving bids 2 story, 60 x 95 ft., rein.-con., brick and steel, here, for Elliott State Bank. $200,000. Noted Sept. 22.

Ill., Peru—Office—V. A. Matteson, archt., 8 South Dearborn St., Chicago, receiving bids 2 story, 150 x 185 ft., rein.-con., brick and steel, for Western Clock Co., Peru, $250,000.

Wis., Milwaukee — Club House — A. D. Koch, archt., 120 Wisconsin St., taking bids and opens same about Aug. 18, 2 story, brick and concrete, plain foundation, Port Washington Rd., for Owl Realty Co. c/o T. C. Massett, 67 Keefe Ave. $150,000.

Minn., Carlton—Courthouse—Aug. 23, by O. W. Samuelson, aud. Carlton Co., 3 story, rein.-con., brick and tile. $150,000. C. W. Kelly, Lonsdale Bldg., Duluth, archt. Noted Nay 11.

Col., Denver—Temple—Aug. 17, by W. N. Bowman, archt., Central Savings Bank Bldg., 8 story, 125 x 125 ft., rein.-con. and stone, plain foundation, 14th and Grant Sts., for Colorado Consistory 1, Masonic Temple. $550,000.

Cal., Kerman—High School—Aug. 19, by A. Johnson, archt., Kingsburg Bank Bldg., Kingsburg, high school, for Kerman Union High School Dist. $150,000 bonds voted.

Cal., Oakland—High School—Aug. 21, by Bd. Educ., 1 story, brick and tile, 63rd St. and San Pablo Ave. $150,000. C. W. Dickey, 2149 Bway., archt.

Cal., Oakland—High School—Sept. 11, by Bd. Educ. 2 and 3 story, rein.-con. and tile. $700,000. C. W. Dickey, 2149 Bway., archt. Noted July 13.

Cal., San Francisco—Club—A. A. Brown, engr., 120 Market St., receiving bids 6 story addition, Sutter St. near Mason St., for Women's Athletic Club. $250,000. Bliss & Faville, Balboa Bldg., archts.

Ont., London—Art—Aug. 14, by J. M. Moore, archt., 489 Richmond St., constructing new arts building, gray stone, $250,000, also central heating plant, $30,000, for Western University. Prices wanted on materials.

Ont., London—University—Aug. 17, by J. M. Moore, archt., 489 Richmond St., science building, gray stone, for Western University. $250,000. Prices wanted on all materials. Noted June 1.

BIDS RECEIVED

N. Y., Astoria (Long Island City, P. O.) —School—C. B. J. Snyder, supt. schools, Concord St., Brooklyn, opened bids Aug. 2, for P. S. 70, on 12th Ave., here, from J. MacArthur Co., 22 Ormond Pl., Brooklyn, $597,000; F. J. Fellows Co., Springfield St., Laurelton, $599,000; E. Diebietch Co., 383 Madison Ave., $604,603. Noted July 27.

Pa., Jenkintown—High School—School Bd. opened bids for high school, from Barnes & McLoughlin, 17 South 17th St., Phila., $139,900, Moore & Co., 19th and Cherry Sts., Phila., $146,429.

CONTRACTS AWARDED

Mass., South Hadley—Dormitory—Mount Holyoke College, 3 story brick, stone and concrete, plain foundation, on Campus, to Casper Ranger Constr. Co., 20 Bond St., Holyoke. Archts. est. $450,000. Noted Nov. 27.

Mass., Worcester — Schools — School Comn., two 2 story, 10 room, brick and steel, plain foudations, Greendale and Lakeview Sections, to J. J. Roberts, 4 Wall St., and E. Belisle, 3 Linden St. Archts. est. $200,000.

Conn., New Britain — Hospital — New Britain General Hospital, Grand St., 4 and 5 story, U-shaped, rein.-con. and brick addition, plain foundation, Griswold and Hawkins Sts., to Eastern Eng. & Constr. Co., 945 Main St., Bridgeport. Archts. est. $350,000.

Conn., New Haven—School—St. Stanislaus Roman Catholic Church, 9 Eld St., 3 story, 90 x 195 ft. brick, concrete and steel, plain foundation, State St., to Sullivan & McKeown, 937 Dixwell Ave., New Haven, $201,688. Noted May 4.

Conn., Seymour—Bank—Seymour Trust Co., Main St., 43 x 83 ft., limestone, brick and marble, plain foundation, 38 ft. high, Main St., to M. A. Durrschmidt, 100 Main St., Derby. Archts. est. $150,000.

N. Y., Brooklyn—Schools—Bd. Educ., 500 Park Ave., New York, P. S. 161, Crown St. near New York Ave., to Frymier & Hanna, 25 West 45th St., New York, $594,000; P. S. 189, East New York Ave., to T. A. Clarke Co., 122 Livingston St., $573,0 . Noted July 27.

N. Y., Buffalo—Office—Hurst Private School, Brisbane Bldg., 4 story, 80 x 110 ft., rein.-con., brick and steel, on Franklin St., to Crooker & Carpenter, 405 Niagara Life Bldg., $180,000.

N. Y., New York—Apartment—J. Tischman & Son, 280 Madison Ave., 14 story, brick, steel and stone, 87th St. and Park Ave., by day labor. $1,500,000. Schwartz & Gross, 347 5th Ave., archts. and engrs.

N. Y., New York—Apartment—Twenty Sixty Nine Bway. Corp., c/o G. F. Pelham, archt. and engr., 200 West 72nd St., 9 story, 50 x 102 ft., brick, steel and stone, plain foundation, 17 East 84th St., by day labor. Archts. est. $300,000. Noted July 20.

N. Y., New York—Hospital—Reconstruction Hospital, 395 Central Park West, 12 story, 105 x 125 ft., brick, steel and stone, 100th St. and Central Park West, to C. T. Wills Inc., 286 5th Ave. Archts. est. $1,000,000.

N. Y., New York—Store and Showroom—Roy Realty Co., c/o D. Wortman, archt. and engr., 116 Lexington Ave., 5 story, brick, steel and stone, 80 Madison Ave., by day labor. $150,000.

N. J., Belleville—High School—Bd. Educ., brick, steel and stone, to C. E. Bowman, Ridgewood. Archts. est. $250,000.

N. J., Nutley—School—Bd. Educ., brick, steel and stone, plain foundation, to Morgan Constr. Co., 207 Market St., Newark. Archts. est. $300,000. Noted May 18.

Pa., Erie—Store—Reliable Home Furnishing Co., 4 story, 81 x 145 ft. brick and steel, State St., to Mayer Bros. Constr. Co., Erie. Archts. est. $150,000.

Pa., Phila.—Office--Phila. Tract Society, 17th and Arch Sts., 4 story, 40 x 115 ft. brick and steel, plain foundation, 1707-9 Arch St., to Cramp & Co., Denckla Bldg. Archts. est. $150,000.

Pa., Pittsburgh—Bank and Office—Exch. Natl. Bank, 250 5th Ave., 7 story, 40 x 120 ft., brick, steel and stone, 5th Ave., to S. M. Siesel, Pittsburgh, and 105 Wells Ave., Milwaukee, Wis. Archts. est. $350,-000. Noted June 15.

Pa., Pittsburgh—Store—McCrory Stores Corp., 1107 Bway., New York, 2 story, 48 x 50 ft. and 78 x 153 ft. brick and steel, East Diamond and Ohio Sts., here, to S. R. Cunningham, 6350 Marchand St. Engrs. est. $150,000.

N. C., Vanceboro—High School—Bd Trutees, brick, to W. Clark, Wilmington. Archts. est. $150,000. Noted May 25.

Ind., South Bend—Bank—Amer. Trust Co., 4 story, 80 x 125 ft. brick, concrete, steel and terra cotta, Michigan St., to R. Sollit & Sons, 30 North LaSalle St., Chicago. Archts. est. $250,000. Noted June 29.

Ill., Chicago—High School—Bd. Educ., 650 South Clark St., 3 story, rein.-con., brick and steel addition, on Union Ave. and 47th St., to Paschen Bros., 111 West Washington St., $3,000,000. Noted May 4.

Ill., Chicago—Store and Office—Lawrence Ave. Trust Co., c/o F. J. Teich, archt., 64 West Randolph St., 3 story, 83 x 150 ft., rein.-con., brick and steel, 4752-8 Winthrop Ave., to Barrett Constr. Co., 7 South Dearborn St. Archts. est. $150,000. Noted June 1.

Ill., Urbana—Agricultural—University of Illinois, c/o J. M. White, superv. archt., 256 Administration Bldg., constructing agricultural building, to H. B. Krauel, Danville, $354,700. Noted June 15.

Minn., Duluth—Apartment—Devonshire Apartment Co., 324 East 17th St., Minneapolis, 3 story, 130 x 200 ft. brick and steel, 14th Ave. E. and 1st St., here, to Carlsted Bros., 542 Builders Exch., Minneapolis, $350,000.

Minn., Duluth—Apartment—C. F. DeZurick and H. Cotlow, Plymouth Bldg., Minneapolis, 3 story, rein.-con., brick and tile, 14th Ave. and 1st St., here, general contract to Carlsted Bros., 542 Builders Exch. Bldg., Minneapolis. Cost complete $325,000.

Minn., St. Paul—Apartment—T. Stohr, 1611 University Ave., 3 story, 112 x 166 ft. brick and tile, Portland Ave, near Saratoga St., to A. H. Heimback, Inc., 1611 University Ave. Cost complete, $225,000.

Ia., Des Moines—Apartment—Des Moines Impvt. Co., Fleming Bldg., general contract 3 story, 126 x 240 ft., rein.-con., brick, tile and stone, 2300 Grand St., to Fleisher Constr. Co., 6th and High Sts., $200,000.

Ia., Des Moines—Monastery—Order of Passionists, Merle Hay Rd. and Douglas Ave., general contract 3 story, 60 x 150 ft., rein.-con., brick, tile and stone, to C. Weitz Sons, 713 Mulberry St., $112,460. Archts. est. $150,000.

Neb., Lincoln — Capitol — State Capitol Comn., c/o [illegible] E. McKelvie, chn., Capitol Bldg., constructing superstructure of first section of capitol, 14th to 16th Sts., H to K Sts., Trade 1 mason work, Trade 2 concrete arches and fireproofing, Trade 3 cement and granolithic floors, Trade 4 gypsum roof slab, Trade 5 cut stone work, Trade 6 structural steel, Trade 7 light and ornamental iron, Trade 8 bronze work, Trade 9 marble work, Trade 10 tile work, Trade 11 slate work, Trade 12 timbrel tile vaulting and acoustic tile, Trade 13 rough carpenter work, Trade 14 roofing and sheet metal work, Trade 15 metal furring and lathing, Trade 16 plastering, Trade 17 interior wood fiinish, Trade 18 Kalamein work and metal covered doors, Trade 19 glazing, Trade 20 painting, Trade 21 elevator work, Trade 22 plumbing, Trade 23 heating and ventilating, Trade 24 electrical work, Trade 25 facing stone in rough blocks (no separate bids received), Trade 26 metal windows; Trades 1 to 4, 6 to 20, and 26 to J. H. Wiese Co., 1425 W. O. W. Bldg., Omaha, $1,356,185, who sublet Trade 4 to U. S. Gypsum Co., 204 West Monroe St., Chicago, Trade 6 to American Bridge Co., 71 Bway., New York City, Trade 7 to D. B. Marshall Co., 210 South 18th St., Omaha, Trade 8 to Art Metal Constr. Co., Jamestown, N. Y., Trades 9, 10, 11, 19 and 26 to Sunderland Bros. Co., 15th and Harney Sts., Omaha, Trade 12 to R. Gustavino Co., 1133 Bway., New York City, Trade 18 to C. B. Krause, 616-18-20 Keeling Bldg., Omaha, Trade 20 to J. E. White, 324 North 24th St., Omaha; Trade 5 to H. Struble Co., Bedford, Ind., $633,739; Trade 21 to Otis Elevator Co., Terminal Bldg., $4,000; Trades 22 and 23 to R. Parks Plumbing and Heating Co., 711 South 16th St., Omaha, $213,727; Trade 24 to W. G. Cornell Co., 45 East 17th St., New York City, $48,419. Noted July 6.

Mo., Kansas City—Club—Kansas City Athletic Club, 1016 Central St., 2 story, to Swenson Constr. Co., Shubert Theatre Bldg. Cost complete, $2,400,000.

Ark., Little Rock—Hospital—City, general contract hospital, to Stewart-McGehee Constr. Co., Kahn Bldg. Total cost $500,000.

Cal., Richardson Springs — Hotel — Richardson Bros. will build 5 story, rein.-con., by day labor. $200,000. C. N. Burreil, 1st Trust Bldg., Oakland, archt.

Buildings (Continued)

Cal., San Francisco—Market—Crystal Palace Market Co., 1175 Market St., will build 1 story, steel and concrete, Market St. near 8th St., by day labor. $250,000. D. C. Coleman, 110 Sutter St., archt.

Ont., Ottawa—Bank—Canadian Bank of Commerce, 106 Wellington St., 3 story, 60 x 100 ft. rein.-con., brick, steel and stone, Sparks St., to G. P. Graves Constr. Co., Ltd., Bank St., $250,000. Noted April 20.

Ont., Renfrew — Collegiate — S. T. C. Chown, chn. Bd. Educ., 3 story, 81 x 160 ft. rein.-con., brick and steel, to Anglin-Norcross, Ltd., 65 Victoria St., Montreal, Que., $129,550; plumbing to W. G. Edge, Ltd., 142 Bank St., Ottawa, $27,995. Noted July 6.

Federal Government Work

BIDS DESIRED

R. I., Providence—Dredging—Aug. 28 at Office U. S. Engineer, dredging in Bridgeport Harbor, Conn.; adv. this issue.

R. I., Providence—Dredging—Aug. 31 at U. S. Engineers Office, dredging in Pawtucket (Seekonk) River; adv. this issue.

Pa., Phila.—Dredging—Sept. 6 at Office U. S. Engineer, 815 Witherspoon Bldg., dredging in Delaware River, on Bellevue, Cherry and Liston ranges; adv. this issue.

D. C., Wash.—Remodeling—Spec. 4694—Aug. 16, by Bureau Yards & Docks, Navy Dept., Wash., D. C., remodeling subsistence building at U. S. Naval Hospital, here.

La., New Orleans—Sand and Gravel—Sept. 1 at U. S. Engineers Office, 329 Customhouse, sand and gravel for Southwest Pass, Mississippi River; adv. this issue.

La., New Orleans—Spur-dikes—Sept. 5, at Office U. S. Engineer, 329 Customhouse, spur-dikes at Southwest Pass, Mississippi River; adv. this issue.

La., New Orleans — Stone — Sept. 7, (change of date) at office of U. S. Engineer, 329 Customhouse, furnishing stone for Southwest Pass, Head of Passes, and South Pass, Mississippi River; adv. this issue.

CONTRACTS AWARDED

Cal., Petaluma—Dredging—U. S. Engineer, Custom House, San Francisco, dredging in Petaluma Creek, to United Dredging Co., foot of 11th Ave., Oakland, 445,000 cu. yd. at $0.0839. Noted July 13.

Miscellaneous

PROPOSED WORK

Transmission Lines—Jamestown, N. Y.—See "Industrial Work."

Gas Line—Mt. Morris, N. Y.—Pavillion Natural Gas Co., Mt. Morris, plans gas line from here to Dansville. $70,000.

Swimming Pool, Bath Houses, etc.—Allentown, Pa.—Lehigh Valley Transit Co., 802 Hamilton Ave., plans concrete and tile swimming pool, bath house, promenade, pumps and filtering system. $150,000. A. F. Smith, 14th and Gordon Sts., engr.

Transmission Line—Warren, Pa.—Warren Light & Power Co. plans 21 mi. high power transmission line from here to Tidioute, 33,000 volts. Cost to exceed $50,000. A. Stack, 219 Liberty St., mgr.

Wharf and Transit Shed Foundation—Tampa, Fla.—Rejected bids opened July 26, concrete wharf and transit shed foundation. R. D. Martin, city engr. Noted July 6.

Street Lighting — Shullsburg, Wis. — Making plans ornamental street lighting, 3 light posts. $25,000. W. F. Richardt, Watertown, engr.

Paving Materials—St. Paul, Minn.—Rejected bids opened June 15, materials for paving east and west alley in Block 6, Terrace Park addition; alley in Union Park and Hinkels Amendment and Hinkels third amendment; alley in Block 29, Summit Park Addition. Noted June 22.

Paving Materials — St. Paul, Minn. — H. W. Austin, city purch. agt., rejected bids opened July 24, materials for paving Hudson Rd. from Point Douglas Rd. to east city limits, Grand Ave. from Milton St. to Cretin Ave. and from Oakland Ave. to west line of Milton St. Noted July 20.

Pipe Line—Casper, Wyo.—Fargo Oil Co. plans 22 mi. of 8 in. iron pipe from Poison Spider Field to here, will use 4 and 6 in. pipe for gathering lines.

Stadium—Kansas City, Mo.—Bd. Park Comrs., having plans prepared by S. H. Kurfiss, archt., 1012 Scarritt Bldg., and soon takes bids 90 x 770 ft. stadium, 39th St. and Gilham Rd.

Pumps—Delhi, Cal.—Delhi Land Colony takes bids in about 2 months, one 8 sec.ft. booster pump, double suction, centrifugal, 30 ft. lift; one 6 sec.ft. centrifugal booster, double suction, 40 ft. lift; one 4 sec.ft. centrifugal booster, double suction, 30 ft. lift. E. Fortier, resident engr.

Amusement Park—Fresno, Cal.—Green Mill Amusement Park having plans prepared by Ellery, Frost & Patten, engrs., 1913 Fresno St., and takes bids about Aug. 20, for amusement park, incl. main building 125 x 250 ft., brick and concrete, with dining room, dance hall, billiard rooms, bowling alleys, rest rooms, playrooms and shower rooms, large swimming tank at rear of main building, parking sheds for 1,000 autos, 11 acres amusement concessions, 100 x 100 ft. conservatory, etc. $350,000.

Pipe—Oakland, Cal.—City appropriated $12,650 to purchase 2 in. pontoon pipe and ball joints; $6,266 for 20 in. steel shore pipe. E. K. Sturgis, clk.

Subway—Oakland, Cal.—Having plans prepared subway under tracks of Western Pacific Ry. at Dewey School. $36,000. M. Campbell, c/o Constr. Dept., Bd. Educ., engr.

Car Barns—Kitchener, Ont.—See "Railways."

BIDS DESIRED

Refined Asphalt, etc.—Brooklyn, N. Y.—Aug. 16, by E. Riegelmann, boro pres., Boro Hall, 130,000 gal. refined asphalt; 1,500 cu.yd. binder stone; 5,200 cu.yd. asphalt sand; 750 net ton limestone; 28,900 ft. lumber; 8,000 gal. tar road binder; 2,200 cu.yd. paving sand; 3,000 cu.yd. granite 1½ in. and 3,000 cu.yd. broken stone 1½ in.; 5,300 bbl. Portland cement; 30,000 asphalt paving blocks; 20,000 wood paving blocks.

Concrete Mixer — Buffalo, N. Y. — L. Clarke, 424 Prudential Bldg., in market for concrete mixer with engine.

Broken Stone, etc.—St. George, N. Y.—Aug. 14, by J. A. Lynch, pres. Richmond Boro, furnishing and delivering 1,000 cu. yd. 1½ broken stone of limestone and 100 yd. screenings; 400 cu.yd. grits.

Stone Jetty—Longport, N. J.—Aug. 22, by Bd. Comrs., extending stone jetties or sea walls or any or all of them on Atlantic Ocean in Longport Boro. W. S. Gilmore, clk.; adv. this issue.

Electric Street Lighting—Warren, O.—Aug. 15, by E. H. Braunberns, dir. Pub. Service, electric lighting streets, avenues, alleys and public places, incl. apparatus, poles, brackets, wires, incandescent lamps, fixtures, reflectors, fitting, connections, globes, etc. G. T. Hecklinger, clk.

Lighting System—Chicago Heights, Ill.—Aug. 21 by Bd. Local Impvts., street lighting system. Sheperd & Hovey, 1623 Monadnock Blk., Chicago, consult. engrs.; adv. this issue.

Stadium—Urbana, Ill.—University of Illinois receiving bids and opens same about Aug. 21, rein.-con., brick and steel stadium. $2,500,000. Holabird & Roche, 104 South Michigan Ave., Chicago, archts.

Reinforcing Rods, etc.—St. Paul, Minn.—Aug. 14, by H. W. Austin, city purch. agt., 63 ton deformed medium steel reinforcing rods and 2 freight elevators for Water Dept. O. Claussen, city engr.

Fire Alarm System, etc.—Kansas City, Mo.—Sept. 5, by Fire Comrs., fire alarm system incl. 130,000 ft. underground cable, 150 fire boxes, 29 fire stations, central exchange building, also complete telephone and telegraph system. $250,000.

Steel Bars—Oakland, Cal.—See "Industrial Works, under Bids Received."

BIDS RECEIVED

Portland Cement—New York, N. Y.—H. Bruckner, pres. Bronx Boro, Municipal Bldg., Crotona Park, opened bids Aug. 3, furnishing 3,500 bags Portland cement, from C. J. Mallett, 2523 Glebe Ave., Bronx, $2,397; J. A. McCarthy, 551 Exterior St., $2,432; E. E. Buehler Co., $2,555. Return of bags $0.10 per bag. Noted July 27.

Pier—Sarasota, Fla.—For 850 ft. concrete recreation pier, from G. S. Keen, Palmetto, $58,667; Carman Co., Tampa, $62,244; H. C. Daniels Constr. Co., West Palm Beach, $73,836. Noted July 13.

Coal Handling and Conveying Machinery—St. Paul, Minn.—Opened bids July 24, coal handling and conveying machinery for Water Dept., from F. J. Rose Co., 718 Metropolitan Life Bldg., Minneapolis, $9,400; Robinson, Cary & Sands Co., 4th and Wacouta Sts., St. Paul, $14,000; Chain Belt Co., 510 Baltimore Bldg., St. Paul, $15,300.

Wood Blocks and Cast Iron Specials—St. Paul, Minn.—H. W. Austin, purch. city agt., 496 sq.yd. 3½ in. creosoted wood blocks, from Walsh Tie Co., 914 Security Bldg., Minneapolis, $2.20 per sq.yd., Republic Creosoting Co., St. Louis Park, $2.25; 11.55 ton c.i. water pipe specials, from St. Paul Fdry. Co., Como Ave. and Mackubin St., St. Paul, $110 per ton, United States Cast Iron Pipe & Fdry. Co., 625 Plymouth Bldg., Minneapolis, $116.50, Bowler Fdry. Co., St. Paul, $118. Noted July 27.

CONTRACTS AWARDED

Pier Sheds and Grain Conveyor Gallery—Portland, Me.—Dirs. Port of Portland, 67 Commercial St., constructing north and south sheds and grain conveyor gallery, State Pier, Contr. 10, to M. A. Long Co., 1523 Munsey Bldg., Baltimore, Md. Noted June 22.

Borings—Long Island City, N. Y.—Transit Comn., 49 Lafayette St., New York, land and river borings along Roosevelt and 40th Aves. and in Flushing River, here, Agreement "B. W." to P. J. Healey, 480 Lexington Ave., New York, $2,944. Noted July 6.

Asphaltic Paving Cement—New York, N. Y.—J. Miller, pres. Manhattan Boro., furnishing and delivering 500 ton asphaltic paving cement to Standard Oil Co., 26 Bway., $18.40 per ton. Noted July 27.

Frogs, Switches, etc.—New York, N. Y.—Transit Comn., 49 Lafayette St., (1) installing frogs, switches, tracks and pumping posts in yard near Jerome Ave. and Moshula Parkway, Boro of Bronx, Jerome Ave. Line, Route 16, (2) additional approach track to Lenox Ave. and 148th St. Yard, to Slattery Eng. & Constr. Co., 10 East 43rd St., (1) $20,905, (2) $209,466; making changes in steel work at easterly approach to Queensboro Plaza Station, Routes 36 and 37, Sect. 1, Boro of Queens, to Jobson Gifford Co., 30 East 42nd St., $67,570. Noted Aug. 3.

Docks, Bulkheading, etc.—Tampa, Fla.—To McGucken, McGucken & Edwards, 204 Nebraska Ave., 2,288 lin.ft. wood sheet pile bulkhead $21,759, 879 wood piles for retaining wall and pedestal foundation $4,878, 102,614 ft. lumber for bulkhead caps, walls and flooring $8,503, 2,186 cu. yd. concrete for bulkhead, retaining wall and foundation pedestals $34,583, 19,526 lin.ft. concrete platform piles $41,395, 1,476 ft. straight concrete platform 30 ft. wide with railroad track $80,885, 695 ft. straight concrete platform, 30 ft. wide, without railroad tracks $29,204, 3,848 sq.ft. concrete work other than straight work $10,890, 84 lin.ft. 36 in. c.i. pipe for sewer outlet $1,512, total $233,608; Estuary project includes 15,000 cu.yd. rock fill, $68,250, 40,000 cu.yd. earth fill, $18,000, total $86,250. Noted April 13 and July 13.

Foundation and Excavation—Milwaukee, Wis. — St. Josephs Convent, 575 Layton Blvd., concrete foundation and excavation for 4 story, 150 x 150 ft., L shaped, addition to convent, rein.-con. and brick, to H. Schmitt & Son, 430 Farwell Ave. Superstructure to be erected later.

Paving Materials—St. Paul, Minn.—Materials for paving Hague Ave. from Lexington to Syndicate Aves., asphaltic concrete, (1) 1,233 bbl. portland cement to Corning Donohue Brick Co., 613 Ryan Bldg., St. Paul, $2.60 per bbl. delivered; (2) 960 cu.yd. crushed rock, and 1,149 cu.yd. screened sand, to J. L. Shiely Co., 305 Dakota Bldg., St. Paul, $2.66 and $1.50 respectively; (3) 104 ton asphalt, to Minnesota Road Equipment Co., 427 Plymouth Bldg., Minneapolis, $19.95 per ton. Noted Aug. 3.

Structural Steel, etc.—St. Paul, Minn.—H. W. Austin, city purch. agt., 12,688 lb. structural steel and 5,020 lb. miscellaneous steel and iron castings, to St. Paul Fdry. Co., Como Ave. and Mackubin St., $6,546; 535 tons of 6, 8 and 12 in. c.i. pipe, to Natl. Cast Iron Pipe Co., Tarrant City, Birmingham, Ala., $25,787; 500 ton 30 in. c.i. pipe, to U. S. Cast Iron Pipe & Fdry. Co., 625 Plymouth Bldg., Minneapolis, $24,100. Noted July 20.

Black Pipe—Eureka, Cal.—Furnishing 12,000 ft. 2 in. standard black pipe, to Moore & Cook, 609 2nd St., $11.95 per ton.

Structural Steel—Oakland, Cal.—See "Industrial Works, under Bids Received."

Gas Holder Foundation—San Francisco, Cal.—Pacific Gas & Electric Co., 445 Sutter St., foundation for gas holder, 3,800 cu.yd. concrete, 12,000 cu. yd. solid rock excav., 25,000 cu.yd. loose rock and earth excav., to Vensano & Co., Holbrook Bldg., $100,000.

Asphalt — Montreal, Que. — To Imperial Oil Co., St. Patrick St., 2,000 ton asphalt in tank cars $15 per ton, 100 ton asphalt in barrels $21.50 per ton.

Cast Iron Pipe — Montreal, Que. — To Canada Iron & Fdry. Co., 28 Victoria Sq., 300 lengths 8 in. c.i. pipe, 187,500 lb.; 100 lengths 10 in. pipe, 85,000 lb.; 1,017 lengths 12 in. pipe, 1,118,700 lb.; total $34,676.

Curbing—Montreal, Que.—To Villeray Quarry Co., 848 Du Rosaire St., 11,675 lin.ft. straight curbstone $1.15, 2,167 lin. ft. circular curbstone $1.25.

Granite Blocks—Montreal, Que.—Furnishing 100,000 granite blocks, to W. McNally Co., 50 McGill St., $113 per M.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Aug. 15.

State Highway Work

Baltimore, Md.

SEALED PROPOSALS for building seven section of State Highway, as follows:

GARRETT COUNTY—Contract G-22—One section of State Highway from Gortner toward Red House, a distance of 2.0 miles—(Concrete).

FREDERICK COUNTY—Contract F-56—One section of State Highway from Middletown toward Myersville, for a distance of 2.03 miles—(Concrete).

MONTGOMERY COUNTY — Contract M-36—One section of State Highway along Flower Ave. from Carroll Ave. to Blair Road a distance of 1.0 miles—(Concrete).

HARFORD COUNTY—Contract H-28—One section of State Highway along the Phila. Road from Aberdeen toward the Balto. Co. Line, a distance of 2.0 miles—(Concrete).

SOMERSET COUNTY—Contract S-16—One section of State Highway from Marion toward Tulls Corner, a distance of 1.5 miles—(Concrete).

WORCESTER COUNTY—Contract WO-27—One section of State Highway from Bishop to Bishopville, a distance of 1.8 miles—(Concrete).

HOWARD COUNTY—Contract HO-25—One section of State Highway from the Columbia Pike near Ellicott City toward Pfeiffer's Corner, for a distance of 1.5 miles—(Concrete), will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. Standard Time, on the 15th day of August, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 27th day of July, 1922.

JOHN N. MACKALL,
Chairman.

L. H. STEUART,
Secretary.

Bids: Aug. 15.

Concrete Paving

Cape May, N. J.

Sealed bids will be received by the commissioners of the City of Cape May, N. J., until Tuesday, August 15, 1922, at ten o'clock standard time, for the laying of approximately 23,000 square yards of portland cement concrete paving, together with alternate bids for laying a like amount of a bituminous surface paving.

Bids must be accompanied by a certified check for an amount not less than five per cent of the total amount bid. Plans and specifications may be had on application to the City Engineer on making a deposit of five dollars, which will be refunded on return of plans and specifications in good condition. The commissioners reserve the right to reject any or all bids.

H. H. BELL,
City Engineer.

OFFICIAL PROPOSALS

Bids: Sept. 7.

Viaducts and Approaches

Nashville, Tenn.

The Board of Public Works of the City of Nashville will receive sealed proposals for the furnishing of materials and labor and the constructing complete of the East Nashville Viaduct and of the East and West Approaches of the Church Street Viaduct, both to be located in Nashville, Tennessee, and to be prosecuted in accordance with the plans and specifications of Freeland, Roberts & Company, Consulting Engineers.

Proposals will be considered:

1—On a lump sum basis for the furnishing of all labor and materials and the constructing complete of the East Nashville Viaduct.

2—On a lump sum basis for the furnishing of all labor and materials and the constructing complete of the East and West Approaches of the Church Street Viaduct.

3—On a lump sum basis for the furnishing of all labor and materials and the constructing complete of the East Nashville Viaduct and the East and West Approaches of the Church Street Viaduct.

Plans, specifications and bidding blanks on file at the office of the City Engineer, City Hall and also at the office of the Consulting Engineers, Freeland, Roberts & Co., 1212-13 Independent Life Building, Nashville, Tennessee.

Plans can be obtained on application with a deposit of twenty-five ($25.00) dollars, per set, this fee to be refunded to depositor on return of plans and specifications in good condition.

A certified check for Five Thousand ($5,000.00) dollars, or approved bidding bond in the sum of five (5%) per cent of the amount of the proposal, executed in favor of the City of Nashville, must accompany each bid.

The successful bidder will be required to execute bond in the full amount of the contract price.

All proposals must be mailed or delivered to S. H. McKay, City Clerk, City Hall., Nashville, Tennessee, on or before ten (10) o'clock a.m., Thursday, September 7th, 1922. Envelopes shall be marked, "Viaduct Proposal."

The Board of Public Works reserves the right to accept any bid or combination of bids, or to reject any or all bids and to waive all formalities.

APPROXIMATE QUANTITIES

Reinforced concrete	9,600 cu.yd.
Steel reinforcement	750 tons

FELIX Z. WILSON,
Mayor.

Attest:
S. H. McKAY,
City Clerk.

Bids: Aug. 15.

Paving

Wellington, Texas.

Sealed bids will be received by the City Clerk of Wellington up to 5 o'clock p.m. August 15th for furnishing all labor and material and constructing approximately 10,500 sq.yd. of concrete, brick, vibrolithic or bitulithic paving.

3% cashiers check must accompany each bid.

Plans on file with City Clerk. Contractors can secure plans from The Mack-Intosh Co., Engineers, Oklahoma City, upon deposit of $15.00. Refund of $10.00 when plans are returned.

OFFICIAL PROPOSALS

Bids: Aug. 23.

Improvement of Second Street

Henderson, Ky.

Sealed proposals for improvement of Second Street will be received by the Commissioner of Public Works and Property of Henderson, Kentucky until 12 o'clock noon standard time on the 23rd day of August, 1922, for the improvement of Second Street of the City of Henderson, Henderson County, Kentucky, from the east margin of Water Street to the west line of the right-of-way of the Illinois Central Railroad Company a distance of 5,115 feet to consist of paved carriageways, 18 feet in width on each side of the street, a curb along the center edge of these carriageways and at street intersections, catch basins with connections and inlets at intersections. Each proposal must contain the full name of every person or company interested in the same and must be accompanied by cash or a certified check made payable to the order of the City of Henderson, Kentucky, for a sum equal to five (5) per cent of the total amount of the bid, as a guarantee that contract will be entered into and proposals must be made on the complete work.

Requirements for bidding and instructions to bidders, form of proposal, contract, specifications, form of bond and plans may be obtained from the Commissioner of Public Works and Property of the City of Henderson or at the office of the engineers, Pearse Greeley & Hansen, 39 West Adams Street, Chicago, Illinois, upon receipt of fifteen dollars ($15.00) which sum so deposited will be refunded if said plans, specifications etc., are returned in good condition within thirty days (30) after the opening of bids.

CITY COMMISSION OF HENDERSON,
KENTUCKY
By CLAY F. HALL,
Mayor.

Bids: Sept.

Spavinaw Water Project

Tulsa, Okla.

The Water Commission of the City of Tulsa, Oklahoma, contemplates receiving proposals during the last half of September for the construction of the Spavinaw Water Supply Project, for which $6,800,000 bonds have been voted.

The work contemplated consists of a masonry and earth dam 50 feet high, 28 miles of 60 inch and 25 miles of 54 inch pipe, a 78 inch tunnel 7,000 feet long, a 350,000,000 gallon storage reservoir, a 10,000,000 gallon high pressure reservoir, and approximately 7 miles of cast iron or steel force mains.

Plans and specifications will not be entirely completed before August 15th, but are now far enough advanced for contractors who contemplate bidding to look over the work, The engineers for the project are prepared to show intending bidders the location of the various works upon the ground and to give detailed information. Contractors contemplating inspecting the work should notify the engineers as far in advance as possible.

Formal notice to contractors will appear in this publication upon the completion of the plans.

THE WATER COMMISSION OF THE
CITY OF TULSA
By A. J. RUDD,
Chairman.

Trammell & Holway, Engineers,
329 Kennedy Building,
Tulsa, Oklahoma.
Dabney H. Maury, Consulting Eng.,
Chicago, Ill.

OFFICIAL PROPOSALS

Bids: Aug. 30.

Highway and Street Paving

Little Rock, Ark.

Sealed bids will be received until ten a.m. of Wednesday August 30th, 1922 at the auditorium of the Board of Commerce, Little Rock, Arkansas, by the Board of Commissioners of Pulaski Road Improvement District Number Ten, for the construction of approximately forty miles of streets and roads. The principal items of construction are as follows:

422,000 sq.yd. Asphalt Surface.
244,000 sq.yd. Five inch Concrete Base.
38,000 tons Broken Stone, additional macadam foundation.
3,100 cu.yd. Concrete in culverts and bridges.
202,000 cu.yd. Excavation.
34,000 lin.ft. Concrete Curb.
185,000 lin.ft. Concrete Road Header.
79,000 Roadway ft. Concrete Road Header.

All proposals or bids must be accompanied by either a certified check drawn on a responsible bank or trust company, or, by a bidders bond made by a surety company authorized to do business in the State of Arkansas. The certified check or bidders bond must be payable to H. S. Turner, Secretary of the Board of Commissioners of Pulaski Road Improvement District Number Ten, for a sum not less than five per cent of the aggregate of the proposals made.

Plans and specifications, as well as additional information, may be secured from the Engineer.

The successful bidder will be required to furnish satisfactory surety construction bond in a sum equaling the amount of the contracts awarded him.

The right is reserved to accept or reject any and all proposals, and to waive informalities.

ROY L. THOMPSON,
Chairman.

H. S .TURNER,
Secretary,
216 Gazette Bldg.,
Little Rock, Ark.
D. A. MACCREA,
Chief Engineer,
215 Gazette Bldg.,
Little Rock, Ark.

Bids: Aug. 21.

Reinforced Concrete Paving

Princeton, N. J.

Notice is hereby given that sealed bids will be received by Princeton Township Committee for the construction of a reinforced concrete pavement in the Township of Princeton in the County of Mercer, with a cement concrete surface upon an old macadam foundation, estimated amount of concrete surface pavement reuired is 5,327 square yards; and opened and read in public at the office of the Princeton Township Committee, Branch Building, Princeton, N. J., on Aug. 21, at seven p.m., Standard Time.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Sincerbeaux and Moore, Engineers, and approved by the State Highway Commission, have been filed in the office of the said Engineers at 705 American Mechanic Building, Trenton, N. J., and Asbury Park Trust Co. Bldg., Asbury Park, N. J., and First National Bank Bldg., Princeton, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the Engineer on proper notice* and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Princeton Township Committee and must be accompanied by a certificate of surety and a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to Engineer.

By order of Princeton Township Committee.

ELLWOOD J. LAWRENCE,
Chairman.
MARTIN CLAUSEN,
Clerk.

*$10.

OFFICIAL PROPOSALS

Bids: Aug. 15.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., on TUESDAY, the 15th day of August, 1922, at one o'clock p.m. advanced standard time, which is twelve o'clock noon, eastern standard time, for the improvement of the highways in the following counties:

CAYUGA...........(one highway: 4.13)
CORTLAND..........(one highway: 3.54)
ESSEX...............(one highway: 5.19)
ORANGE.............(one highway: 7.96)
Also for the reconstruction of the following:
COLUMBIA..........(one contract: 3.11)
DUTCHESS.........(two contracts: 0.24)
and 3.04
LEWIS................one contract: 3.00)
ORLEANS...........(one contract: 2.08)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The special attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.

J. C. FINCH,
Secretary.

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Technical Paper

Engineering News-Record's circulation—over 30,000 weekly—is the largest of any technical paper printed. It includes among its readers practically every contractor, dealer, and manufacturer in the country who is interested in bidding on public works contracts—either local or outside of his immediate vicinity.

Bids: Aug. 15.

Paulsboro-Gibbstown Road

Woodbury, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Gloucester for reconstruction of Paulsboro-Gibbstown road, in the Township of Greenwich, in the County of Gloucester, New Jersey, with a reinforced concrete pavement, estimated amount of concrete pavement required is 28,008 sq.yd., and opened and read in public at Court House, Woodbury, N. J., on Tuesday, August 15th, 1922, at 10.00 o'clock a.m., Eastern Standard Time.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by William C. Cattell, County Engineer, have been filed in the office of the said engineer at Woodbury, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to the Board of Chosen Freeholders of the County of Gloucester and must be accompanied by a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the County of Gloucester.

CHESTER N. STEELMAN, Clerk.
WM. C. CATTELL, County Engineer.

OFFICIAL PROPOSALS

Bids: Aug. 15.

Paving of Ocean Avenue

Long Branch, N. J.

Notice is hereby given that sealed proposals will be received by the Board of Commissioners of the City of Long Branch, New Jersey, for the paving of Ocean Avenue in said City from Sea View Avenue southwardly to Brighton Avenue with approximately 60,000 square yards of asphalt upon a concrete foundation, with concrete gutters 3 feet wide, together with new concrete curb and other work incidental to said improvement including those portions of driveways of intersecting streets or alleys which are included within the property line of said avenue above mentioned and will be opened and read at a regular meeting of the Board of Commissioners at City Hall, Long Branch, New Jersey, on Tuseday, evening, August 15, 1922, at 8 o'clock Day Light Saving Time, or as soon thereafter as same can be presented.

Drawings and specifications prepared by J. W. Seaman, City Engineer, are now on file in the office of the City Clerk and at the office of the engineer, and may be obtained from the engineer by prospective bidders during business hours, upon a deposit of $10, which will be refunded upon return of the plans and specifications in good condition at or before the time the bids are received.

All bids must be made on the standard proposal form in the manner designated therein and required by the specifications and must be enclosed in sealed envelopes bearing the name and address of the bidder and marked "Bid for paving Ocean Avenue" and addressed to Frank C. Quinn, City Clerk, and must be accompanied by a surety company certificate stating that said surety company will provide the bidder with the required bond on the proposed work. No bid will be considered unless accompanied by a certified check for not less than 10% of the amount bid on the work, drawn to the order of Frank L. Howland, City Treasurer or cash in equal amount.

The standard proposal forms and data may be obtained on application to the engineer at his office 192 Broadway, Long Branch, New Jersey.

The Board of Commissioners reserve the right to reject any or all bids if deemed to the best interest of the City so to do.

Dated Long Branch, New Jersey, August 3, 1922.

FRANK C. QUINN,
City Clerk.

Bids: Aug. 30.

Tunnel

Providence, R. I.

Sealed proposals for building the Tunnel portion of the Scituate Aqueduct located in the Town of Scituate and the City of Cranston, R. I. about 8 miles southwesterly of the City of Providence, R. I. will be received at the office of the Water Supply Board, City Hall, Providence, R. I. until 1:30 P.M. Eastern Standard Time (2:30 P. M. daylight saving time) on Wednesday, August 30, 1922, at which time and place they will be publicly opened and read.

The work will include the construction of a concrete lined tunnel about 3¼ miles in length with an area inside the lining equivalent to a circle 7 feet 9 inches in diameter but of a horse shoe shape except at and near the portals where a 7½ foot circular section will be used. A construction shaft about 140 feet in depth will be required. It is expected that the tunnel will be in rock for substantially its entire length. Some of the principal estimated quantities are: tunnel excavation 60,000 cubic yards, concrete 28,500 cubic yards, excavation in open cut 17,000 cubic yards.

Pamphlets containing plans, information for bidders, form of proposal, contract and bond and specifications, may be obtained on or about August 9 from the Secretary of the Board, City Hall, or from the Chief Engineer, 631 Westminster Street.

CITY OF PROVIDENCE
WATER SUPPLY BOARD.
B. THOMAS POTTER,
Chairman

SAMUEL N. GRAMMONT,
Secretary.
FRANK E. WINSOR,
Chief Engineer.

OFFICIAL PROPOSALS

Bids: Aug. 23.

State Highway Work

Dover, Del.

Sealed proposals will be received by the State Highway Department, at its office, Dover, Delaware, until 2 o'clock p. m., August 23, 1922, and at that place and time publicly opened, for the construction of State Highways, involving the following approximate quantities:

CONTRACT No. 41-A
Superstructure (Steel) Laurel Bridge
Structural Steel—
111,000 lb. Moving parts.
40,000 lb. Fixed parts.
7,000 lb. Cast steel track plates.
Machinery—
6,400 lb. Racks, gears, bearings, misc.
1,220 lb. Forged steel.
800 lb. Cold rolled shafting.
80 lb. Bronze.
1,500 lb. Reinforcing steel.
65 cu.yd. Counter weight. (Plain concrete)
12 M. B. M. Flooring.
80 lin.ft. Pipe railing.
Selected Motor and Housing.

The Scherzer Rolling Lift Bridge Co., Chicago, Ill., are the designers of the steel superstructure.

The contract will be for a lump sum.

CONTRACT No. CN-8.
Thru Townsend. 0.427 Miles.
1,050 cu.yd. Excavation.
810 cu.yd. Cement Concrete Pavement.
200 lb. Reinforcement.

CONTRACT No. CN-9
Thru St. Georges. 0.20 Miles.
600 cu.yd. Excavation.
430 cu.yd. Cement Concrete Pavement.
100 lb. Reinforcement.

Performance of contract shall commence within ten (10) days after execution of the contract and be completed during 1922.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked "Proposal for the Construction of State or State Aid Highways."

The Contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans of CN-8 and CN-9 may be seen at Dover.

General plan with stress sheet for Contract 41-A, index plans for Contract CN-8 and CN-9 and specifications for each may be obtained upon deposit of $10, which amount will be refunded upon return of plans and specifications in good condition at the office of

STATE HIGHWAY DEPARTMENT,
Dover, Delaware.

Bids: Aug. 22.

Steel Bridge

Athens, Ca.

Sealed proposals will be received by the Board of Commissioners of Roads and Revenues of Clarke County, Georgia, at the office of said Board in the Court House at Athens, Georgia, until Noon, City time, August 22, 1922, for the furnishing of all labor, material, equipment and other things necessary for the erection of a bridge on River Street in the City of Athens, Georgia, where said Street crosses the Oconee river.

The said bridge is to be constructed of steel, to be approximately 135 feet in length with a roadway 24 feet wide, and a sidewalk 5 feet in width on one side, and provisions made for carrying an eight inch water main on the other side. The County of Clarke is to construct the substructure and to have the same in readiness for the erection of the bridge proper.

Specifications may be had by applying to the undersigned.

By order of said Board.

TATE WRIGHT,
Clerk and County Attorney.

OFFICIAL PROPOSALS

Bids: Sept. 1.

Superstructures for Filtration Plant

Bay City, Mich.

Sealed proposals for constructing the superstructures for a filtration plant and miscellaneous work will be received at the office of the City Manager, City Hall, Bay City, Michigan, until ten o'clock a.m., Eastern Standard Time, on Sept. 1st, 1922.

All bids must be made upon blank proposal forms furnished by the City and each bid must be accompanied by a proposal bond or certified check for $5,000.

Surety bonds in the sum of 50% of the contract will be required of the successful bidder.

Plans, proposal forms, contract and specifications may be obtained at the office of the City Manager, City Hall, Bay City, Michigan, and also from the Frazier-Ellms-Sheal Company, Engineers, Illuminating Building, Cleveland, Ohio, upon deposit of fifty dollars which deposit will be refunded upon return of plans and specifications in good condition.

The City reserves the right to accept any bids or to reject any and all bids.

WM. H. REID,
City Manager.

Engineering News-Record Reaches Your Local Contractors

Its distribution among the contractors of any one state is in proportion to the number of contractors situated in that state. The Official Proposal Colums of *Engineering News-Record* offer precisely the same efficient service to municipalities, counties, and state and government departments in every section of the United States.

Bids: Aug. 18.

Channel Work

Bloomington, Ill.

Sealed bids will be received by the Trustees of the Bloomington and Normal Sanitary District, at 404 Unity Building, Bloomington, Illinois, up to 2 o'clock p. m., August 18, 1922, for construction of the open channel work of the District as follows:

71,300 cubic yards excavation in open channel.
76,200 square yards hand dressed spoil bank.
150 lineal feet retaining wall requiring 56 cu. yd. concrete.
75 lineal feet reinforced concrete sewer crossing under channel.
1 manhole on 33-inch sewer.
1 manhole on 48-inch sewer to be repaired.
Supports for two sewers crossing proposed channel.

Open channel has bottom widths from 8 feet to 26 feet, with side slopes 1½ to 1, average depth 7 feet.

Separate bids will be received on the dredging and spoil bank work and on the incidental work above listed.

All bids must be on forms prescribed by the Trustees and bidding blanks may be obtained from Taylor & Woltmann, 428 Unity Bldg., Bloomington, Illinois, Engineers for the District.

Plans, profiles and specifications for the work may be obtained from the Engineers.

All bids must be accompanied by a check for 10 per cent of the amount of the bid, certified by a responsible bank, payable to John W. Harber, President of Board of Trustees.

The Trustees reserve the right to reject any and all bids.

Dated Bloomington, Illinois, July 8, 1922.

JOHN W. HARBER,
FRED D. BARBER,
JOHN J. CONDON,
Trustees, Bloomington and Normal Sanitary District.

OFFICIAL PROPOSALS

Bids: Aug. 16.

Street Paving

Nashville, Tenn.

Notice is hereby given that sealed proposals will be received at the office of the City Clerk until 10 o'clock a.m. Wednesday, August 16, 1922, for constructing street paving on the following streets, to-wit:

GRANITE BLOCK PAVING
(RESURFACE)

Buchanan Street from 9th Avenue to 18th Avenue, South Second Street from Woodland Street to Fatherland Street.

BITUMINOUS CONCRETE PAVEMENT
(RESURFACE)

Sixth Avenue, South, from Broadawy to Bell Street.

ASPHALTIC PAVEMENT (RESURFACE)

Hayes Street from 15th Avenue to Louise Avenue, Terrace Place from 20th Avenue to 21st Avenue, Villa Street from South Street to Tremont Street, McMillin Avenue from Church Street to Cedar Street, Heffernan Street from 18th Avenue to 21st Avenue, South Second Street from Fatherland Street to Shelby Avenue, Seventh Street from Woodland Street to Bienville Street, Foster Street from First Street to Seventh Street, Shelby Avenue from Second Street to Tenth Street, South Tenth Street from Woodland Street to Shelby Avenue.

ASPHALTIC PAVEMENT (NEW GRADING AND PAVING)

Highland Avenue from Twenty-fifth Avenue to Twenty-eighth Avenue, Glen Avenue from Ninth Avenue to Bradford Avenue, Halcyon Avenue from Ninth Avenue to Twelfth Avenue, Montrose Avenue from Ninth Avenue to Twelfth Avenue, Nineteenth Avenue, South, from Acklen Avenue to point 525 feet south, Twentieth Avenue, South, from Acklen Avenue to point 525 feet south, Heffernan Street from Twenty-first Avenue to Twenty-eighth Avenue, Evander Street from Woodland Street to Holly Street, Russell Street from Nineteenth Street to Twentieth Street, South Nineteenth Street from Shelby Avenue to Electric Avenue, South Nineteenth Street from Russell Street to Shelby Avenue, Ashworth Avenue from Eighteenth Street to Shelby Park, Alley No. 919 (between West Belmont Circle and Eighteenth Avenue) from Acklen Avenue to point 500 feet south.

Approximately 13,000 square yards of Granite Block Paving, 3,000 square yards of Bituminous Concrete Paving, 79,000 square yards of Asphaltic Paving (Resurface) and 50,000 square yards of Asphaltic Paving (New Grading and Paving) will be required. Separate proposals must be submitted for each street on blank forms accompanying specifications, which will be furnished by Wm. W. Southgate, City Engineer, upon application. A charge of fifty cents (50c.) per copy will be made for each specification and proposal furnished. Proposals must be accompanied by a certified check payable to the order of the City of Nashville in an amount equivalent to ten per cent of the aggregate bid, or an approved bond in a penal sum of like amount with a solvent surety indemnity insurance company authorized to do business in the State of Tennessee. The said checks and bonds will be returned to unsuccessful bidders upon award of contract, and to successful bidders when they shall have entered into contract and made approved bond for the faithful performance of said contract as required by law. The right is reserved to reject any and all bids.

By order of the Board of Public Works.

FELIX Z. WILSON,
Mayor.

Attest:
S. H. McKAY,
City Clerk.

Bids: Aug. 18.

Brick and Stone Church

Madisonville, Ky.

The building committee of The Methodist Episcopal Church South, of Madisonville, Ky., will receive proposals for the erection of a brick and stone church up until 10 o'clock a.m., August 18th, 1922.

Plans and specifications may be had upon application to Rev. J. A. Baylor, Architect, 1115 Fourth Ave., Louisville, Ky., or the chairman of the committee.

A certified check for $2,500.00 payable to J. B. Scott, Treasurer, or a proposal bond executed by some good bonding company must be enclosed with each proposal.

The committee reserves the right to reject any or all proposals.

BASIL M. BROOKS, Chn. of Committee.

Bids: Aug. 16.

Steel Tower Tank

Sayreville, N. J.

Sealed proposals will be received by the Mayor and Borough Council of the Borough of Sayreville, N. J., at the Borough Council Chambers, Borough Hall, in the Borough of Sayreville on the 16th day of August, 1922 at the hour of 8 o'clock P. M., Daylight Saving Time and 7 o'clock P. M., Standard Time, for furnishing of 100,000 gallon steel tank on a tower sixty (60) feet high to the balcony, and erecting on foundations to be provided by the Borough of Sayreville.

All of said work to be done in accordance with the specifications prepared by Waldo S. Coulter, Consulting Engineer, 114 Liberty Street, New York, N. Y., and which said specifications were adopted by the Borough Council of the Borough of Sayreville, the meeting held Wednesday, March 15, 1922, which said specifications are now on file in the office of the Borough Clerk, Borough Hall, Sayreville, N. J., where they may be seen by bidders or a set of said specifications can be obtained from Waldo S. Coulter, Consulting Engineer upon the payment of two dollars ($2.00), which sai dsum of two dollars ($2.00) will not be refunded.

Each bidder shall submit with his proposal a drawing showing the sizes of the various members and the dimensions of the structure he proposes to furnish under this contract.

Each proposal must be in a sealed envelope and marked, "Proposal for Steel Tower Tank." Each bid must be accompanied by a certified check for five hundred dollars ($500) made payable unconditionally to the Treasurer of the Borough of Sayreville, which check must be presented with the bid as a guarantee that the bidder will within ten (10) days after receiving the award, enter into contract with the Borough of Sayreville for the performance of the work, and will also provide a Surety Company bond to be approved by the Borough Attorney in the sum of five thousand dollars ($5,000) for the faithful performance of the said contract.

The Mayor and Borough Council reserve the right to reject any and all bids.

The erection and construction of said steel tower tank must be completed within 150 consecutive working days from the date of the signing of the contract.

EDWARD E. CLARK,
Mayor.

Attest:
FRANK P. KOLB,
Borough Clerk.
Approved:
THOMAS H. HAGERTY,
Borough Attorney.

Bids: Sept. 16.

Tenders for Plant

Melbourne, Australia.

Tenders are hereby invited for the supply, delivery, etc., of the following for the Morwell Power Scheme.

Copies of Tender Form and Specification will be available upon application to: Office of the Bureau of Foreign & Domestic Commerce, United States Department of Commerce, First National Bank Building, CHICAGO, and Office of the Bureau of Foreign & Domestic Commerce, United States Department of Commerce, 734 Customs House, NEW YORK CITY.

SPECIFICATION NO. 261—STRAIN & PIN TYPE INSULATORS

CHARGE: £2:2:0 for the first three copies of Tender Form, Conditions of Contract, Specification and Drawing complete. These charges will be returned on receipt of a bona fide tender. A fourth copy and any further copies will be supplied for the sum of 10/6 each.

PRELIMINARY DEPOSIT: A preliminary deposit of £100:0:0 is to lodged with Tender.

The Specification may be inspected at the above mentioned Offices, and also at the office of: The Commissioner for Australia in U. S. A., Room 3012, 61 Broadway, NEW YORK.

The Commission does not bind itself to accept the lowest or any tender.

Tenders on prescribed form, properly endorsed and addressed, must be delivered to the undersigned in Melbourne not later than Noon, 16th September, 1922.

R. LIDDELOW, Secretary.
State Electricity Commission of Victoria,
Melbourne,
Victoria, Australia.

Bids: Sept. 1.

Substructures for Filtration Plant and Miscellaneous Work

Bay City, Mich.

Sealed proposal for constructing the Substructures for a Filtration Plant and Miscellaneous Work will be received at the office of the City Manager, City Hall, Bay City, Michigan, until ten o'clock a.m., Eastern Standard Time, on September 1st, 1922.

All bids must be made upon blank proposal forms furnished by the City, and each bid must be accompanied by a proposal bond or certified check for $10,000. Bids will be compared on the basis of the Engineer's estimate of quantities.

Surety bonds in the sum of 50% of the contract will be required of the successful bidder.

Plans, proposal forms, contract, and specifications may be obtained at the office of the City Manager, City Hall, Bay City, Michigan, and also from The Frazier-Ellms-Sheal Company, Engineers, Illuminating Building, Cleveland, Ohio, upon deposit of fifty dollars, which deposit will be refunded upon return of plans and specififications in good condition.

The City reserves the right to accept any bid or to reject any and all bids.

WM. H. REID,
City Manager.

National Publicity Offers a Two-Fold Advantage

Giving calls for bids National publicity opens the way for additional and possibly lower offers from outside bidders to whom work can be let, if desired.
Then too, local contractors, seeing your contracts advertised Nationally will figure closer, realizing that the field of competitors for the work is greatly enlarged.
An advertisement printed in the Official Proposal Columns of *Engineering News-Record* brings the contract to the attention of not only local bidders but, in addition, any others who might be interested.

Bids: Aug. 15.

Sewerage System

Long Branch, N. J.

Notice is hereby given that sealed proposals will be received by the Board of Commissioners of the City of Long Branch, New Jersey for the installation of the extension of the present municipal sewer in the City of Long Branch, together with the building of a pumping station, and will be opened and read at a regular meeting of the Board at City Hall on Tuesday August 15, 1922, at 8 o'clock in the evening Day Light Saving Time.

The approximate amount of work to be done consists of 5,500 lineal feet of 8 inch terra cotta pipe, 2,500 lineal feet of 5 inch curb connections together with the building of the receiving basin and pumping station all as shown on plans and specifications prepared by J. W. Seaman, City Engineer, which may be obtained by applying to the engineer at his office 192 Broadway, Long Branch, New Jersey, upon a deposit of $10, which will be refunded upon the return of the plans and specifications in good condition, on or before the time the bids are received.

Bids must be made on standard proposal form in the manner designated therein and required by the specifications and must be enclosed in sealed envelopes bearing the name and address of the bidder and marked "Bids for Sewer" and addressed to Frank C. Quinn, City Clerk, and must be accompanied by a certifified check for not less than 10% of the amount bid on the work, drawn to the order of Frank L. Howland, City Treasurer, or cash in equal amount. The Board of Commissioners reserves the right to reject any or all bids if deemed to the best interest of the City so to do.

Dated, Long Branch, New Jersey, August 3, 1922.

FRANK C. QUINN,
City Clerk.

Bids: Aug. 17.

Road Improvement

Jonesboro, Arkansas.

Sealed bids for the improvement of certain roads in Lake City Nettleton and Bay Road Improvement District No. 1, Craighead County Arkansas, will be received by the Commissioners of said District at the Office of the Secretary, Jonesboro, Arkansas, on the 17th day of August 1922 at 2 P.M. at which time and place they will be publicly opened and read.

The work proposed consists of the following approximate items:

120,750 square yards Bituminous Macadam surface course (Penetration method) on old waterbound macadam base.

2,000 cubic yards Re-constructed base course.

Plans and specifications may be examined at the office of the Secretary of the District, Jonesboro, Arkansas or at the office of the Engineers, Klyce and Kackley, Nashville, Tenn., and Jonesboro, Arkansas, or at the office of the State Highway Commission, Little Rock, Arkansas. A copy may be obtained from the Engineers upon a receipt of a deposit $10.00 of which amount $5.00 will be refunded when the plans and specifications are returned in good order. If additional information is required, address the Engineers.

All proposals or bids must be accompanied by a certified check drawn on a responsible bank or trust company or by a bidder's bond made by a corporation approved by the State Highway Commission. Certified checks or bidder's bond must be payable to E. E. Randolph, Secretary of the Board of Commissioners, Lake City, Nettleton and Bay Road Improvement District No. 1, Craighead County, for a sum not less than $6,000.00.

The successful bidder will be required to furnish construction bond in a sum equaling the amount of the contract. The right is reserved to accept or reject any or all proposals and to waive informalities.

The contractor will be paid cash on monthly estimates prepared by the engineers and approved by the State Highway Engineer amounting to 85 per cent of the work done.

E. E. RANDOLPH,
Secretary Board of Commissioners.

Klyce & Kackley,
720-4th and 1st Bank Bldg.
Nashville, Tenn.
Engineers for the District.

Bids: Aug. 25.

Construction of Main Sewer to Shorewood and Whitefish Bay.

Milwaukee, Wis.

Published by authority of the Metropolitan Sewerage Commission of the County of Milwaukee.

Sealed proposals for the construction of extensions to the Intercepting Sewer System of the County of Milwaukee, Wisconsin, will be received by the Metropolitan Sewerage Commission at its offices, 508 Market Street, Milwaukee, Wisconsin, until 2:00 o'clock p.m., August 25th, 1922, at which time and place the proposals will be publicly opened and read.

The work to be done embraces the building of approximately the following work:

484 lineal feet of 18 inch Siphon.

4,872 lineal feet of 42 inch Concrete Sewer.

Together with all manholes and other appurtenances.

The time allowed for completion of this contract shall be nine (9) months from the date of the engineer's notice to begin work.

Each proposal submitted must be accompanied by a cash deposit of, or, in lieu thereof, by a certified check drawn upon a National or State Bank or Trust Company, and to the order of the "Metropolitan Sewerage Commission of the County of Milwaukee" to the amount of Twenty five Hundred ($2,500.00) Dollars.

Specifications and blank forms of proposals can be obtained and detailed plans examined at the office of the Metropolitan Sewerage Commission, 508 Market Street, Milwaukee, Wis., and a full set of plans will be sent to any contractor upon receipt of Five ($5.00) Dollars. This sum will be returned upon surrender of the plans in good condition, if returned within thirty days after the award of the contract.

JOHN H. FOWLES,
Secretary.

OFFICIAL PROPOSALS

Bids: Aug. 16.

Sewerage System

Sayreville, N. J.

Sealed proposals will be received by the Mayor and Borough Council of the Borough of Sayreville, N. J., at the Borough Council Chambers, Borough Hall in the Borough of Sayreville on the 16th day of August, 1922 at the hour of 8 o'clock P. M., Daylight Saving Time and 7 o'clock P. M., Standard Time, for the construction of a system of sewers and appurtenances in the Borough of Sayreville. The work will in general consist of about

49,700 lin.ft. of 8 Inch Sewers
7,900 lin.ft. of 10 Inch Sewers
1,736 lin.ft. of 8 Inch c.i. outfall sewer on piles
3,700 lin.ft. of 6 Inch c.i. force main
1,470 lin.ft. of 10 Inch force main

together with sewage pumping stations and various appurtenances.

All of said work to be done in accordance with the plans, profiles and specifications prepared by Waldo S. Coulter, Consulting Engineer, 114 Liberty Street, New York, N. Y., which said plans, profiles and specifications were adopted by the Borough Council of the Borough of Sayreville at the meeting held Wednesday, March 15, 1922, and which said plans, profiles and specifications are now on file in the office of the Borough Clerk, Borough Hall, Sayreville, N. J., where they may be seen by bidders or a set of the said plans, profiles and specifications can be secured from Waldo S. Coulter, Consulting Engineer, by depositing fifteen dollars ($15.00) one-half of which will be refunded upon the return of the plans, profiles and specifications in good condition within seven (7) days after the award of the contract. All bids must be on the form of proposal to be obtained from the Consulting Engineer.

Each bidder must accompany his bid by a certified check of five thousand dollars ($5,000) payable unconditionally to the Treasurer of the Borough of Sayreville, which said check must be presented with the bid as a guarantee that the bidder will within ten (10) days after receiving the award enter into and execute a contract for the faithful performance of the work to be done under said contract, and said bid must be in a sealed envelope and marked "Proposal for a Sewerage System." The successful bidder will also be required to furnish a Surety Company bond to the Borough of Sayreville in the amount of Fifty thousand dollars ($50,000) for the faithful performance of the work to be done under said contract, said bond to be approved by the Borough Attorney.

In case of failure to execute the contract and furnish the required Surety Company bond within ten (10) days after due notice that the contract has been awarded to him, the successful bidder shall forfeit his deposit to the Borough of Sayreville as liquidated damages.

The right to reject any or all bids is reserved by the Mayor and Borough Council.

All of said work must be completed on or before December 1, 1923.

EDWARD E. CLARK,
Mayor.

Attest:
FRANK P. KOLB,
Borough Clerk.
Approved:
THOMAS H. HAGERTY,
Borough Attorney.

Bids: Aug. 18.

Water Purification Plant

Sebring, Ohio.

Sealed bids for the construction of a 2 million gallon water purification plant will be received by the Village Clerk until 12 o'clock noon, on August 18, 1922.

Plans and specifications may be seen at the office of the Clerk or may be obtained from Burgess and Niple, Engineers, 223 East Broad Street, Columbus, Ohio, on deposit of ten dollars of which five dollars will be refunded on return of plans and specifications within ten days after letting. A bond or certified check in the sum of ten per cent of the amount of the bid shall accompany the proposal.

The Village reserves the right to reject any and all bids, and to waive informalities.

THE VILLAGE OF SEBRING, OHIO
JAMES G. EARDLEY,
Clerk.

OFFICIAL PROPOSALS

Bids: Aug.21

Dredging

Norwalk, Conn.

Sealed proposals will be received by the Mayor of the City of Norwalk, Conn., at 7 o'clock P.M. (daylight saving time) on August 21, 1922, for dredging in Norwalk Harbor.

The dredged material is to be pumped upon the land near to the area from which the material is taken in order to form a City park and to fill a low area north of the park.

The approximate amount of mmaterial to be dredged is 250,000 cu.yds.

Plans, specifications and proposal blanks may be obtained from the City Clerk, South Norwalk, Conn., upon the depossit of $10., which amount will be refunded upon the return of the plans and specifications in good condition.

Each proposal must be accompanied by a certified check for $2,000.00 payable to the Treasurer of the City of Norwalk.

The City reserves the right to reject any or all bids.

CALVIN L. BARTON,
Mayor

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these advertisers through *Engineering News-Record's* large NATIONAL circulation, reaching almost every contractor, dealer, and manufacturer in the country interested in bidding on public work contracts. It is the DOMINANT MEDIUM for advertising contracts for work, material, and supplies for towns, cities, counties, state and government departments, and private organizations.

Bids: Aug. 17.

Reinforced Concrete Street Paving and Appertaining Structures

Upper Nyack, N. Y.

Sealed proposals will be received by the Trustees and President of the Village of Upper Nyack, at the Village Hall, Upper Nyack, New York, at 2 p.m. standard time, August 17, 1922, for street improvements. Work will consist of approximately 14,000 square yards of reinforced cement concrete pavement.

All bids must be upon blanks provided in the proposal furnished to bidders.

Bids must be accompanied by a certified check for three per cent, (3%) of the amount of the bid. Plans and specifications will be on file at the Village Treasurer's office, Wyman & Polhamous store, Upper Nyack, and the office of the Engineer, 507 Fifth Avenue, Room 600, New York City.

Copies of the plans and specifications may be obtained on or after August 3rd, 1922, for three dollars, ($3.00), per set. No refund for specifications or plans returned. Bidding blanks will be furnished free.

The right is reserved to reject any or all bids.

FRANK R. ZWAHLEN,
Village Clerk.

H. ELTINGE BREED, Engineer,
507 Fifth Avenue,
Room 600,
New York City.

Bids: Aug. 21

Levee Work

Naples, Ill

Proposals will be received by the Commissioners of the Valley City Drainage and Levee District at Naples, Illinois, until 10.00 A.M., August 21, 1922, for placing about 20,000 cubic yards of earth on top of their present Illinois River levee opposite Naples, Illinois.

Information and specifications may be obtained from the Randolph-Perkins Company, Engineers, at Naples, Illinois, or 1210 First National Bank Bldg., Chicago.

WM. SEVERNS,
Chairman
H. G. EDWARDS,
Commissioner
THOMAS MEEHAN,
Commissioner

OFFICIAL PROPOSALS

Bids: Aug. 16.

Water Works System

Sayreville, N. J.

Sealed proposals will be received by the Mayor and Borough Council of the Borough of Sayreville, N. J., at the Borough Council Chambers, Borough Hall, in the Borough of Sayreville, on the 16th day of August, 1922, at the hour of 8 o'clock p.m., Daylight Saving Time and 7 o'clock p.m. Standard Time, for the construction of a Water Works System in the Borough of Sayreville. The work, will, in general, consist of:

Laying about 13,402 lin.ft. of 4 inch Cast Iron Pipe,
Laying about 30,715 lin.ft. of 6 inch Cast Iron Pipe,
Laying about 10,215 lin.ft. of 8 inch Cast Iron Pipe,
Laying about 14,780 lin.ft. of 10 inch Cast Iron Pipe

together with other and appertaining construction.

All of said work to be done in accordance with the plans and specifications prepared by Waldo S. Coulter, Consulting Engineer, 114 Liberty Street, New York, N. Y., which said plans and specifications were adopted by the Borough Council of the Borough of Sayreville at the meeting held Wednesday, March 15th, 1922, and which said plans and specifications are now on file in the office of the Borough Clerk, Borough Hall, Sayreville, N. J., where they may be seen by bidders or a set of the said plans and specifications can be secured from Waldo S. Coulter, Consulting Engineer, by depositing ten dollars ($10.00), one half of which will be refunded upon the return of the plans and specifications in good condition within seven (7) days after the award of the contract. All bids must be on the form of proposal to be obtained from the Consulting Engineer.

Each bidder must accompany his bid by a certified check of five thousand dollars ($5,000), payable unconditionally to the Treasurer of the Borough of Sayreville, which said check must be presented with the bid as a guarantee that the bidder will within ten (10) days after receiving the award enter into and execute a contract for the faithful performance of the work to be done under said contract, and said bid must be in a sealed envelope and marked "Proposal for a Water Works System." The successful bidder will also be required to furnish a Surety Company bond to the Borough of Sayreville in the amount of Fifty Thousand Dollars ($50,000), for the faithful performance of the work to be done under said contract, said bond to be approved by the Borough Attorney.

In case of failure to execute the contract and furnish the required Surety Company bond within ten (10) days after due notice that the contract has been awarded to him, the successful bidder shall forfeit his deposit to the Borough of Sayreville as liquidated damages.

The right to reject any or all bids is reserved by the Mayor and Borough Council.

All of said work must be completed on or before December 1, 1923.

EDWARD E. CLARK,
Mayor.

Attest:
FRANK P. KOLB,
Borough Clerk.
Approved:
THOMAS H. HAGERTY,
Borough Attorney.

Bids: Aug. 16.

Water Main and Sewer Construction

Hyattsville, Md.

Sealed proposals for Contract 32-W & S will be received at the office of the Washington Suburban Sanitary Commission, Evans Bldg., New York Ave., Washington, D. C. until 3 P.M., Eastern Standard Time, Wednesday, August 16, 1922, for constructing 11,500 feet of 6 in. to 8 in. cast iron water mains and 33,500 feet of 6 in. to 10 in. sewers and appurtenances.

Plans obtainable from Robert B. Morse, Chief Engineer of District, Hyattsville, Md., on returnable deposit of $5.00.

T. HOWARD DUCKETT,
EMORY H. BOGLEY,
J. BOND SMITH,
Commissioners.

OFFICIAL PROPOSALS

Bids: Sept. 5.

High School

Smyrna, Del.

Public notice is hereby given that the Board of Education, of the Smyrna Special School District and Delaware School Auxiliary Assocaition will meet at the office of the Delaware School Auxiliary Association, duPont Building, Wilmington, Delaware, on Sept. 5th. 1922, at the hour of 11 o'clock, Daylight Saving Time, and then and there will receive and open sealed proposals for furnishing labor and material to erect and complete a new High School Building for the Town of Smyrna, Kent County, State of Delaware.

The work for which bids or proposals are hereby invited will consist of semi-fireproof building constructed of brick and concrete walls, with timber and reinforced concrete floor and roof construction. The size of building is approximately 150 ft. x 80 ft. The building will be one and two stories high and contain about 14 Instruction Rooms and Auditorium.

Bids will be received for the erection complete of the entire building under one contract, or for the following divisions separately:

1—For the General Construction, which includes all masonry, carpentry, steel and iron, roofing, painting, and all work kindred thereto.

2—For Plumbing and Gas Fitting, and all work kindred thereto.

3—For Heating and Ventilating and all work kindred thereto.

4—For Electrical Work and all work kindred thereto.

The Board of Education and Delaware School Auxiliary Association reserve the right to accept or reject any or all proposals and to waive informalities at their discretion.

All bids must be in sealed envelopes addressed to the Board of Education of the Smyrna Special School District, care of Delaware School Auxiliary Association, du Pont Building. Wilmington, Delaware, endorsed "Proposals for (Naming the branch of work covered by bid)," with the name of the bidder.

No bid will be considered unless accompanied by a certified check to the order of the Board of Education of the Smyrna Special School District to the amount of 2% of the amount of the bid or a bid bond of like amount, binding the bidder to execute the contract if awarded him. The terms of the proposal with surety required are fixed by the specifications.

Copies of the plans, specifications will be on file in the office of the Delaware School Auxiliary Association, du Pont Building, Wilmington, Delaware, and at the Smyrna High School, Smyrna, Delaware, for the purpose of examination and estimating.

There will be a limited number of copies of the plans and specifications which will be loaned to the prospective bidders on deposit of a certified check to the order of Delaware School Auxiliary Association in the sum of $25.00. If plans and specifications are returned on or before the submission of estimates, the check will be returned, but should the plans and specifications be not returned, the deposit may become forfeited. Applications for the plans and specifications should be made to the Delaware School of Auxiliary Association, Room 8124 duPont Building, Wilmington, Delaware.

THE BOARD OF EDUCATION OF THE SMYRNA SPECIAL SCHOOL DISTRICT, SMYRNA, DEL.
W. O. HOFFECKER, President.
DELAWARE SCHOOL AUXILIARY ASSOCIATION.
DR. JOS. H. ODELL, President.

DITCHING CONTRACT WANTED

Anyone having work to sublet, suitable for a 30-ft. span Bay City Dryland Dredge,

Write to
N. B. MILLER, Milan, Tenn.

OFFICIAL PROPOSALS

Bids: Aug. 22.

Stone Jetties

Longport, N. J.

Sealed proposals for the construction or extension of stone jetties or sea walls or any or all of them on the Atlantic Ocean, in the Borough of Longport, County of Atlantic, State of New Jersey, will be received by the Board of Commissioners of the Borough of Longport, at 7.30 o'clock in the evening, Eastern Standard Time, August 22, 1922, during a regular meeting of said Board of Commissioners, at the Commission Chamber, Borough Hall, Longport, N. J.; said bids to be opened and read in public at the aforesaid time and place.

Plans, specifications and form of bid, certificate of surety, contract and bond, covering proposed work, are on file in the office of the Borough Clerk, at Borough Hall, Longport, N. J. where they may be inspected during business hours. Any prospective bidder will be furnished with a complete set of the plans and specifications of the proposed work in consideration of a deposit of $10.00 and such deposit will be refunded if both plans and specifications are returned in good condition on or before August 22, 1922. Each bid must be made on the standard proposal form in the manner required by the specifications, must be enclosed in a sealed envelope marked "Proposals for Construction of Stone Jetties or Stone Seawalls or any or all of them at Longport, N. J., to be opened at 7.30 P. M., Eastern Standard Time, August 22, 1922." and with the certificate of surety properly filled in, and shall be enclosed in another envelope addressed to William S. Gilmore, Borough Clerk, Borough Hall, Longport, N. J. These envelopes must not be marked in any other manner. Each bid must be accompanied by a certified check payable to the Director of Revenue and Finance, or cash, in the amount of $10,000.00 and no bid will be received after the hour fixed for receipt of bids.

A contract will be awarded, if awarded at all, within one month of the date of receiving bids and such award will be made subject to the sale and delivery of bonds to be issued for the purpose of financing the above work.

The right is reserved to reject any or all bids.

By order of the Board of Commissioners of the Borough of Longport, N. J.
WILLIAM S. GILMORE.
Borough Clerk.

Bids: Aug. 24.

Two Concrete Bridges

Attleboro, Mass.

Proposals are invited until noon, August 24, 1922, by the city of Attleboro, Public Works Department, for constructing two concrete bridges to replace existing structures.

First: At Bank Street to cross Bungay River.

Second: At Water Street to cross Ten Mile River.

The structure on Bank Street will rest on pile foundation.

Proposals will be received for either or both of these structures.

Proposals to be sealed and addressed to the Mayor endorsed, "Bank Street or Water Street Bridge Proposal,"' as the case may be.

Quantities are approximate and depend on the actual foundations uncovered.

Plans and specifications and sounding data and instruction to bidders are on file at the office of the City Engineer, 27 Park Street, Attleboro.

The right is reserved to reject any or all bids or to accept one not the lowest if it be deemed for the best interest of the city so to do.

PHILIP E. BRADY,
Mayor.
JOHN O. TABER, Jr.,
Supt. Public Works.

OFFICIAL PROPOSALS

Bids: Aug. 21.

Street Illumination

Chicago Heights, Ill.

Public notice is hereby given that the Board of Local Improvements of the City of Chicago Heights, Illinois, will receive sealed proposals or bids for the construction of an improved modern street illuminating system consisting of two hundred and fifty-one (251) lighting units, mounted on ornamental concrete electric lighting standards, in accordance with ordinances therefore now on file in the office of the clerk of said city.

Bids will be opened by said Board at ten o'clock a.m. (Central Standard Time) on August 21, A. D. 1922.

Proposals must be made on blanks obtained from the City Clerk, and shall be addressed to W. J. Sadler, Secretary of the Board of Local Improvements of the City of Chicago Heights. Bids will be accepted by said secretary up to nine o'clock a.m. (Central Standard Time) on August 21, A. D. 1922.

Contractor will be paid in vouchers and in bonds, bearing six per cent interest, payable out of the proceeds of a special assessment levied by the City of Chicago Heights to pay for said improvement. (City Court of Chicago Heights, A-Docket No. 205, lighting units 132; B-Docket No. 206, lighting units 81; C-Docket No. 207, lighting units 38).

All proposals shall be accompanied by cash or check, payable to the order of J. E. Thomas, President of the Board of Local Improvements, certified to by a responsible bank, for an amount which shall not be less than ten per cent of the aggregate of the proposal.

The Board reserves the right to reject any or all bids.

BOARD OF LOCAL IMPROVEMENTS OF THE CITY OF CHICAGO HEIGHTS, ILLINOIS.
By J. E. THOMAS,
President.

Attest:
W. J. SADLER,
Secretary.

Copies of the plans and specifications may be secured at the office of the City Engineer, City Hall, Chicago Heights, Illinois, or at the office of Shepherd & Hovey, Consulting Engineers, 1623 Monadnock Block, Chicago, Illinois. A deposit of ten (10) dollars will be required.

Bids: Aug. 25.

Water Works Extension

Mansfield, Mass.

Sealed proposals will be received until 8 o'clock P.M. on the 25th day of August, 1922, at the office of the Town Manager, Mansfield, Mass., for doing all excavating and laying about 7,600 ft. of 8 in., and 2,500 ft. of 6 in. C. I. pipe in East Mansfield and about 7,700 ft. of 8 in. and 1,000 ft. of gether with all specials, hydrants, valves, etc. 6 in. C. I. pipe in West Mansfield, to-

Bids will be considered on two contracts. Contract No. 1 for East Mansfield and Contract No. 2, for West Mansfield.

A certified check for $1,000 shall accompany each bid. The right is reserved to reject any or all bids.

Plans and specifications may be obtained upon a deposit of $5.00 from the Town Manager's office at the Town Hall, Mansfield, Mass.

ERNEST E. LOTHROP,
August 7, 1922. Town Manager.

These Two Things I Do Well

CONTRACT BONDS
COMPENSATION
INSURANCE

HARMON V. SWART
92 William St., New York.

CONTRACT BONDS FOR RESPONSIBLE CONTRACTORS

The strong financial backing of Ætna bonds makes them acceptable anywhere to individuals, firms, corporations, the Federal Government, the individual States, and to all counties and municipalities.

ÆTNA CASUALTY AND SURETY COMPANY

HARTFORD, CONN. AGENTS EVERYWHERE

OFFICIAL PROPOSALS

Bids: Sept. 1.

Highway Work

Somerville, N. J.

Notice is hereby given that sealed bids will be received by the County of Somerset for the following: The construction of State Highway Route No. 9, Section 7A, from Grove Street, through East Main Street, North Gaston Avenue and Union Avenue to the easterly borough line of Somerville, consisting of 12,450 sq.yd. of "Surface Type C" one course reinforced cement concrete pavement with intersections, drains and appurtenances.

Work is to be performed under County Reimbursement Act, Chapter 183, Laws of 1918, and amended by Chapter 317, Laws of 1920.

Bids will be received at the Court House at Somerville on Friday, Sept. 1st, 1922, at 10.30 a.m., Daylight Saving Time, (Eastern Standard Time, 9.30 a.m.).

Drawings, specifications and form of contract and bond for the proposed work are on file in the office of H. C. Van Emburgh, County Engineer, at Court House, Somerville, and in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of ten dollars ($10.00) upon application to H. C. Van Emburgh, County Engineer. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, enclosed in sealed envelopes, addressed to the Board of Chosen Freeholders of the County of Somerset and bearing the name and address of the bidder and the name and section of the route on the outside. Bid must be accompanied by a certified check drawn to the order of Edwin Garretson, County Treasurer, for not less than ten per cent (10 per cent) of amount of the bid, provided that said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form will be furnished on application to H. C. Van Emburgh, County Engineer.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a statement of equipment properly filled out.

By order of a resolution of the Board of Chosen Freeholders of the County of Somerset passed at a meeting held on Tuesday, August 1st, 1922.

WM. S. WOODRUFF, Clerk.

Bids: Aug. 23.

Pipe Sewers and Disposal Works

Rye, N. Y.

Sealed proposals will be received and opened publicly by the Trustees of the Village of Rye, N. Y., at the Village Municipal Hall, at 8.15 p.m., August 23rd, 1922.

Said proposals to cover construction (both materials and labor included) of certain pipe sewers and disposal works, according to plans and specifications filed with the Village Clerk.

Copies of plans and specifications may be seen also at office of City-Wastes Disposal Co., 45 Seventh Ave., New York City. Sets may be borrowed upon deposit of $15 of which $10 will be refunded if papers are returned in good condition before Sept. 1st., 1922.

Approximately the proposed work consists of:

- About 29,000 feet of 8-inch and 600 feet of 15-inch vitrified pipe sewers, with manholes and flushtanks, much of it in rock excavation;
- About 6,600 feet of iron pipe sewers, siphons and force-mains, 8-inch to 16-inch;
- An indeterminate amount of drain-tile laid in sewer trench;
- Sewage tanks, sprinkling filters and sand-beds, with appurtenances.

Each bid must be made on blank forms obtained from the Village Clerk or the Engineer, and must be accompanied by a certified check for $10,000 as a guarantee of good faith.

The Village reserves the right to reject any or all bids.

WILLIAM H. SELZER,
Village Clerk,
Rye, Westchester Co., N. Y.

G. EVERETT HILL,
Engineer,
45 Seventh Ave., New York.

OFFICIAL PROPOSALS

Bids: Aug. 16.

Cast Iron Water Pipes

Sayreville, N. J.

Sealed proposals will be received by the Mayor and Borough Council of the Borough of Sayreville, N. J., at the Borough Council Chambers, Borough Hall, in the Borough of Sayreville on the 16th day of August, 1922 at the hour of 8 o'clock, P. M., Daylight Saving Time and 7 o'clock, P. M., Standard Time for the furnishing of one hundred forty-six (146) tons 4 Inch cast iron pipe, hub and spigot ends, Class "B"; twelve hundred ninety-three (1293) tons 6 Inch to 18 Inch Cast Iron Pipe, hub and spigot ends, classes "B" and "C", and twenty-four (24) tons special iron castings. All pipe and special castings to be manufactured in accordance with Am. W. W. Assn. specifications. All proposals shall state the price per ton of 2,000 pounds, Sayreville, N. J.

All of said bids shall be in accordance with the specifications prepared by Waldo S. Coulter, Consulting Engineer, 114 Liberty Street, New York, N. Y., which said specifications were adopted by the Borough Council of the Borough of Sayreville at the meeting held on Wednesday, March 15, 1922, which said specifications are now on file in the office of the Borough Clerk, Borough Hall, Sayreville, N. J., where they may be seen by bidders, or a set of said specifications can be obtained from Waldo S. Coulter, Consulting Engineer, upon the payment of two dollars ($2.00), which said sum of two dollars ($2.00) will not be refunded.

Each proposal must be in a sealed envelope and marked "Proposal for Cast Iron Pipe." Each bid must be accompanied by a certified check for four thousand dollars ($4,000) made payable unconditionally to the Treasurer of the Borough of Sayreville, which check must be presented with the bid as a guarantee that the bidder will within ten (10) days after receiving the award, enter into contract with the Borough of Sayreville for the furnishing of the said cast iron pipe and special castings, and will also provide a Surety Company Bond to be approved by the Borough Attorney in the sum of Thirty thousand dollars ($30,000) for the faithful performance of the contract.

The furnishing of said cast iron pipe and special castings shall be completed within 150 days from the date of the signing of the contract.

The Mayor and Borough Council reserve the right to reject and and all bids.

EDWARD E. CLARK,
Mayor.

Attest:
FRANK P. KOLB,
Borough Clerk.
Approved:
THOMAS H. HAGERTY,
Borough Attorney.

U. S. GOVERNMENT

PROPOSALS FOR SPURDIKE CONSTRUCTION.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9:00 a.m., Sept. 5, 1922, and then opened, for construction of spurdikes at Southwest Pass, Mississippi River. Further information on application.

PROPOSALS FOR SPURDIKE CONSTRUCTION.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9:00 a.m., Sept. 5, 1922, and then opened, for construction of spurdikes at Head of Passes, Mississippi River. Further information on application.

PROPOSALS FOR BULKHEAD CONSTRUCTION.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9:00 a.m., Sept. 5, 1922, and then opened, for bulkhead construction at Southwest Pass, Mississippi River. Further information on application.

PROPOSALS FOR STONE.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9:00 a.m., Sept. 7, 1922, and then opened, for furnishing and delivering stone for Southwest Pass, Head of Passes, and South Pass, Mississippi River. Further information on application.

U. S. ENGINEER OFFICE, Galveston, Tex. Sealed proposals will be received here until 12 M., Aug. 15th, 1922, and then opened, for dredging the Houston Ship Channel, Texas. Further information on application.

U. S. GOVERNMENT

PROPOSALS FOR STEEL OIL BARGES.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 8:00 a.m., Sept. 5, 1922, and then opened, for construction and delivery of two 4,000-barrel steel oil barges in the Mississippi River, at New Orleans, La. Further information on application.

PROPOSALS FOR SAND AND GRAVEL—U. S. Engineer Office, 329 Customhouse, New Orleans, La., Sealed proposals will be received here until 9:00 A.M., Sept. 1, 1922, and then opened, for furnishing sand and gravel for Southwest Pass, Mississippi River. Further information on application.

U. S. ENGINEER OFFICE, Providence, R. I. Sealed proposals will be received here until 11 o'clock A.M., Eastern Standard Time, Aug. 28, 1922, and then opened for dredging in Bridgeport Harbor, Conn. Further information on application.

U. S. ENGINEER OFFICE, 815 Witherspoon Bldg., Philadelphia, Pa. Bids are wanted until September 6, 1922, for dredging in Delaware River on Bellevue, Cherry Island and Liston ranges. Further information on application.

U. S. ENGINEER OFFICE, Providence, R. I. Sealed proposals will be received here until 11 o'clock A.M., Eastern Standard Time, August 31, 1922, and then opened, for dredging in Pawtucket (Seekonk) River, R. I. Further information on application.

U. S. ENGINEER OFFICE, BALTIMORE, MD., Sealed proposals will be received here until 1 p.m., daylight saving time, August 21, 1922, and then opened for dredging in Baltimore Harbor and Channels, Md. Further information on application.

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in Hudson River, N. Y., will be received here until 12 M., September 5, 1922, (daylight saving time) and then opened. Further information on application.

U. S. ENGINEER OFFICE, Nashville, Tenn.—Sealed proposals will be received here until 11 a. m., Sept. 5, 1922, and then opened, for steel gates for Lock F, Cumberland River. Further information on application.

UNITED STATES ENGINEER OFFICE, Duluth, Minn., July 14, 1922. Sealed proposals will be received here until 10 o'clock a.m., August 14, 1922, and then opened, for constructing and delivering a steel derrick scow, complete with machinery and equipment. Further information on application.

U. S. ENGR. OFFICE, WILMINGTON, Del. Sealed proposals will be received here until 11 a.m., standard time, Aug. 15, 1922, and then opened, for excavating Inland Waterway from Delaware River to Chesapeake Bay, Del. and Md. (Chesapeake and Delaware Canal). Further information on application.

U. S. ENGINEER OFFICE, Providence, R. I. Sealed proposals will be received here until 11 o'clock a.m., Eastern Standard Time, August 15, 1922, and then opened, for rock removal in Stamford Harbor, Conn. Further information on application.

PROPOSALS FOR PONTOON CATAMARANS.—U. S. Engineer Office, 2d District, Portland, Ore.—Sealed proposals for 80 all steel pontoon catamarans will be received here unti 11 a.m., August 21, 1922, and then opened. Further information on application.

U. S. ENGINEER OFFICE, 616 Army Building, New York City.—SEALED PROPOSALS will be received here until 11 a.m., Eastern Standard Time, August 19, 1922, and then opened, for dredging in Passaic River, N. J. Further information on application.

U. S. ENGINEER OFFICE, BUFFALO, N. Y.—SEALED PROPOSALS will be received here until 11 a.m. (Eastern standard time) Aug. 25, 1922, and then opened, for constructing Office-Storehouse Building and six Operating Houses at Black Rock Lock and Storehouse at Ferry Street Bridge, Buffalo, N. Y. Further information on application.

PROPOSALS FOR LEVEE WORK—Office, Mississippi River Commission, 1st and 2d Districts, Customhouse, Memphis, Tenn.—Sealed proposals will be received here until 11 a.m., Aug. 14, 1922, and then opened, for constructing about 2,900,000 cubic yards of earthwork in the Upper and Lower St. Francis and White River Levee Districts. Further information on application.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Aug. 18	Wheeling, W. Va.	Aug. 17
Aug. 21	Blain, Pa.	Aug. 17
Aug. 21	Lyndhurst, O.	Aug. 17
Aug. 21	Port Credit, Ont.	Aug. 17
Aug. 22	Chanute, Kan.	Aug. 17
Aug. 23	Cleveland, O.	Aug. 17
Aug. 23	New York, N. Y.	Aug. 17
Aug. 24	Sacramento, Cal.	July 27
Aug. 24	Quincy, Fla.	Aug. 3
Aug. 25	Mansfield. Mass.	Aug. 10
Aug. 28	Shakopee, Minn.	Aug. 17
Aug. 28	Sibley, Ill. Adv. Aug. 17.	Aug. 17
Aug. 29	Charlotte, N. C.	Aug. 10
Aug. 30	Scituate, R. I.	Aug. 3
Aug. 30	Madison, N. J. Adv. Aug. 17.	Aug. 17
Sept. 15	Grants Pass, Ore.	July 27
Sept. 15	Plaquemine, La.	Aug. 3
Oct. 1	Ponchatoula, La.	Aug. 3

SEWERS

Bids Close		See Eng. News-Record
Aug. 18	Erie, Pa.	Aug. 3
Aug. 20	Colonie (Watervliet P. O.), N. Y.	Aug. 10
Aug. 21	Redwood City, Cal.	Aug. 10
Aug. 21	New York, N. Y.	Aug. 17
Aug. 22	Rice Lake, Wis.	Aug. 17
Aug. 22	Newark, N. J.	July 27
Aug. 23	Rye, N. Y.	July 27
Aug. 23	Brooklyn, N. Y.	Aug. 17
Aug. 25	St. George, N. Y.	Aug. 17
Aug. 25	Milwaukee, Wis. Adv. Aug. 10 and 17.	Aug. 10
Aug. 25	Tonganoxie, Kan.	Aug. 17
Aug. 28	Stewart, Minn.	Aug. 17
Aug. 29	Newark, N. J.	Aug. 10
Aug. 31	Marion, O. Adv. Aug. 17.	Aug. 17
Sept. 4	Redwood City, Cal.	Aug. 17
Sept. 5	Plainfield, N. J. Adv. Aug. 17.	Aug. 17
Sept. 6	Gardnerville, Nev.	Aug. 17
Sept. 7	Spring Valley, N. Y. Adv. Aug. 17.	Aug. 17
Sept. 15	Eveleth, Minn.	Aug. 17

BRIDGES

Bids Close		See Eng. News-Record
Aug. 21	Mottville, Mich	Aug. 10
Aug. 22	Athens, Ga.	Aug. 10
Aug. 22	Miami, Fla.	Aug. 10
Aug. 23	Pinkham Notch, N. H.	Aug. 17
Aug. 23	Mercer, Pa.	Aug. 17
Aug. 24	La Salle, N. Y.	Aug. 17
Aug. 24	Attelboro, Mass.	Aug. 10
Aug. 28	Maynard, O.	Aug. 17
Aug. 29	Wellington, New Zealand	July 13
Aug. 30	Newton, Ill.	Aug. 17
Aug. 30	Richland, N. Y. Adv. Aug. 17.	Aug. 17
Aug. 30	North Carolina	Aug. 17
Sept. 1	Knoxville, Tenn.	July 27
Sept. 5	Houston, Tex.	Aug. 10
Sept. 5	Ft. Lauderdale, Fla. Adv. Aug. 17.	Aug. 17
Sept. 5	Augusta, Ga. Adv. Aug. 17.	Aug. 17
Sept. 5	Greenfield, Ind.	Aug. 17
Sept. 7	New Braunfels, Tex. Adv. Aug. 17.	Aug. 17
Sept. 7	Savannah, Ga.	Aug. 17
Sept. 7	Nashville, Tenn.	Aug. 3
Oct. 1	Siam	July 13
Oct. 31	Sydney, Australia	Jan. 12
Sept. 1, 1923	Sydney, New South Wales, Australia	Aug. 3

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Aug. 19	Jefferson, Wis.	Aug. 10
Aug. 20	Port Frank, Ont.	Aug. 10
Aug. 21	Norwalk, Conn.	Aug. 10
Aug. 21	Naples, Ill.	Aug. 10
Aug. 25	Austin, Minn.	Aug. 10
Aug. 26	Moorhead, Minn.	Aug. 17
Aug. 28	Biggs, Cal.	Aug. 17
Aug. 29	Wooster, O. Adv. Aug. 17.	Aug. 17

STREETS AND ROADS

Bids Close		See Eng. News-Record
Aug. 19	Cleveland, O	Aug. 10
Aug. 21	Princeton, N. J. Adv. Aug. 10 and 17.	Aug. 10
Aug. 21	Pella, Ia.	Aug. 10
Aug. 21	Elkader, Ia.	Aug. 17
Aug. 21	South Bend, Ind.	Aug. 17
Aug. 21	Cleveland, O.	Aug. 17
Aug. 21	New York, N. Y.	Aug. 17
Aug. 21	White Fish Bay, Wis.	Aug. 17
Aug. 21	Beloit, Wis.	Aug. 17
Aug. 21	Long Island City, N. Y.	Aug. 17
Aug. 22	Long Island City, N. Y.	Aug. 17
Aug. 22	Ft. Wayne, Ind.	Aug. 17
Aug. 22	Orangeburg, S. C.	Aug. 3
Aug. 22	Beaver, Pa.	Aug. 17
Aug. 23	San Francisco, Cal.	Aug. 17
Aug. 23	Two Harbors, Minn.	Aug. 3
Aug. 23	Delaware	Aug. 10
Aug. 23	Henderson, Ky. Adv. Aug. 10 and 17.	Aug. 10
Aug. 23	Akron, O.	Aug. 10
Aug. 23	Nevada	Aug. 17
Aug. 23	Cleveland, O.	Aug. 17
Aug. 23	Michigan	Aug. 17
Aug. 23	Rochester, N. Y.	Aug. 17
Aug. 23	Coleman, Tex.	Aug. 17
Aug. 23	Savannah, Ga.	Aug. 17
Aug. 24	Coleman, Tex.	Aug. 17
Aug. 24	Charleston, S. C.	Aug. 17
Aug. 24	Wyoming	Aug. 17
Aug. 24	Michigan	Aug. 17
Aug. 24	Virginia	Aug. 17
Aug. 24	Charleston, S. C.	Aug. 3
Aug. 25	Maine	Aug. 17
Aug. 25	Fargo, N. D.	Aug. 17
Aug. 28	California	Aug. 10
Aug. 28	Youngsville, Pa.	Aug. 17
Aug. 28	Waukegan, Ill. Adv. Aug. 17.	Aug. 17
Aug. 28	Waterloo, N. Y. Adv. Aug. 17.	Aug. 17
Aug. 28	Freehold, N. J. Adv. Aug. 17.	Aug. 17
Aug. 28	Greenfield, O.	Aug. 17
Aug. 29	Maryland Adv. Aug. 17.	Aug. 17
Aug. 29	New York Adv. Aug. 17.	Aug. 17
Aug. 29	Michigan	Aug. 17
Aug. 29	El Dorado, Kan.	Aug. 10
Aug. 30	North Carolina	Aug. 10
Aug. 30	North Carolina	Aug. 3
Aug. 30	Little Rock, Ark. Adv. Aug. 10 and 17.	Aug. 10
Aug. 30	Michigan	Aug. 17
Aug. 30	North Carolina Adv. Aug. 17.	Aug. 17
Aug. 30	Columbus, O.	Aug. 17
Aug. 31	Sacramento, Cal.	Aug. 17
Sept. 1	Georgia	Aug. 17
Sept. 1	St. George, S. C.	Aug. 17
Sept. 1	Blue Earth, Minn.	Aug. 17
Sept. 1	Wellington, Kan.	Aug. 17
Sept. 1	Somerville, N. J. Adv. Aug. 10 and 17.	Aug. 17
Sept. 5	Washington	Aug. 10
Sept. 6	Red Bank, N. J. Adv. Aug. 17.	Aug. 17
Sept. 8	Somerville, N. J. Adv. Aug. 17.	Aug. 17
Sept. 11	Crescent City, Cal.	Aug. 17
Sept. 19	New Orleans, La.	July 6

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Aug. 26	San Antonio, Tex.	Aug. 17
Sept. 1	Long Island City, N. Y.	Aug. 17
Sept. 6	Cohoes, N. Y. Adv. Aug. 17.	Aug. 17

BUILDINGS

Bids Close		See Eng. News-Record
Aug. 18	Shaker Heights, (Cleveland P. O.) O.	Aug. 10
Aug. 18	Beckley, W. Va.	Aug. 17
Aug. 20	Erie, Pa.	July 13
Aug. 21	Plant City, Fla.	Aug. 10
Aug. 21	Oxford, N. C.	Aug. 10
Aug. 21	Toronto, Ont.	Aug. 17
Aug. 21	Columbus, O.	Aug. 17
Aug. 22	Canton, O.	Aug. 17
Aug. 22	New York, N. Y.	Aug. 10
Aug. 22	Stateville, Ill.	Aug. 3
Aug. 23	Worcester, Mass.	Aug. 10
Aug. 23	Carlton, Minn.	Aug. 10
Aug. 23	Bloomington, Ind.	Aug. 17
Aug. 23	Nashua, N. H.	Aug. 17
Aug. 23	Duke, N. C.	Aug. 17
Aug. 25	Oxford, O.	Aug. 17
Aug. 28	Wauwatosa, Wis.	Aug. 17
Aug. 28	Erie, Pa.	Aug. 17
Aug. 28	Albany, N. Y.	Aug. 17
Aug. 31	New York, N. Y.	Aug. 3
Aug. 31	Baton Rouge, La.	Aug. 17
Sept. 1	Knoxville, Tenn.	July 20
Sept. 5	Smyrna, Del. Adv. Aug. 10 and 17.	Aug. 10
Sept. 6	Milaca, Minn.	Aug. 17
Sept. 7	Columbus, O.	Aug. 17
Sept. 11	Oakland, Cal.	Aug. 10
Sept. 30	Duluth, Minn.	July 13
Oct. 1	Duluth, Minn.	Aug. 3

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Aug. 19	Dredging—New York, N. Y	July 20
Aug. 21	Dredging—Baltimore, Md. Adv. July 27 to Aug. 17.	July 27
Aug. 22	Post Office—Spanish Fork, Utah	July 27
Aug. 22	Houses, etc. — Pt. Vicente, Cal.	Aug. 17
Aug. 22	Post Office—Fond du Lac, Wis.	July 27
Aug. 23	Retaining Walls — Quantico, Va.	July 27
Aug. 23	Quay Walls, etc.—Pearl Harbor, H. T.	July 20
Aug. 23	Dredging—Norfolk, Va.	July 27
Aug. 24	Roads and Walks — Augusta, Ga.	Aug. 17
Aug. 25	Extension to Workroom — Ft. Worth, Tex.	Aug. 3
Aug. 25	Office, Storehouse, etc.—Buffalo, N. Y.	Aug. 3
Aug. 28	Remodeling — Raleigh, N. C.	Aug. 3
Aug. 28	Dredging — Providence, R. I. Adv. Aug. 10 and 17.	Aug. 10
Aug. 30	Circulating Loop — Mare Island, Cal.	July 27
Aug. 30	Stables—Plattsburg, N. Y. Adv. Aug. 17.	Aug. 17
Aug. 31	Canal—Klamath Falls, Ore.	July 27
Aug. 31	Dredging — Providence, R. I. Adv. Aug. 10 and 17.	Aug. 10
Aug. 31	Remodeling, etc. — Baltimore, Md.	Aug. 17
Sept. 1	Sand and Gravel—New Orleans, La. Adv. Aug. 10 and 17.	Aug. 10
Sept. 1	Road—Dover, N. J. Adv. Aug. 17.	Aug. 17
Sept. 1	Refrigerating Plants—Perryville, Md.	July 20
Sept. 5	Dredging — New York, N. Y. Adv. Aug. 3 to 17.	Aug. 3
Sept. 5	Spur-dikes — New Orleans, La. Adv. Aug. 10 and 17.	Aug. 10
Sept. 5	Steel Gates — Nashville, Tenn.	Aug. 3
Sept. 5	Dykes, etc.—New Orleans, La. Adv. Aug. 10 and 17.	Aug. 3
Sept. 5	Dredge Pontoons, etc.—Mobile, Ala. Adv. Aug. 17.	Aug. 17
Sept. 6	Motors, etc.—Yuma, Ariz.	July 27
Sept. 6	Dredging—Phila., Pa. Adv. Aug. 10 and 17.	Aug. 10
Sept. 7	Stone—New Orleans, La. Adv. Aug. 10 and 17.	Aug. 10
Sept. 14	Dredging—Norfolk, Va. Adv. Aug. 17.	Aug. 17

MISCELLANEOUS

Bids Close		See Eng. News-Record
Aug. 21	Lighting System — Chicago Heights, Ill.	Aug. 10
Aug. 21	Paving Sand — New York, N. Y.	Aug. 17
Aug. 22	Heating and Ventilating Apparatus, etc. — New York, N. Y.	Aug. 17
Aug. 22	Stone Jetty — Longport, N. J.	Aug. 10
Aug. 22	Boardwalk Extension — Long Branch, N. J. Adv. Aug. 17.	Aug. 17
Aug. 23	Fine Gravel — New York, N. Y.	Aug. 17
Aug. 25	Oak Piles, etc. — New York, N. Y.	Aug. 17
Aug. 25	Tunnel—Merced, Cal.	Aug. 17
Aug. 25	Clearing, etc., New York, N. Y.	Aug. 17
Aug. 28	Paving Materials—St. Paul, Minn.	Aug. 17
Aug. 28	Mechanical Equipment—Sacramento, Cal.	Aug. 3
Sept. 6	Truck Bodies, etc.—San Francisco, Cal.	Aug. 17
Sept. 15	Fire Alarm System, etc.—Kansas City, Mo.	
Sept. 16	Strain & Pin Type Insulators —Melbourne, Australia	July 27
Oct. 10	Steam Turbine, etc.—New Orleans, La. Adv. Aug. 17.	Aug. 17
Nov. 4	Transformers, etc. — Melbourne, Australia Adv. Aug. 17.	Aug. 17

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Batavia—Plans 4,000 ft. c.i. mains in Lewis and Williams Sts. $15,000. I. J. Carmichael, clk. Noted May 11.

N. Y., Binghamton—City plans to purchase chain of small lakes in Chemung Co. and develop same to adequately furnish city with new water supply incl. piping, filter stations, pumps, etc. $200,000-$300,000 (does not include purchase of lakes). W. E. Weller, city engr.

N. Y., Corning—See "Sewers."

N. Y., Endicott—Endicott-Johnson Co., 108 East Main St., has purchased Silver Lake, near here, and plans to supply city of Endicott with water. Project includes 20 mi. pipe line. Hoadley & Giles, c/o owner, engrs.

N. J., East Orange—See "Contracts and Awards."

Mich., North Branch—Plans 15,000 ft. 4 and 6 in. c.i. mains, hydrants, tank and tower. C. B. Farnsworth, village clk.

O., Niles—Plans 500 ton 24 in. c.i mains in East Robbins Ave. M. Hogan dir. pub. wks.

O., Piqua—Plans complete waterworks pumping plant, driving wells and some mains. $350,000. Engineer not selected.

O., Sidney—Plans extending mains, 23,700 ft. 4-10 in. pipe, seventy-three 4-10 in. valves and valve boxes, 22,700 lb. specials, etc. B. Coulson, city engr.

Minn., Fergus Falls—Voted $30,000 bonds relaying mains, repairing and extending water system. H. Blegan, city engr.

Kan., Morrill—Soon takes bids waterworks, $30,000; sewers and disposal plants, $20,000. Shockley Eng. Co., 800 Graphic Arts Bldg., Kansas City, Mo., engrs.

Ont., Oakville—Plans filtration plant. $25,000. Address A. Forster, mayor.

Ont., Port Dover — Takes bids end of August waterworks. $40,000 bonds voted. Prices wanted on all materials.

BIDS DESIRED

N. Y., New York—Aug. 23, by Bd. Purch., Municipal Bldg., furnishing, delivering, unloading, stacking and storing high pressure c.i. pipe and special castings, for Dept. Water Supply, Gas & Electricity. G. A. Whalen, comr.

N. J., Madison—Aug. 30 by Tribus & Massa, engrs., 15 Park Row, New York, artesian well connections, pumping plant and electric equipment for estate of H. McK. Twombly, near here; adv. the issue.

Pa., Blain—Aug. 21, by W. L. Smith, pres. Boro Council, building reservoir, laying mains, etc. $50,000.

W. Va., Wheeling — Aug. 18, by City Council and W. M. Evans, city clk., 17,000 ft. 30 in. steel force mains, 3,000 ft. 36 in. steel reservoir mains. five 1,000,000 gal. steel storage tanks, 48 in. intake line, intake pier and traveling screens. J. N. Chester, Union Bank Bldg., Pittsburgh, engr. Noted April 13.

O., Cleveland—Aug. 23, underpinning filters at Division Ave. filtration plant, incl. 18,690 lin.ft. pre-molded sectional concrete piles. To exceed $25,000. A. V. Ruggles, City Hall, engr.

O., Cleveland—Aug. 23, by Cuyahoga Co. for Sect. A of Improvement 16 of Water Supply System for Co. Sewer Dist. 1, 18,900 ft. 6, 8 and 10 in. c.i. pipe. R. F. MacDowell, Court House, engr.

O., Lyndhurst (near Cleveland)—Aug. 21, c.i. mains. To exceed $25,5000. S. C. Vessey, clk. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Ill., Sibley — Aug. 28, constructing 9 blocks mains, etc., also storage battery and switchboard for electric plant. S. M. Waldon, treas.; adv. this issue.

Minn., Shakopee—Aug. 28, by city, water main extensions 3,820 lin.ft. 6 in. c.i. pipe; sewer extensions, 4,666 lin.ft. 8 in. vitr. pipe sewer. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs.

Kan., Chanute—Aug. 22 by C. G. Wood, city clk., water main extension and improvements to purification plant, incl. 2,122 cu.yd. excav., 1,035 cu.yd. rein.-con., 50 cu.yd. plain concrete, 19,140 lb. Class A c.i. pipe, 4,786 lb. special castings H & S, 41,285 lin. ft. 4-16 in. c.i. pipe, 1,225.05 ton 4-16 in. Class B, H & S pipe, 20,000 lb. 4 in. standard special castings, 18,000 lb. 6 in. and larger special castings, 1,475 lb. 6 in. and larger flanged castings, sixty-six 4-16 in. double gate valves and boxes, 17 standard fire hydrants. Black & Veatch, Mutual Bldg., Kansas City, Mo., engrs.

Cal., Petaluma—A. F. Tomasini Hardware Co. in market for filter for filtering water in swimming tank, 70,000 gal. capacity.

Ont., Port Credit — Aug. 21, by G. W. Gordon, town clk., supplying 2 mi. 4, 6 and 8 in. c.i. pipe, special castings, valves, centrifugal pumps, erecting overhead steel tank, settling basin, filters, reservoir and concrete and brick pumping station, meters, gages, hydrants, etc. $60,000. Gore, Nasmith & Storrie, Confederation Life Bldg., Toronto, engrs. Noted April 20.

BIDS RECEIVED

O., Cleveland—Cuyahoga Co. opened bids Aug. 5, for Impvt. 14 of Water Supply System, 24,570 ft. 4-12 in. c.i. pipe, from Water & Sewer Impvt. Co., 10,923 Detroit Ave., $76,047; E. Cesa, 2462 Baldwin Rd., $81,200; Gantose Constr. Co., Columbia Bldg., $92,250.

O., Rome (Hilliards, P. O.) — Franklin Co. (Columbus) opened bids Aug. 10, 13,500 ft. c.i. mains in Sewer Dist. Prairie 1, from Burnip Constr. Co., 223 East Broad St., Columbus, $25,314; Pitt Constr. Co., Fulton Bldg., Pittsburgh, Pa., $26,229; Elcon Eng. Co., 522 Rowlands Bldg., Columbus, $27,034. Noted Aug. 3.

In July

We published 141 *tips on new waterworks construction as follows:*

Proposed work	42
Bids desired	43
Bids received	9
Contracts awarded	47

No let-up since April.

Utah, Ogden—Furnishing and laying 1,500 ton 12-20 in. c.i. mains, 14,000 cu.yd. earth and 7,000 cu.yd. rock excav., from Western Eng. & Constr. Co., Tempelton Bldg., Salt Lake City, $139,774; F. W. Spencer Co., State St., Salt Lake City, $143,429; Wheelwright Constr. Co., Main St., $148,125. Noted July 17.

Wash., Seattle—Opened bids Aug. 4, water mains in Lucille St., et al., 18,150 in. ft. 8 in. Class D c.i. pipe, etc., from Paduano & Co., Seattle, $49,369; V. Ramgalia, Seattle, $49,749; C. L. Creelman, Ry. Exch. Bldg., Seattle, $49,807. Engrs. est. $50,000.

California—See "Dams".

Cal., Reedley—Erecting 60,000 gal. steel water tank and tower, from Pittsburg-Des Moines Steel Co., Rialto Bldg., San Francisco, $6,599; Chicago Bridges, Steel & Iron Wks., Rialto Bldg., San Francisco, $6,600; Minneapolis Steel & Mchy. Co., 220 W. S. T., Salt Lake City, Utah, $7,648. Noted July 20.

Cal., Santa Rosa—Extending waterworks system, from following contractors:

Butte Electric Constr. Co., 534 Folsom St., San Francisco, constructing air-lift for artesian well, rein.-con. aerator, flume, receiving reservoir, 350,000 gal. capacity, pumping buildings, compressors, motors, crane, pipe, meters, electrical machinery, etc., all foregoing and using two 5 in. Byron-Jackson pumps $46,000; two 6 in. Byron-Jackson pumps $45,645; two 6 in. Worthington pumps $46,672; two 5 in. Worthington pumps single stage $46,114; two 5 in. Courtenay pumps $45,630.

Millen & La Voie, 265 9th St., Oakland, constructing rein.-con. receiving reservoir, aerator, flume and fence, pumping buildings, roof for existing reservoir, etc., $34,470.

W. L. Proctor, Sprigg St., constructing concrete reservoir, aerator, flume, pumping buildings, roof for existing reservoir, etc., $28,870.

Rocca & Coletti, San Rafael, constructing pumping station buildings, except electric and pumping machinery, reservoir, except equipment, concrete aerator, without pipe, and control flume; pumping plant buildings $6,897; reservoir 350,000 gal. $13,900; aerator $360, control flume $300.

G. H. Chick, R. F. D. 1, Box 143, Napa, constructing all works using Worthington 11 x 7 x 12 two stage compressors, water works supply Ventura meters, G. E. or Electric Controller Mfg. Co.'s switchboards, Byron-Jackson 5 in. centrifugal pumps, c.i. pipe, etc., all work cost plus 10% with bonus for savings under total cost of $45,250. (Total cost not to exceed $50,000 for completed project). Noted July 20.

CONTRACTS AWARDED

N. Y., Brooklyn—State Hospital Comn., Capitol, Albany, test wells for Brooklyn State Hospital, here, from A. J. Connelly, 100 South 10th St., Newark, N. J., $5,965; Artesian Well & Supply Co., 195 Anthony St., Providence, R. I., $7,850; Ridpath & Potter, Co., Inc., Bourse Bldg., Phila., Pa., $8,500.

N. Y., Raybrook—State Hospital Comn., Albany, addition and alterations to water supply system at New York State Hospital for Incipient Tuberculosis, here, to J. J. Fitzpatrick & Sons, 84 Bridge St., Plattsburg, $19,192.

N. J., East Orange—Bd. Water Comrs., 438 Main St., additional water supply work, to U. S. Cast Iron Pipe & Fdry. Co., 71 Bway., New York, flanged special castings $155 per ton, bell and spigot special castings $120, 6-16 in. bell and spigot pipe $58.90, 20 and 24 in. bell and spigot pipe $52.90, all f.o.b. Chatham; to Lock Joint Pipe Co., Ampere, 8,000 ft. 20 in. rein.-con. water pipe delivered at side of trench $3.20; to A. P. Smith Mfg. Co., Norman St., 16 in. hub end valves $138 each, 10 in. hub end valves $49, 6 in. hub end valves $20.50, 6 in. flanged valves $23,000, 10 in. flanged check valves $58, 2 in. air valves $34, all f.o.b. Chatham; to United Lead Co., 111 Bway., New York, 4 ton pig lead, f.o.b. Chatham $140; to Babcock & Wilcox, 85 Liberty St., New York, one 132 h.p. water tube boiler erected in existing boiler room $6,989; to D'Olier Centrifugal Pump and Machy. Co., New York, 1 steam turbine driven, centrifugal pump, 2M.G.D. against 261 ft. total head in existing pumping station $7,500; to Ames Iron Wks., 41 East 42nd St., New York, 2 unaflow steam engine driven alternating current generating units, 120 K.V.A. each, 2,300 volts, 60 cycle for two units erected in pumping station, $13,826; to C. H. Wheeler Mfg. Co., 50 Church St., New York, 2 surface condensers, 400 sq.ft. each with crank and flywheel vacuum pump, delivered f.o.b. Chatham, $5,270; to Jaehnig & Peoples, Inc., 221 13th Ave., Newark, inside steam, water, air and auxiliary piping completely erected $18,000; to Mack & Mack, 103 Park Ave., New York, electrical work, incl. 12,000 ft. wood pole, lead cable transmission line, inside and outside wiring, switchboard and 7 transformers, erected complete $24,500. Buildings, structures, well pumps, wells and laying outside pipe will be readvertised. Noted July 6.

Pa., Coalport—Boro Council rein.-con. reservoir, 100,000 gal. capacity, to H. O. Ebensburg. Noted July 20.

Pa., Phila.—Laying 6, 8 and 12 in. c.i. pipe to A. DeSandro & Son, 3906 North 50th St., $31,174; furnishing 6, 8 and 12 in. c.i. pipe, to R. D. Wood & Co., 300 Chestnut St., $64,100; furnishing 6, 8 and 12 in. stop valves, to W. E. Cooney Co., 519 Arch St., $18,106; furnishing and laying 30 in. steel pipe, to A. J. Ellis, 5724 Marshall St., $21,151. Noted July 20.

Wis., Blue Mounds—For rein.-con. reservoir, laying mains, installing and furnishing equipment for waterworks system, to Ayem, Petersen & Rue, Main St., Mt. Horeb. Engrs. est. $25,000.

Wis., Tomahawk — Wisconsin Valley Impvt. Co., 1st Natl. Bank Bldg., Wausau, will build rein.-con. and steel reservoir dam, incl. gravel and earth embankment, bv day labor. $100,000.

Wis., Two Rivers—Intake crib suction well and suction pipe line, to McMullen & Pitz, 915 Commercial St., Manitowoc. Noted June 15.

Minn., North St. Paul—Waterworks extensions and electrification of pumping plant, 36,000 lin.ft. c.i. pipe, etc., to J. J. Connolly, 1007 Reaney St., St. Paul, $50,000. Noted June 29.

Minn., Storden—Waterworks, to Pittsburgh-Des Moines Steel Co., Tuttle and South West 10th St., Des Moines, Ia., $9,791. Noted June 29.

Mont., Harlem—For filtration plant and 8,000 lin.ft. 6 in. c.i. mains, to J. P. Murphy, Great Falls, $42,680. Noted July 6.

Okla., Oklahoma City—Dept. Pub. Property, water filtration plant, to Tibbens & Pleasant, 202 Daniels Bldg., Tulsa, $282,700. Noted July 20.

Wash., Morton — Installing Connolly Creek gravity water system, to Auburn Constr. Co., Auburn, $16,000.

Wash., Seattle—For 10,200 ft. Class C, and 1,800 ft. Class D c.i. pipe, 20 in. diam., for repairs to city water system, to Amer. Cast Iron Pipe Co., Acipco St., Birmingham, Ala., $48.40 per ton. Engrs. est. $67,000.

Ont., Kincardine — H. Hurdon, chn. Waterworks Com., slow sand filter contracts as follows: tubes to Natl. Iron Corp., foot of Cherry St., Toronto; pumps to Goldie-McCulloch Co. Ltd., 64 West Main St., Galt; sewer pipe to Clay Products Agency.

Waterworks (Continued)

9 Wellington St. E., Toronto; valves to T. McAvity & Sons Ltd., 95 King St. W., Toronto; sand washer to J. Ingles Co., 14 Strachan Ave., Toronto; gasoline tanks to S. F. Bowser Co., Ltd., 66 Fraser St., Toronto. Noted June 22.

B. C. Chilliwack—Elk Creek Waterworks Co. will build mains (mostly wood pipe, also 10 in. steel) by day labor under direction of A. H. Turvey, engr., c/o owner. $50,000.

B. C., New Westminster—To Vancouver Eng. Wks., Ltd., 519 6th Ave. W., Vancouver, 8,400 ft. 24 in. steel water pipe, $30,976.

Sewers

PROPOSED WORK

N. Y., Corning—Plans election to vote on $30,000 bond issue to extend sewers and water mains. W. O. Drake, city engr.

Pa., Pittsburgh—Plans relief sewers in Howe St. and College Ave. from existing sewer at Stratton Line to existing 36 in. brick sewer in Elmer St., 24 and 30 in. pipe, $18,700, Beechview Ave. and Parody Way, 15 and 18 in. pipe, $3,000, Morewood and Ellsworth Aves., 24 in. terra cotta pipe, $6,000, Corropolis St., 12 in. terra cotta pipe, $1,000.

La., Shreveport—See "Buildings."

O., Ashtabula—Preparing plans sewerage system. $1,000,000. G. B. Gascoigne, Leader-News Bldg., Cleveland, engr.

Mich., Cadillac—Having revised plans prepared and opens bids about September, 2 story, concrete and brick sewage disposal plant. $50,000. Hoad, Decker & Drury, 302 South State St., Ann Arbor, engrs.

Mich., Grosse Pointe Farms (Detroit P. O.)—Plans sewer in Oak St. from Grosse Pointe Blvd. to point north, incl. 890 ft. 12 in. and 1,073 ft. 10 in. vitr. pipe. R. H. Erley, Grosse Pointe Farms, engr.

Kan., Morrill—See "Waterworks".

Kan., Wichita—Making plans and soon takes bids Storm Sewer 15, College Hill Dist., excavating and laying 1¼ mi. 72 in. sewer pipe and 1¾ mi. pipe ranging from 72 in. to 42 in. Bids on precast concrete pipe, monolithic construction, vitr. segment block or brick. $200,000. P. L. Brockway, Wichita, engr.

Col., Denver—Making plans Washington Park Storm Sewer Dist. 2. Will take alternate bids on vitr. pipe, vitr. brick, 2nd class, rein.-con., or 3rd Class segment blocks. $481,810. A. K. Vickery, City Hall, engr.

Ont., Hamilton—Having plans prepared sewage disposal plant in eastern section of city. $2,500,000. Gore, Nasmith & Storrie, Confederation Life Bldg., Toronto, engrs.

Ont., London—Plans reconstructing several sanitary sewers in business section, vitr. tile pipe, 8 in. up. $250,000. H. A. Brazier, city engr.

Ont., Port Dover—Plans 8,000 ft. of 8-12 in. vitr. tile sewer from town limits to Black Creek. $27,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Port Dover—Takes bids end of August for sewers. $30,000 bonds voted. Prices wanted on all materials.

BIDS DESIRED

N. Y., Brooklyn—Aug. 23, by E. Riegelmann, boro pres., Boro Hall, sewers in Gravesend Ave. between Kings Highway and Ave. T, Ave. T between Gravesend Ave. and West 5th St., West 5th St. between Ave. T and Ave. U; repairing sewer in Foster Ave. between Ocean Parkway and East 9th St.; repairing pipe sewers in Greene Ave. between Marcy and Lewis Aves.

N. Y., New York—Aug. 21, by J. Miller, pres. Manhattan Boro, Municipal Bldg., alterations and improvement to sewer in West 57th St. between 5th and 6th Aves. Former bids rejected. Noted Aug. 10.

N. Y., St. George — Aug. 25, by J. A. Lynch, pres. Richmond Boro, Boro Hall, temporary sanitary sewers in Seymour Ave. from Richmond Ave. to point about 400 ft. easterly, Leadley Pl. from Richmond Ave. to point about 300 ft. southerly, Willow Brook Rd. from point about 530 ft. south of Forest Ave. to Forest Ave., Dixon Ave. from Van Riper St. to Villa Ave., Villa Ave. from point about 90 ft. north of Richmond Ave. to point about 100 ft. south of Prospect St.

N. Y., Spring Valley—Sept. 7, by Bd. Trustees, sanitary sewerage system and sewage disposal plant. W. S. Coulter, 114 Liberty St., New York, engr.; adv. this issue.

N. J., Plainfield—Sept. 5, for 1,000 lin.ft. 7 ft. x 2 ft. 5 in. rein.-con. storm sewer. A. W. Vars, city engr.; adv. this issue.

O., Marion — Aug. 31, at office E. A. Schultz, dir. Pub. Serv., sewage treatment works, Contr. A; main sanitary sewer, Contr. B. G. B. Gascoigne, 648 Leader-News Bldg., Cleveland, engr.; adv. this issue. Noted Aug. 10.

Wis., Rice Lake—Aug. 22, West side sewerage system, incl. 10,637 lin.ft. 8-18 in. vitr. pipe, 51 manholes, 1 concrete outlet, 1 Imhoff tank, 1 sludge bed. $30,000. J. H. A. Brahtz, 409 Metropolitan Opera House Bldg., St. Paul, Minn., engr. Noted June 8.

Minn., Eveleth—Sept. 15, improving sewerage system, incl. septic tank. $264,500. C. M. Downey, 419 Jackson St., engr.

Minn., Shakopee—See "Waterworks".

Minn., Stewart—Aug. 28, sanitary sewerage system, 17,916 lin.ft. 8-12 in. vitr. pipe, 48 lin.ft. 10 in. c.i. pipe, 2 flush tanks, 45 manholes, etc. $25,000. E. Lestico, clk. Druar & Milinowski, 500 Globe Bldg., St. Paul, engrs.

Kan., Tonganoxie — Aug. 25, by City Clerk, complete sewerage system and sewage disposal works, incl. 14,403 lin.ft. 8-12 in., vitr. pipe sewer, 7,581 cu.yd. excav. for disposal works, 39.5 cu.yd. concrete in Imhoff tank, etc., 47 cu.yd. concrete in sand filters, 2,444 lin.ft. 4 in. sewer pipe in underdrains, etc. Black & Veatch, Mutual Bldg., Kansas City, Mo., engrs.

Nev., Gardnerville—Sept. 6, by Comrs. Douglas Co., at Minden, complete system for Gardnerville Sewer Dist., 18,000 lin.ft. 6-12 in. vitr. pipe, 8,000 cu.yd. excav., 300 bbl. cement, etc. $30,000. L. H. Taylor & Co., 309 State Life Bldg., Reno, engrs.

Cal., Redwood City — Sept. 4, by City trustees, sewers in Jefferson Acres, 11,680 lin.ft. 4-8 in. vitr. pipe, 21 manholes, 2 lampholes; in Rodgers and Standish Sts., 2,300 lin.ft. vitr. pipe sewer, and 1,500 lin. ft. 4 in. vitr. pipe laterals, 6 manholes. C. L. Dimmitt, 1st Natl. Bank Bldg., Redwood City, engr.

BIDS RECEIVED

Wis., Milwaukee—Metropolitan Sewerage Comn. of Milwaukee Co., 508 Market St., intercepting sewer in Watertown Plank Rd., (a) 1,962 ft. 24 in. c.i. pipe siphon, (b) 4,134 ft. 48 in. plain concrete sewer, (c) 1,802 ft. 48 in. rein.-con. sewer, from Mid-West Constr. Co., 253 Walker St., (a) $8.90 per ft., (b) $15.80 (c) $17.40, etc., total $113,777; Wenzel & Henock, 498 27th St., (a) 29,665 (lump sum), (b) $21, (c) $21.50, etc., total $157,008; G. E. Zimmermann, 3402 Grand Ave., (a) $14 (b) $24 (c) $30.40, etc., total $183,721. Noted July 27.

In July

We published 150 *tips on new sewer construction as follows:*

Proposed work 42
Bids desired 58
Bids received 14
Contracts awarded 36

Are you hunting these down?

Wash., Seattle—Opened bids Aug. 4, grading 11th Ave. W., et al., 11.25 acres clearing from M. Richardson, 6,307 12th Ave. N. E., $53,155, Odman Contg. Co., 2,534 33rd Ave. S., $57,011, Hauge & Espland, Thompson Bldg., $59,769; paving 3rd Ave. W., et al., 50,850 sq.yd. 7 in. concrete, 27,100 lin.ft. concrete curbing, 20,000 cu.yd. earth excav., from A. Tocco & Co., 1125 20th Ave. S., $167,916, D. H. Traphagen, Walker Bldg., $168,984, J. L. Smith, Pioneer Bldg., $168,028; grading and paving Empire Way et al., 162,000 cu.yd. earthwork, 2,600 lin.ft. integral armored concrete curb, 17,400 lin.ft. integral concrete curb, type A, 43,400 sq.yd. concrete paving, 7 in., (a) clay, (b) concrete from J. L. Smith, Pioneer Bldg., (a) $323,798, (b) $323,135, D. H. Traphagen, Walker Bldg., (a) $338,786, (b) $336,642, Jann & Bressi, New York Blk., (a) $343,314, (b) $343,314.

Wash., Everett—Opened bids Aug. 2, paving Hewitt Ave. from Broadway to Federal St., 20,000 sq.yd. concrete, removing old wood block surface, from J. W. Hoover & Co., Everett, $146,000. Engrs. est. $150,000.

CONTRACTS AWARDED

W. Va., Wheeling—Sewers in Main, Market and 12th Sts., to W. J. Weekland Co., Charleston, $74,489. Noted July 27.

O., Akron—Trunk sewer in Miller Ave., 2,120 ft. of 12-15 in. vitr. clay pipe, and 1,990 ft. 39-54 in. segmental block, to Shullo Constr. Co., 932 2nd Natl. Bldg., $31,031; trunk sewer in Crozier Ave., 730 ft. of 10 in. vitr. clay pipe and 2,025 ft. of 30-42 in. segmental block, to T. E. McShaffrey Constr. Co., 171 South Forge St., $20,268. Engrs. est. $46,950 and $25,189 respectively.

O., Akron—M. P. Tucker, dir. Pub. Serv., building Gorge Blvd. Trunk Sewer, 2,595 ft. 30-72 in. brick, to E. and W. McShaffrey Co., 574 Rhodes Ave., $57,277. Engrs. est. $70,000. Noted Aug. 3.

O., Cleveland—Cuyahoga Co., 9,240 ft. 8 in. vitr. sewer in Snow Rd., to Gallagher-Burke Constr. Co., 1228 Bonnie View Ave., Lakewood, $67,080. Noted July 27.

Ind., Indianapolis—Bd. Sanitary Comrs., (power plant building) in connection with sewage disposal plant, to W. P. Jungclaus Co., 825 Massachusetts Ave., $118,750. Noted July 13.

Ia., Blairstown—For 13,087 lin.ft. 8-12 in. sewer pipe to O. M. Anenson, Roland, $12,615; disposal plant to Adams & Graham, Cedar Rapids, $8,519. Noted July 27.

Minn., Brainerd—For 5,743 lin.ft. 36-54 in. sewers, in East Maple St. north to Mississippi River, to Riches & Son, Superior, Wis., $38,908. Noted July 13.

Minn., St. Charles—New sanitary sewerage system, 33,846 ft. 8 in. and 1,775 ft. 10 in. pipe, 81 manholes, 15 lampholes, Imhoff tank, to Gedney & Murphy, 211 Lumber Exch. Bldg., Minneapolis, $54,400. Noted July 20.

S. D., Yankton—Extending sewers, incl. 17,435 lin.ft. 10-36 in. pipe, 41 manholes, 7,000 lin.ft. 10 in. connecting pipe, to Cady & Savonell, Sioux City, Ia., $35,943. Noted July 27.

Cal., San Luis Obispo—For 10,900 lin.ft. 6 in. vitr. salt glazed sewer pipe, est., to W. J. Tobin, 527 Santa Ray St., Oakland, $13,378. Noted July 20.

Ont., Ottawa—Will build Lady Grey Hospital Sewer, 10,000 ft. of vitr. tile pipe, 8 in. and up, by day labor under supervision of A. F. Macallum, city engr. $80,000.

Bridges

PROPOSED WORK

Pa., Harrisburg—Dauphin Co. having plans prepared concrete deck girder with three 20 ft. spans over Conewago Creek at Beverly Sta. $30,000. C. M. Hershey, 14 South 2nd St., engr.

Pa., Lawrenceville—State plans to reconstruct bridge over river here. Work will be done by Tioga Co. and town. Address W. G. Kellogg, Lawrenceville, supt. highways.

N. C., Whiteville—Columbus Co. plans hard surfacing 1 mi. road across Soles Swamp near here. $32,000. E. J. Grimsley, Freeman, Chn. Bd. Comrs.

Ohio—Dept. Highways and Pub. Wks., Columbus, received no bids Aug. 11, concrete beam bridge and approaches on Sect. "I" National Rd., Guernsey Co.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids which were to be received Aug. 11, concrete bridge on Sect. "Salineville" Salineville-Yellow Creek Rd., Columbiana Co.

Mich., Marine City—State Hy. Dept., Lansing, soon takes bids substructure for Bridge 770901, one hundred and thirty-five ft. swing bridge, here.

Kan., Lyndon—Osage Co. takes bids about Sept. 2. 183 ft. steel span, alternate bids on four 50 ft. concrete spans. D. Atkins, Jr., co. engr.

Tex., Palestine—Anderson and Cherokee having preliminary inspection and estimates made, 1,700 ft. bridge over Neches River on State Highway 43, between Cherokee and Anderson Counties, steel span, wood trestle and earth approaches, $26,390. W. F. Hutson, State Highway Dept., Austin, engr.

Ont., Toronto—City and Dept. Pub. Wks., Ottawa, plan 200 ft. steel bascule span bridge, 60 ft., over western entrance to Toronto Harbor, $500,000 exclusive of approaches which will be built by Harbor Comn. Will probably proceed next year. R. C. Harris, city engr.

BIDS DESIRED

N. H., Pinkham Notch—Aug. 23, by F. E. Everett, state engr. Concord, 125 ft. bridge, riveted steel truss, over stream, here. $25,000.

N. Y., La Salle—Aug. 24, by Niagara Town Bd., P. C. Goetzman, clk., 100 ft. steel girder bridge, 32 ft. roadway, over Cayuga Creek. $25,000. Noted June 8.

Bridges (Continued)

N. Y., Richland—Aug. 30 at office Town Clerk of Town of Richland in Village of Pulaski, for rein.-con. arch and girder bridge across Salmon River. Concrete-Steel Eng. Co., Park Row Bldg., New York, engrs.; adv. this issue. Noted June 22 under "Pulaski."

Pa., Mercer—Aug. 23, by Comrs. Mercer Co., 4 rein.-con. bridges as follows: Bridge 2802, Shenango Twp., 35 ft. girder; Bridge 3011, Springfield Twp., 24 ft. girder; Bridge 508, Deer Creek Twp., 12 ft. girder; Bridge 2307, Hickory Twp., girder super-structure and widening and building present abutments; also Bridge 2306 Hickory Twp., through plate, encased steel girder, 50 ft. span and widening and rebuilding present abutments. $25,000. F. P. Graham, Grove City, co. engr.

North Carolina—See "Streets and Roads."

Ga., Augusta—Sept. 5, by Streets and Drains Com., Green St. Bridge over Third Level of Canal. W. H. Wise, city engr. and comr. of Pub. Wks.; adv. this issue.

Ga., Savannah—Sept. 7, by State Hy. Depts., Georgia and South Carolina, bridge over Savannah River near here, Contr. 1, 243,633 cu.yd. embankment (preferably placed by hydraulic method); Contr. 2, 6,650 cu.yd. concrete, 984,000 lb. reinforcing steel, 28,000 lin.ft. concrete piling, etc. $480,000. Address W. R. Neel, Atlanta, state highway engr.

Fla., Ft. Lauderdale—Sept. 5, by Bd. Comrs. Broward Co., 2 steel highway swing drawbridges across Florida Intra-Coastal Canal, one near Pompano, other near Dania. H. C. Davis, engr.; adv. this issue.

Tenn., Blountville—Sullivan Co. taking bids concrete bridge over Holstons River near Tuters Mill. $30,000. C. M. Dulamey, Bristol, engr.

O., Maynard—Aug. 28, by Comrs. Belmont Co. (St. Clairsville), concrete bridge with rein.-con. slab top, Colerain Twp., near here. A. T. Fogle, co. aud.

Ind., Greenfield—Sept. 5, by Comrs. Hancock Co., building two concrete and one steel bridge. C. Boone, Greenfield, c/o engr.

Ill., Newton—Aug. 30 by Comrs. Captain Pond Drainage and Levee Dist., at office A. Kasserman, atty., Newton, 1 steel bridge, 170 ft. span, 16 ft. roadway, 2 concrete piers.

Minn., Moorhead—See "Excavation and Dredging."

Tex., New Braunfels—Sept. 7, by F. G. Blumberg, mayor, at office of City Clerk, rein.-con. bridge across Comal River. Terrell Bartlett Engrs., Calcasier Bldg., San Antonio, engrs; adv. this issue.

BIDS RECEIVED

N. Y., Waterford—C. L. Cadle, supt. Pub. Wks., Albany, opened bids Aug. 9, concrete slab bridge across old Champlain Canal on Broad St., here, from E. J. Doyle, and E. B. Sanford, 95 State St., Albany, $27,615; J. P. Kelly, 17 Saratoga Ave., Cohoes, $28,720; Troy Pub. Wks. Co., U. C. N. Bank Bldg., Utica, $30,430. Engrs. est. $29,720.

Alabama—W. S. Keller, state highway engr., Montgomery, opened bids July 25, two 100 ft. concrete arch bridges, one 80 ft. steel span, and one 100 ft. 6 in. span, etc., from Smith Co., 30 3rd Ave. W., Birmingham, $127,771; J. A. Peterson, Montgomery, $129.592; Lawrence, Nixon & Phillips, Jackson, Miss., $132,848. Noted July 6.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids Aug. 11, bridges in following counties: Highland Co., Sect. "N" Hillsboro-Washington C. H. Rd., two steel bridges, from Perkins Structural Steel Co., Wooster, $10,362; Brookville Bridge Co., Brookville, $10,464. Pickaway Co., Sect. "U" bridge over Scippo Creek, from M. M. Kirton, Circleville, $12,170. Brown Co., Sect. "P" Milford-Hillsboro Rd., top slab bridge, from Fred M. Mark, Washington C. H., $2,571; Miller, Smith & Strayton, Mt. Orab, $2,671.

O., Cleveland—Cuyahoga Co. concrete arch bridge on Highland Rd., from Nelson & Kelly, West 112th St., $23,602; Forschner Co., East 10th St. and St. Clair Ave., $24,578; H. B. Hirsch, Cleveland, $25,621. Noted July 13.

CONTRACTS AWARDED

N. Y., Cayuga—New York Central R. R., Grand Central Terminal, New York, furnishing 180 ton steel and castings for 114 ft. steel and concrete bridge, here, to Shoemaker, Satter & Thwait Co., 256 Bway., New York. Noted March 30.

W. Va., Ripley—Comrs. Jackson Co., substructure on Carnahan Bridge to Lambert & Cole, Huntington, $11,538; superstructures on Carnahan and King Bridges to Oregonia Bridge Co., Lebanon, O., $7,137 each. Angerona and Cottageville Bridges to Concrete Steel Bridge Co., Clarksburg, $21,948 and $18,701 respectively. Noted July 13.

In July

We published** 134 **tips on new bridge construction as follows:

Proposed work	25
Bids desired	45
Bids received	21
Contracts awarded	43

Watch these pages

North Carolina — See "Streets and Roads."

North Carolina—State Hy. Dept., Raleigh, constructing rein.-con. bridges and culverts on State Projects 604 and 535, Union and Guilford Counties, to Hagedorn Constr. Co., Thomasville, $38,315; State Project 569, Moore Co., to Mayfield Constr. Co., Denmark, S. C., $26,390; State Project 484, Wake Co., to Booz, Lloyd & Co., Marion, $26,147; State Project 702 A, Alleghany Co., to Luten Bridge Co., 405 East 4th Ave., Knoxville, Tenn., $59,964; State Project 952 A, Jackson Co., and State Project 963, Macon Co., to Brooks-Callaway Co., Forsyth Bldg., Atlanta, Ga., $34,771 and $27,841 respectively. Noted Aug. 3.

Fla., Ft. Lauderdale—Broward Co. reconstructing bridge over New River Sound, 192 cu.yd. concrete, 90 ft. reconstruction timber trestle, 1,720 lin.ft. timber retaining walls, 7,000 cu.yd. dredged fill, removal of 900 ft. trestle, to J. Olsson, Ft. Lauderdale, $17,277, contract award subject to permit from War Department; improving Las Olas Blvd., 1,470 ft. creosoted timber retaining wall to J. Olsson, Ft. Lauderdale, $6,615; 3,600 ft. builder rip rap and 6,200 cu.yd. rock fill, to Hall & Marshall, Ft. Lauderdale. $14,369. Noted July 20.

Alabama—W. S. Keller, state highway engr., Montgomery, two 80 ft. steel spans and concrete girders on concrete pile bents, total length 1,037 ft., over Cubahatchee, Caleebee and Little Caleebee Creeks, Macon Co., to Austin Bros. Bridge Co., Hurt Bldg., Atlanta, Ga., $73,764. Noted June 29.

Alabama—State Hy. Dept., Montgomery, Rooster Bridge over Tombigbee River on Dixie Overland Highway at Moscow Ferry, Marengo and Sumter Counties, two 230 ft. and one 160 ft. spans, concrete approach and substructure, Waddell lift, total length 988 ft. 10 in., 18 ft. roadway, to Doullet & Williams Co., 816 Howard Ave., New Orleans, La. Virginia Bridge & Iron Co, (sub. contractors)) to furnish and erect superstructure.

Alabama—State Hy. Dept., Montgomery, 1,000 ft. bridge, Waddell type of vertical lift span, across Tombigbee River, at Moscow Landing, near Demopolis, Marengo and Sumter Counties, to Doullut & Williams, Howard Ave., New Orleans, La., $235,075. Noted July 27.

Tennessee—State Hy. Dept., Nashville, concrete arch bridge over Rocky River on Warren-Van Buren Co. line, Federal Aid Project 79, to Warren County Constr. Co., Stahlman Bldg., Nashville, $25,956. Noted July 13.

Ohio—Dept. Highways and Pub. Wks., repairing bridge on National Rd., Sect. "N," Clark Co., to J. Fox, Brookville, $2,286; constructing concrete girder bridge and abutments, Lima-Sandusky Rd., Sect. "F," Hancock Co., to P. Alge, Arlington, $3,044; concrete girder bridge, Marysville-Kenton Rd., Sect. "H," Union Co., to G. A. Lofgren, Marysville, $3,756; concrete beam bridge, Mansfield-Millersburg Rd., Sect. "B-1," Holmes Co., to Shrimplin & Lewis, Killbuck, $5,772; rein.-con. bridge, National Rd., Sect. "R," Muskingum Co., to Adams Co., Zanesville, $9,684; concrete girder bridge Columbus-Wooster Rd., Sect. "A," Knox Co., and concrete girder bridge Columbus-Wooster Rd., Sect. "E," Knox Co., to Logsten & Breckler, Danville, $4,308 and $3,857 respectively. Noted Aug. 10.

O., Columbus—R. W. Smith, clk. Franklin Co to I. E. Smith, Richmond, Ind., constructing and paving approaches to Greenlawn Ave. Bridge, 8,100 cu.yd. fill and 2,800 sq.yd. bituminous macadam, $17,542; extending bridge 179 on McKinley Rd., Franklin Twp., $1,525; constructing culvert 174 on McKinley Rd., Franklin Twp., $2,536.

Minnesota—State Hy Dept., St. Paul, Bridge 3252, State Project 34-24, steel, one lift span and three 60 ft. approaches, over Mississippi River, Itasca Co., to Minneapolis Bridge Co., Metropolitan Life Bldg., Minneapolis, $45,445. Noted Aug. 10.

Missouri—State Hy. Dept. at div. office Canton, one 85 ft. steel, one 30 ft. rein.-con. spandrel filled arch, one 24 ft. and three 30 ft. rein.-con. deck girder, one 14 ft. and two 20 ft. rein.-con. slab spans, 18 ft. roadways, on Federal Aid Project 38, Lewis Co., to O. J. Hanick, 4066 Lindell St., St. Louis, $35,370. Noted Aug. 3.

Wash., Yakima — Yakima Co., 252 ft. steel bridge, 20 ft. roadway, across Naches River, two concrete abutments, to Union Bridge Co., Central Bldg., Seattle. $46,194. Engrs. est. $40,000. Noted July 27.

Dams

PROPOSED WORK

N. Y., Binghamton—Binghamton Light Heat & Power Co., 172 Washington St., purchased Rockbottom Dam, plans to improve and enlarge same to make it capable of furnishing power to industries of Binghampton.

Ia., Harvey—City having plans prepared 800 ft. concrete dam, 10 ft. head, 2,400 hp. $270,000. Fargo Eng. Co., West Cortlandt St., Jackson, Mich., engrs., Burns & McDonnell, Interstate Bldg., Kansas City, Mo., associated engrs.

Que., Quebec—Dept. Lands & Forests of Provincial Government, having plans prepared and soon takes bids, dam at Lake Kenegami. $1,800,000.

BIDS RECEIVED

Pa., Greenville—L. B. Taylor, concrete and wood dam across Shenango River, on Smathers Estate, from Universal Constr. Co., Empire Bldg., Pittsburgh, $26,194; W. McIntyre & Sons, Sharon, $26,731; Lake Erie Constr. Co., Perry Wayne Bldg., Cleveland, O., $30,870.

California—Yuba Development Co., Hobart Bldg., San Francisco, (a) concrete arch dam, raising present dam from 45 ft. to 175 ft., enlarged dam to be 500 ft. long on crest, 41 ft. thick at base, 6 ft. thick at top; (b) concrete power house, from Bent Bros., 1714 Eagle Ave., Los Angeles, (a) $330,650, (b) $12,974; W. A. Kraner, Balboa Bldg., San Francisco, (a) $345,650, (b) $14,477; J. L. McLaughlin, 251 Kearny St., San Francisco, (a) $372,470, (b) $17,550. Owner will furnish cement, steel, pipe, etc.

Railways

PROPOSED WORK

New York—See "Miscellaneous".

Pennsylvania—Eagles Mere R.R. Co., Eagles Mere, plans to improve road, 10 mi. long, narrow gauge. Work includes changing entire road to standard gauge and possibly electrifying same. $25,000. H. V. Yeager, genl. Mgr.

Ontario—Grand River Electric Ry., Galt, having plans prepared interswitching line at Simcoe. $30,000. F. H. Midgley, Galt, ch. engr.

CONTRACTS AWARDED

Ohio—U. S. Coal Co., Citizens Bldg., Cleveland, installing 2½ mi. single track railroad siding, 60,000 cu.yd. grading, to H. L. Carr, Frederick Bldg., Cleveland. Engrs. est. $85,000. Wood ties and steel rails have been purchased.

Kansas—Atchison, Topeka & Santa Fe Ry. Exch. Bldg., Chicago, 48 mi. railroad from Ellinor to Eldorado, to Bates & Rogers, Old Colony Bldg., Chicago. $3,000,000.

Excavation and Dredging

PROPOSED WORK

N. Y., Syracuse—Plans flood control of Furnace Brook. $75,000. T. H. Mather, city engr.

Wis., Union Grove—Hoosier D. D., making plans 2 mi. 10-15 in. clay tile drains and some open ditch work. $25,000. W. E. O'Brien, Union Grove, engr.

Cal., Live Oak—Reclamation Dist. 2056 had plans prepared 40 mi. ditches ranging from 3 to 6 ft. wide, 5 ft. deep, 416,000 cu.yd. excav., 3,000 lin.ft. of 12-36 in. con-

Excavation and Dredging (Continued)

crete pipe for laterals, 148 cu.yd. concrete for structures. W. Stanton, Live Oak, engr.

Cal., Merced—Merced Irrigation Dist. soon takes bids 30 mi. laterals. R. C. Starr, ch. engr.

BIDS DESIRED

O., Wooster—Aug. 29 at office of C. F. Schopf, secy. Joint Bd. Comrs. Wayne and Holmes Counties, Court House, draining and dredging Killbuck Creek; adv. this issue.

Minn., Moorhead — Aug. 26, by A. O. Houglum, aud. Clay Co., Co. Ditch 45, 10 mi. main ditch, 60,621 cu.yd. excav.; 36,587 cu.yd. excav. in Lateral 1, 32,587 cu.yd. excav. Lateral 2, clearing and grubbing 4 mi., leveling 6 mi. old spoil bank, 2 new and 1 rebuilt wooden bridges, 4 steel I beam bridges on concrete abutments, 7 rebuilt I beam bridges on concrete abutments, involving 684 cu.yd. concrete, 34,800 lb. structural steel, 1,845 lb. reinforcing, 783 cu.yd. structural excav.

Cal., Biggs—Aug. 28, by Dirs. Recl. Dist. 200 of Butte Co., constructing drainage system. To exceed $25,000. W. W. Green, Biggs, engr.

Cal., Merced—See "Miscellaneous."

BIDS RECEIVED

Ore., Grants Pass—Grants Pass Irrigation Dist. opened bids Aug. 8, excavating main canal, sta. 0 to 333, (except 6 to 26 completed), 167,000 cu.yd. dry earth and 13,000 cu.yd. dry rock excav., from P. Welch, Medford, $73,580; Pacific Bridge Co., East Salmon St., Portland, $119,343; J. Hampshire, Grants Pass, $119,930. Engrs. est. $100,000. Noted July 20.

CONTRACTS AWARDED

Ind., Boonville—Warrick Co., 77,650 ft. Cypress Creek Dredge Drain, 1,374,025 cu.yd. earth excav., to R. H. McWilliams, Exch. Bldg., Memphis, Tenn., $123,272. Engrs. est. $150,000. Noted Aug. 10.

Minn., Olivia—Renville Co., Co. Ditch 92, 92,263 cu.yd. excav., to Mulgrew & Sons Co., Dubuque, Ia., $10,983; 6 timber bridges, to E. C. Fritze, Olivia, $3,000; 149,500 lin.ft. 5-36 in. tile, material and labor, to Kirscher Bros., Olivia, $62,840. Noted July 13.

Cal., Merced—Merced Irrigation Dist., constructing Le Grande Lake-Yosemite Canal, Div. 1, including canal 16 ft. wide on bottom, 7.8 ft. deep, will be done by district; Div. 2 including 6,400 ft. canal, 16 ft. wide on bottom, 7.8 ft. deep, 6,850 ft. canal, 8 ft. wide on bottom, 5.5 ft. deep, 7,450 ft. canal, 5 ft. wide on bottom, 5.5 ft. deep, and Div. 3, including 23,535 ft. canal, 8 ft. wide on bottom, 5.5 ft. deep, 16,425 ft. canal, 5 ft. wide on bottom, 5.5 ft. deep, 4,740 ft. canal, 5 ft. wide on bottom, 4.2 ft. deep, to C. R. Adams, Briggs. Noted Aug. 10.

Streets and Roads

PROPOSED WORK

Pa., Mechanisburg—Plans paving 1,700 ft. South Market St. from Simpson St. to Elmwood Ave., rein.-con., alternate types will be considered. $28,000. C. Bryan, Carlisle, engr.

Pa., Pittsburgh—Soon takes bids repaving Smithfield St. with granite block. $35,000.

N. C., Thomasville—Plans paving South Main St. from Jewel Cotton Mills to Baptist Orphanage, East Guilford St. to Cemetery St., and Cemetery St. back to North Main St., concrete or some type of asphalt. $75,000.

N. C., Whiteville—Columbus Co. plans 3 concrete bridges across Soles Swamp near here. $30,000. E. J. Grimsley, Freeman, chn. Bd. Comrs.

Florida—State Hy. Dept., Tallahassee, rejected bids opened June 14, surfacing 18 mi. State Rd. 3, between De Leon Springs and Putnam Co. line, Volusia Co. Noted June 23.

Florida—State Rd. Dept., Tallahassee, rejected bids opened June 27, surfacing with bituminous macadam on crushed stone, 10 mi. Project 32, from Duval Co. line north, Nassau Co., and 8 mi. Project 17, between Bullards Creek and Hillsborough Co. line, Manatee Co. Noted July 6.

Fla., Jacksonville—Plans to issue time warrants for $33,000 for sidewalks. W. E. Sheddan, city engr.

La., Shreveport—See "Buildings."

Tenn., Nashville — Making preliminary plans widening 8th St. from Church St. to Bway. $100,000. W. W. Southgate, City Hall, engr.

Ohio—Dept Highways and Pub Wks., Columbus cancelled bids that were to be opened Aug. 11, grading, bridging and paving 1.31 mi. Sect. "G" Bucyrus-Cresline Rd., Crawford Co., rein.-con., brick, bituminous macadam asphalt or tar.

Ohio—Dept. Highways and Pub. Wks., Columbus received no bids Aug. 11, grading, bridging and paving 2.731 mi. Sect. "A" Chagrin Falls-Cuyahoga Falls Rd., Cuyahoga Co., rein.-con., or brick; 0.83 mi. Sect. "Medina West" Ashland-Medina Rd., Medina Co., rein.-con. or monolithic brick.

O., Columbus—Plans grading, bridging and paving 4 mi. Columbus-Wooster Rd. $182,000. C. C. Lattimer, Court House, engr.

O., Youngstown—City Council authorized $48,180 bond issue for paving Hartzell, Bella Vista and Oneta Sts., brick or macadam. I. Turner, city engr.

Ind., Ft. Wayne — Allen Co. plans paving 6.3 mi. Hoagland Rd., 16 ft., 59,099 sq.yd. concrete on concrete. $98,170. A. W. Grosvenor, Courthouse, engr.

Ind., Goshen—Elkhart Co. plans paving 13,840 ft. Fish Lake Rd., 18 ft., 27,679 sq.yd. concrete. $63,250. C. L. Kinney, Courthouse, engr.

Ind., Hammond—Lake Co. plans grading and gravel surfacing 33,400 ft. Leo Bixenman Rd., 16 ft. $36,814. R. Seely, Hammond, engr.

Ind., New Albany—Floyd Co. plans grading and gravel surfacing 31,287 ft. Elizabeth and New Albany Ridge Rd., 16 ft. $35,000. M. M. Boland, Courthouse, engr.

Ind., Spencer—Owen Co. plans surfacing 13,274 ft. Henry Rentschler Rd., 18 ft., crushed stone. $27,300. L. Drescher, Courthouse, engr.

Mich., Grosse Pointe Farms (Detroit P. O.)—Plans grading and paving Oak St. from Grosse Pointe Blvd. to Ridge Rd., incl. 6,125 sq.yd. 9 in. concrete, 4,600 lin.ft. concrete curbing, $35,000; 4,000 ft. Moran Rd., 10,100 sq.yd. 9 in. concrete, 7,550 lin.ft. concrete curbing, $50,000. R. H. Erley, Grosse Pointe Farms, engr.

Kan., Iola—Allen Co. soon takes bids paving 12.8 mi. Humboldt Elsmore Rd., 16 ft., bituminous macadam. A. R. Stroup, Iola, engr.

Kan., Kansas City — Wyandotte Co. making plans paving 1¾ mi. Sortor Rd., 16 ft., waterbound macadam. O. K. Williamson, Co., engr.

Kan., Kansas City—Wyandotte Co. soon takes bids paving 1½ mi. Carlton Rd., 16 ft., waterbound macadam, 1½ mi. Golden Belt Rd., Sect. A, 18 ft., concrete bituminous concrete or asphaltic concrete. O. K. Williamson, Co. engr.

Missouri—State Hy. Dept., Jefferson City, plans 8.506 mi. road from Wayland to Keokuk 24 ft., Federal Aid Project 171, Clark Co., 22,679 cu.yd. earth excav., 11,566 cu.yd. borrow, 500 cu.yd. per 100 ft. overhaul, 160.6 cu.yd. concrete, 2,885 lb. reinforcing, 60,071 sq.yd. gravel surfacing, 12 ft. wide, 7 in. at centre, 4 in. at edges, etc. B. H. Piepmeier, state highway engr.

Tex., Memphis—Attorney Generals Dept., Austin, approved $65,000 bond issue for street paving and improvements. Montgomery & Ward, Wichita Falls, consult. engrs.

Tex., Wichita Falls—Wichita Co. to vote Aug. 22 on $150,000 bond issue for branch county hospitals at Electra, Iowa Park and Burkburnett. J. P. Jones, co. judge.

Col., Denver—Making plans surfacing 2½ mi. Bway Paving Dist. 6, 2 in. wearing surface on 5 in. concrete or 2 in. wearing surface on 4 in. asphaltic, commonly known as black base. $166,858. A. K. Vickery, City Hall, engr.

Cal., Fresno—Had revised plans prepared improving Farris Ave. between Belmont and Hedges Aves., 131,610 sq.ft. grading, 119,804 sq.ft. asphaltic pavement, 2,304 sq.ft. concrete gutter, 317 lin.ft. concrete curb, etc. W. Stranahan, city engr. Noted Aug. 10.

Cal., Stockton—Had plans prepared improving Pershing Ave., Argonaut St., et al., 11,266 cu.yd. cut, 9,984 cu.yd. fill, 23,907 lin.ft. concrete curb and gutter, 134,255 sq.ft. cement walks, 448,081 sq.ft. 3 in. asphaltic concrete on 3 in. macadam. $145,000. W. B. Hogan, city engr.

Ont., Hamilton—Plans 12.500 sq.yd. asphalt pavements on concrete Central Ave. $4,500, Woodbine Crescent $8,000, Stirton St. $5,500, Alandale St. $5,400, Hope St. $9,000, Dunsmore Ave. $5 500, Edgemount Ave. $6,900, Alice St. $5,400, Albermarle Ave. $6,000; also 200,000 sq.ft. concrete sidewalks, Kenilworth Ave. and King St. $5,000. Houghton, Ashford and Wexford Aves. $9,000, Weir St. and Tragina Ave. $17,000, Barons Rd., Dunsmore, Roxboro, Tuxedo, Paling and Hampton Aves. $35,000. E. R. Gray, city engr.

Ont., Hamilton—Plans paving Craigmiller Ave. from Ottawa St. to Rosslyn Ave., 3,000 sq.yd. asphalt, $11,000, Hunter St. from Ferguson to Victoria Aves., 6,000 sq. yd. asphalt, $24,000. E. R. Gray, city engr.

Ont., Simcoe—Having plans prepared and soon takes bids paving Argyle, Robinson, Queen and West Sts., 18,500 sq.yd. tarvia macadam, $75,000, and possibly a concrete bridge at additional cost of $40,000. G. R. Marston, city engr.

BIDS DESIRED

Maine—Aug. 25, by State Hy. Comn., Augusta, surfacing with bituminous macadam, 2.64 mi. highway in Brighton, and 1 mi. in Rockport-Camden; gravel surfacing 5.8 mi. in Turner, 3.16 mi. in Perry, 3.67 mi. in Rome and New Sharon, and 3.37 mi. in New Sharon; cement concrete surfacing 3.78 mi. in Presque Isle. P. D. Sargent, ch. engr.

New York—Aug. 29, by H. S. Sisson, comr. State Hy. Dept., Albany, improving highways in Erie, Franklin, Hamilton, Lewis, Orange, Saratoga, Washington and Wyoming Counties, repairing highways in Livingston, Madison, Oswego, Rensselaer and Steuben Counties; adv. this issue.

N. Y., Long Island City—Aug. 21, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., recurbing, reflagging and paving Dutch Kills St. from Jackson Ave. to tracks of Long Island R.R., 1st Ward, Dutch Kills St. from Jackson Ave. to point about 400 ft. southerly, sheet asphalt on concrete, thence to railroad will be second hand granite block; paving for width of 20 ft. adjacent to northerly curb line North Jane St. from Vernon Ave. westerly to its terminus, granite block; Howland St. from Wolcott to Ditmars Aves., bituminous macadam; Pettit Pl. from Judge to Ithaca Sts., sheet asphalt; 122nd (Brevoort) St. from Metropolitan to 84th (St. Ann's) Aves., sheet asphalt on concrete; grading, regrading, curbing and paving South Jane St. from Ely to Van Alst Aves., granite block on concrete; Van Alst Ave. from South Jane St. to Harris Ave., second hand granite block on sand; grading, curbing and laying sidewalks on Crown Pl. from Opdyke St. to Corona Ave.; 81st St. (Nevada Ave.) from 91st to Atlantic Aves.; 122nd (Brevoort) St. from Metropolitan to 84th (St. Ann's Aves.); grading, curbing, laying sidewalks and paving Gleane St. from Baxter to Britton Aves., sheet asphalt on concrete; curbing and laying sidewalks on Gates Ave. between Fresh Pond Rd. and Prospect Ave., 2nd Ward; recurbing and paving Bleecker St. from Forest Ave. to John St., sheet asphalt on concrete; grading westerly sidewalk and gutter spaces, setting curb, etc., on 126th (North Villa) St. from Metropolitan to Hillside Aves., 4th Ward; grading, etc., 42nd St. from Jackson to Hayes Aves.; receiving basins in westerly corner of Ely and Van Alst Aves. and southerly corner of Van Alst Ave.; east and north corners of Judge St.; southerly corner of Metropolitan Ave.; northerly and westerly corners of Britton Ave.

N. Y., Long Island City—Aug. 22, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing, recurbing, flagging, reflagging and paving, etc., 46th St. from Jackson to Roosevelt Aves., Louona Ave. from Roosevelt to Kingsland Aves.; paving 7th Ave. from Washington to Graham Aves., 1st Ward, all sheet asphalt on concrete.

N. Y., New York—Aug. 21, by J. Miller, pres. Manhattan Boro, Municipal Bldg., paving (1) Fort Washington Pl. between West 181st and 183rd Sts., (2) Broad St., (3) 78th St.

N. Y., Rochester—Aug. 23 by Bd. Contr. and Supply resurfacing North St. from Main to Portland Aves., asphalt. $102,320. C. A. Poole, city engr. Noted April 20.

N. Y., Waterloo—Aug. 28, by Bd. Trustees paving 21,700 sq.yd. various streets, bituminous macadam, (penetration method) A. R. Moore, clk. Noted July 27; adv. this issue.

N. J., Freehold—Aug. 28, by Mayor and Boro Council, Municipal Bldg., reconstructing Throckmorton St. C. A. Niles, Municipal Bldg., boro engr.; adv. this issue.

N. J., Red Bank—Sept. 6, by Monmouth Co., Court House, Freehold, constructing State Highway Route 4, Sect. 5A, Maple Ave., here. G. K. Allen, Jr., co. engr.; adv. this issue.

N. J., Somerville—Sept. 1, by Somerset Co., Court House, constructing State Highway Route 9, Sect. 7A, from Grove St. through East Main St., North Gaston and Union Aves. to easterly boro line. H. C. Van Emburgh, co. engr.; adv. this issue.

N. J., Somerville—Sept. 8, by Somerset Co., Court House, constructing State Highway Route 16, Sect. 4, from Pluckamin to Somerville. H. C. Van Emburgh, Court House, co. engr.; adv. this issue.

Pa., Beaver—Aug. 22, by M. Thompson, clk., College Hill, paving 4th Ave., College Hill, asphalt on concrete. $75,000. I. Linderman, c/o Clerk, engr.

Pa., Youngsville—Aug. 28, by A. White, clk. Warren Co., paving 3,636 ft. Main St., rein.-con. (County's share of work) $25,000. Village's share of work noted Aug. 3.

Streets and Roads (Continued)

Maryland—Aug. 29, by State Roads Comn., Baltimore, building 8 sections state Highways in following counties: Allegany Co., Contr. A-21; Frederick Co., Contr. F-57; Howard Co., Contrs. HO-27 and HO-30; Anne Arundel Co., AA-25; Calvert Co., Contr. C-13; Charles Co., CH-21; St. Marys Co., Contr. SM-20. J. N. Mackall, chn.; adv. this issue.

Virginia—Aug. 24, by State Hy. Comn., Richmond, paving 10.29 mi. road between Pulaski and Max Meadows, State Project 151, Pulaski and Wythe Counties, 18 ft., 32,160 cu.yd. excav., 1,132 ft. pipe, 606 cu.yd. concrete, 23,000 lb. reinforcing, etc., $200,000; 1.84 mi. roads, State Project S-219, 5,500 cu.yd. excav., 366 ft. pipe, etc., $50,000. H. G. Shirley, Richmond, chn.

North Carolina—Aug. 30, by State Hy. Comn., Raleigh, hard surface (concrete or asphaltic paving), incl. grading, etc., in Pitt, Columbus, Durham, Orange, Davidson, Rockingham, Anson, Cabarrus, Mecklenburg, Surry, Wilkes, Cleveland, Buncombe and Rutherford Counties; topsoiling, sand-clay or gravel surfacing, incl. grading, etc., Bertie, Martin, Ashe, Wilkes, McDowell and Rutherford Counties; penetration or waterbound macadam in Pender Co.; bridges in Brunswick, Rockingham, Davidson, McDowell and Mitchell Counties; adv. this issue.

S. C., Charleston—Aug. 24, by Charleston Co. Hy. Comn., surfacing 2.17 mi. road between navy yard and port terminals, incl. 5,564 cu.yd. common excav., 20,374 sq.yd. concrete surfacing, etc.

S. C., St. George—Sept. 1, by Dorchester Co. Hy. Comn., surfacing 4.46 mi. Orangeburg-Charleston Highway, incl. 32,884 cu.yd. common excav., 11,424 cu.yd. sand clay surfacing, 735 lin.ft. rein.-con. pipe, etc.

Georgia—Sept. 1, by State Hy. Dept., Senate Chambers, State Capitol, Atlanta, grading 3.73 mi. Cleveland-Blairsville Rd., beginning at Neel Gap on top Blue Ridge Mountains and extending toward Blairsville, Federal Aid Project 284, Union Co., 2,750 lin.ft. drain pipe, 50,930 cu.yd. earth, 36,337 cu.yd. rock and 1,421 sta.yd. overhaul excav., 41.5 cu.yd. concrete, 5,186 lb. reinforcing, 66.462 acres clearing; 10.08 mi. Brunswick Davieu Rd. from Brunswick to Broadfield, Federal Aid Project 261, Glynn Co., 358 lin.ft. 24-30 in. t. s. v. c. pipe, 10,729 cu.yd. common, 41,226 cu.yd. borrow and 6,870 sta.yd. overhaul borrow excav., 106,163 sq.yd. clay gravel surfacing, 21.64 acres clearing, 29.66 cu.yd. concrete, etc. W. R. Neel, Peachtree Bldg., Atlanta, highway engr.

Ga., Savannah—Aug. 23, by G. R. Butler, clk. Chatham Co., paving 4½ mi. Savannah-Tybee Rd., between sta. 409-436 and sta. 642-679, asphalt or concrete.

Ga., Thomasville—Taking bids paving South Main St. from Jewel Cotton Mills to Baptist Orphanage, East Guilford to Cemetery Sts. and Cemetery St. to North Main St., 30,000 sq.yd. vitr. brick, asphalt or concrete.

O., Cleveland—Aug. 21, grading and landscape work in Euclid Park, Andrew J. Rickoff, Lafayette, Mt. Auburn, Audubon, Patrick Henry and Warner Schools. $50,000. W. R. McCormack, East 6th St. and Rockwell Ave., engr.

O., Cleveland—Aug. 23, paving East 55th St. from Brow to Harwood Aves., Halliday Ave. from Ivanhoe to Nottingham Rds. and Kipling Ave. from Ivanhoe Rd. to Nathaniel Ave., with brick. To exceed $25,000. R. Hoffman, 618 City Hall, engr.

O., Columbus—Aug. 30, by Franklin Co., grading, bridging and paving 10.3 mi. Alkire Rd., Franklin, Jackson, Prairie and Pleasant Twps., 16 ft., bituminous macadam. $270,241. C. C. Lattimer, Court House, engr.

O., Greenfield—Aug. 28, at office of G. Shrock, village clk., grading and paving Jefferson St. from 6th to 10th Sts., vitr. brick, asphalt, warrenite, bitulithic or other material.

Ind., Ft. Wayne—Aug. 22, by Comrs. Allen Co., grading and gravel surfacing 2.67 mi. Klopfenstein Rd., and 2.17 mi. Ruhl Rd., both 18 ft., $26,000 and $25,600 respectively. A. W. Grosvenor, Court House, engr. Noted Aug. 10.

Ind., South Bend—Aug. 21, by Comrs. St. Joseph Co., paving 20,075 ft. C. A. Carlisle Rd., 16 ft., 35,667 sq.yd. concrete on concrete. $92,000. P. R. Gillen, Court House, engr.

Michigan—Aug. 23, by State Hy. Dept., Lansing, grading and surfacing 4.52 mi. Federal Aid Project 85, Lapeer Co., 36,733 cu.yd. excav., 42,391 sq.yd. gravel. F. F. Rogers, state highway comr.

Michigan—Aug. 24, by State Hy. Dept., Lansing, grading and surfacing 6.98 mi. State Trunk Line Rd. 22-11, Sect. B, Leelanau Co., 56,809 cu.yd. excav., 65,518 sq.yd. gravel. F. F. Rogers, state highway comr.

Michigan—Aug. 24, by State Hy. Dept., Lansing, grading 8.862 mi. State Trunk Line Rd. 28-9, Sect. B, Baraga Co., 67,570 cu.yd. earth and 3,821 cu.yd. rock excav., 33.7 acres clearing. F. F. Rogers, state highway comr.

Michigan—Aug. 29, by State Hy. Dept., Lansing, grading 4.258 mi. State Trunk Line Rd. 25-4, Luce Co., 69,716 cu.yd. excav. F. F. Rogers, state highway comr.

Michigan—Aug. 29, by State Hy. Dept., Lansing, grading and surfacing 5.996 mi. Assessment Dist. Rd. 207, Huron and Tuscola Counties, 13,327 cu.yd. excav., 56,184 sq.yd. gravel. F. F. Rogers, state highway comr.

Michigan—Aug. 30, by State Hy. Dept., Lansing, grading and surfacing 2.802 mi. State Trunk Line Rd. 46-14, Sect. A, Montcalm Co., 15,109 cu.yd. excav., 26,300 sq.yd. gravel. F. F. Rogers, state highway comr.

Michigan—Aug. 30, by State Hy. Dept., Lansing, grading and surfacing 2.802 mi. State Trunk Line Rd. 46-14, Sect. A, Montcalm Co., 15,109 cu.yd. excav., 26,300 sq.yd. gravel. F. F. Rogers, state highway comr.

Ill., Waukegan—Aug. 28, by Road and Bridge Com. at office C. E. Russell, supt. highways of Lake Co., Court House, portland cement concrete paving Sect. X-15 D, Grand Ave. from Gurnee westerly to Lake Villa Rd.; adv. this issue.

Wis., Beloit—Aug. 21, by Bd. Pub. Wks., new pavement, etc., State St. from Public Ave. to state line, 10,500 sq.yd. 4 in. vitr. block on 6 in. concrete, sheet asphalt on 7 in. concrete, one course rein.-con. or creosoted blocks on 6 in. concrete, 320 lin.ft. combined concrete curb and gutter, 4,600 cu.yd. grading incl. removal of present brick pavement, 1,200 sq.yd. interurban track construction, etc.; Portland Ave from 4th to Hackett Sts. and from Hackett to Lincoln Sts., 12,600 sq.yd. sheet asphalt on 5 in. concrete, asphaltic concrete on 5 in. concrete or one course rein.-con., 1,500 lin.ft. combined concrete curb and gutter, 4,000 cu.yd. excav. G. E. Heebink, City Hall, engr. Noted Aug. 3.

Wis., White Fish Bay—Aug. 21, by W. Volkmann, village clk., 14,034 sq.yd. concrete pavement and 5,267 cu.yd. grading.

Ia., Elkader—Aug. 21, for 21,650 sq.yd. paving, (various types), 11,000 lin.ft. concrete curb and gutter, 6,450 cu.yd. excav. $52,000. M. Tschirgi & Son, 712 Amer. Trust Bldg., Cedar Rapids, engrs.

Minn., Blue Earth—Sept. 1, by Faribault Co., grading, etc., State Rd. 13, Job 2203, 82,000 cu.yd. excav., 66,000 cu.yd. overhaul, 1,524 lin.ft. 12-36 in. portable culverts. $25,000. L. Quarve, Blue Earth, engr. ,

Kan., Wellington—Sept. 1, by Clerk Sumner Co., grading 8.425 mi. Meridian Rd., Sects. D and E, Federal Aid Project 35, 29½ ft. J. W. Mavity, Wellington, engr. Noted Aug. 3.

N. D., Fargo—Aug. 25, by Cass Co., gravel surfacing 18 mi. Red Trail Highway, from Mapleton westerly. $30,000. W. R. Tucker, co. aud.

Wyoming—Aug. 24, by State Hy. Dept., Cheyenne, grading, surfacing and building culverts on 4.4 mi. Project 27-B, Newcastle to Four Corners, Weston Co., $61,000; 10 mi. Project 37-B, Ft. Laramie to Lingle, Goshen Co., $90,108; 3.2 mi. Worland to Tensleep, Washakie Co., $31,127; 8.8 mi. from Crowheart northwest, Fremont Co., $45,128; 8 mi. from Powder River west, Natrona Co., $41,132; 3.1 mi. from Moorcroft to Carlisle, Crook Co., $47,133; 3.1 mi. from Horsecreek north, Laramie Co., $27,135; 12.2 mi. from Ft. Bridge to Dog Springs, Uinta Co., $50,136; 8.2 mi. from Kemmerer north, Lincoln Co., $50,000; 3.8 mi. Projects 131 and 52, Niobrara and Fremont Counties, $33,000; grading, surfacing and culverts on 3.8 mi. Project 17, 3.3 mi. Project 27-A, and 2.5 mi. Project 25 also concrete bridge on Project 16, $38,000; surfacing 8 mi. Project 85, from Casper west, Natrona Co., $33,000. S. E. Sevison, ch. engr.

Tex., Coleman—Aug. 23, by L. G. Mathews, judge Coleman Co., grading, gravel surfacing, etc., 17.72 mi. State Highway 7, Federal Aid Project 194, incl., 31.2 acres clearing, 90,312 cu.yd. borrow, 41,256 cu.yd. roadway excav., 2,865.6 cu.yd. concrete, 315,583 lb. reinforcing and 83,270 lb. structural steel, 38,880 cu.yd. shipped gravel surfacing furnished by county. $232,440. W. E. Dickerson, co. engr. ,

Tex., Coleman—Aug. 24, by L. G. Mathews, judge, Coleman Co., surfacing, etc., 10.58 mi. State Highway 7-A, Federal Aid Project 303, 16, 18 and 30 ft. $87,477. W. E. Dickerson, co. engr. Noted July 13.

Nevada—Aug. 23 by State Hy. Comn., Carson City, grading 3.76 mi. Route 9, Sect. A, Washoe Co., 22,000 cu.yd. excav., 105 cu.yd. Class A and 30 cu.yd. Class B concrete, etc.; grading and asphalt surfacing incl. seal coat 15.57 mi. Reno-Purdy Rd., Route 9, Sect. A, Washoe Co., 15.5 mi. grading, 109,600 sq.yd. asphalt macadam, 109,600 sq.yd. seal coat, etc.; grading, surfacing and building culverts on 5.4 mi. Lincoln Highway from Grimes to Salt Wells, Churchill Co., 15 ft., 37,000 cu.yd. excav., 5.4 mi. subgrade and shoulders, 25 cu.yd. Class B concrete, 7,200 cu.yd. screen and load, 14,000 yd. mi. haul and 7,200 cu.yd. spread gravel, etc.; 3.7 mi. Reno-Lawtons Rd., Washoe Co., 37,000 cu.yd. excav., 285 cu.yd. Class A and 50 cu.yd. Class B concrete, 3.7 mi. subgrade and shoulders, 3,980 cu.yd. screen and load, 3,980 yd. mi. haul and 17,400 sq.yd. spread and compact selected material, etc.; 8.52 mi. from west county line to Battle Mountain, Route 1, Sect. 1-A, Lander Co., 16,200 cu.yd. excav., 30 cu.yd. Class A and 25 cu.yd. Class B concrete, 8.52 mi. subgrade and shoulders, 9,600 cu.yd. screen and load, 44,200 yd. mi. haul and 9,600 cu.yd. spread gravel. G. W. Borden, ch. engr.

Cal., Crescent City — Sept. 11, by City Trustees, improving various streets, 23,900 cu.yd. grading excav., 316,300 sq.ft. grading surface, 316,300 sq. ft. asphaltic macadam pavement, 168,418 sq.ft. asphaltic macadam pavement to be rebuilt, etc. C. C. Kennedy, Call Bldg., San Francisco, engr. Noted Aug. 1.

Cal., Sacramento—Aug. 31, by council, curbing, guttering, paving and laying sewers in Riverside Blvd., 15,662 lin.ft. concrete curb and gutter, 220 lin.ft. concrete curb, 963 lin.ft. curb wall, 10 concrete manholes to be reconstructed, 4,341 lin.ft. 8-22 in. vitr. pipe sewer, 318,476 sq.ft. 5½ in. pavement, 8,830 sq.ft. 6 in. pavement. A. Givan, city engr.

Cal., San Francisco—Aug. 23, by Bd. Pub. Wks., paving 327 ft. Ocean Beach Esplanade, Sect. D, rein.-con. M. M. O'Shaughnessy, city engr.

BIDS RECEIVED

N. Y., New York—Park Bd., Dept. of Parks, Municipal Bldg., opened bids Aug. 10, paving walks in Madison Square Park, asphalt mastic, from Sicilian Asphalt Paving Co., 41 Park Row, $25,889; Interboro Asphalt Co., 2306 Creston Ave., $27,058; Asphalt Constr. Co., 208 Bway., $38,350.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, opened bids Aug. 8, reconstructing with concrete pavement roadway Richmond Turnpike from Bulls Head to Linoleumville factory, from E. Galaway, 676 9th Ave., New York, $108,201; Brooklyn Manhattan Contg. Co., 26 Court St., Brooklyn, $120,926; J. Johnson Sons, 455 Bway., West New Brighton, Staten Island, $124,435. Noted Aug. 3.

Virginia—State Hy. Comn., Richmond, grading, paving, etc., 4.07 mi. road between Donkey and Pound Gap, Virginia Project S-138, Wise Co., 16 ft., from Jones & Combson, Bristol, $173,859; Coddell-Byars Constr. Co., Winchester, $179,655; Roberts Constr. Co., Pulaski, $189,706.

Alabama—W. S. Keller, state highway engr., Montgomery, opened bids July 25, grading and gravel surfacing 18.754 mi. road from Guin to Walker Co. line, 24 ft. and 18 ft. surface, Marion Co., from Smith Co., 30 3rd Ave. W., Birmingham, $148,651; Lamb & McLemore, Eutaw, $155,129; J. M. Gray, Jasper, $155,792. Noted July 6.

Louisiana—State Hy. Dept., Redmond Bldg., Baton Rouge, gravel surfacing 11.21 mi. Sorrento-St. Amant, Walker, Brittany and Asa Highways, from A. E. Perry, Colfax, $36,622; Newell Constr. Co., $37,947; Pickett & Hollier, Opelousas, $39,228.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids Aug. 11, grading, bridging and paving roads with (a) bituminous macadam, asphalt, oil, (b) bituminous macadam, tar, (c) brick, (d) plain concrete, (e) rein.-con., (f) bituminous macadam, asphalt, lake, (g) Kentucky rock asphalt, (h) bituminous concrete, oil, in following counties:

Allen Co., Sect. "A" Delphos-Kalida Rd., 0.66 mi., from G. B. Walther, 504 Opera House Blk., Lima, (a) $12,247 (b) $12,247; Central Paving Co., Hamilton, (a) $13,713 (b) $13,713; E. L. Reeb, Lima, (a) $14,044 (b) $14,044.

Ashland Co., Sect. "Loundonville" Columbus-Wooster Rd., 0.208 mi., from G. B. Herring & Son, Mansfield, (c) $16,100.

Franklin Co., Sect. "B" Columbus-Wooster Rd., 4.113 mi., from R. H. Shafer, Chamber of Commerce Bldg., Columbus, (c) $102,654; H. N. Snyder Co., Columbus, (c) $108,487; J. Wroe, Dayton, (c) $108,534.

Streets and Roads (Continued)

Gallia Co., **Sect. "A-1" Gallipolis-Crown City Rd., 0.86 mi., from Miller Bros., Gallipolis, (d) $31,909.**

Guernsey Co., **Sect. "F-Liberty" Cambridge-Newcomerstown Rd., 1.672 mi., from** C. Bird, **Springfield, (e) $51,406.**

Guernsey Co., **Sect. "G-1" Cambridge-Newcomerstown Rd., 2.036 mi., from C.** Bird, **Springfield, (e) $64,281.**

Jefferson Co., **Sect. "K-1" Ohio River Rd.,** 2.157 mi., **from Brown & Allen, Ellsworth,** (c) $109,090; **B. C. Stringer Co., Rayland,** (c) $111,264.

Meigs Co., **Sect. "L" Pomeroy-Athens Rd.,** 2.845 mi., **from S. A. Palmer, Marietta,** (b) $76,692 **(e) $75,495; Ebersbach Constr.** Co., Pomeroy, **(b) $76,542 (e) $78,456;** R. H. Shafer, **Chamber of Commerce Bldg.,** Columbus, **(a) $76,422 (e) $78,458; E. L.** Reeb, Lima, **(a) $75,881 (b) $75,881.**

Morrow Co., **Sect. "J" Marion-Galion Rd.,** 2.233 mi., **from Marifield & Uncapher,** Marion, (a) **$67,066 (b) $68,705 (f) $71,547;** Malloy & Seckel, **Marion, (a) $68,705 (b)** $70,600; **E. L. Reeb, Lima, (a) $69,670 (b)** $69,670.

Morrow Co., **Sect. "L" Mt. Gilead-Mansfield** Rd., **6.322 mi., from C. W. Conley,** Columbus, **(g) $196,324; Smith Constr. Co.,** Youngstown, **(h) $197,480.**

Scioto Co., **Sect. "R-2-A" Ohio-River Rd.,** 3.139 mi., **from H. N. Snyder, Columbus,** (c) $129,018.

Washington Co., **Sect. "K-2" Marietta-**Caldwell **Rd., 4.88 mi., from S. A. Palmer,** Marietta, (e) **$146,926; Gaty Constr. Co.,** Central **Natl. Bank Bldg., Columbus, (e)** $148,432; **Seiple-Wolfe Constr. Co., Youngs**town, (e) **$149,981.**

Seneca Co., **Sect. "A-1" Columbus Rd.,** 0.69 mi., **constructing concrete curb, from** C. M. Gray, **Waterville, $2,625; R. M.** Myers, Attica, **$2,698.**

Franklin Co., **Sect. "B" Columbus-**Wooster **Rd., 4.113 mi., building waterbound** macadam base, **from R. H. Shafer, Cham**ber of Commerce **Bldg., Columbus, $69,587;** H. N. Snyder, **Columbus, $69,587; J. Wroe,** Dayton, **$69,587.**

Medina Co., **Sect. "P" Ashland-Medina** Rd., bridges **and culverts, from E. L.** Breuggeman, **Akron, $6,545; Lodi Concrete** Co., Lodi, **$6,836.**

Missouri—State Hy. Dept. at div. office, Albany, opened **bids July 5, 2.603 mi. road,** 24 ft., through **Albany, State Aid Project** 20.169, **Gentry Co., (1) 31,696 cu.yd. earth** excav., (2) **277.1 cu.yd. Class B concrete,** (3) 36.2 **cu.yd. Class C concrete, (4) 30,381** lb. reinforcing, **from H. Washam, Jackson**ville, (1) $0.38, **(2) $23, (3) $23, (4) $0.06,** total $26,411; **Land Constr. Co., Ballinger** Bldg., St. **Joseph, (1) $0.46, (2) $26, (3)** $26, (4) **$0.06, total $30,819.**

Missouri—State Hy. Dept. at div. office Bloomfield, opened **bids July 15, 14.841 mi.** road from **Advance northeast and south,** Federal Aid **Project 187, Stoddard Co., (1** 93,969 cu.yd. **earth excav., (2) 36,078 cu.yd.** borrow, (3) **777.5 cu.yd. Class B concrete** masonry, (4) **52.8 cu.yd. Class C concrete,** (5) 66,707 **lb. reinforcing, from Thomas &** McDaniel, **Wapella, Ia., (1) $0.2875, (2)** $0.2875, (3) **$20, (4) $25, (5) $0.05, total** $91,254; **Service Constr. Co., Poplar Bluff,** (1) $0.25, **(2) $0.25, (3) $18, (4) $19, (5)** $0.05, total **91,059; Little & Dean, Paris,** Tenn., **(1) $0.35, (2) $0.25, (3) $19, (4)** $19, (5) **$0.045, total $99,190. Noted July 27.**

Missouri—State Hy. Dept. at div. office Carthage, opened **bids July 13, 1.393 mi.** road **from Carthage to Springfield, Federal** Aid **Project 168A, Jasper Co., (1) 2,354** cu.yd. **earth excav. (2) 3,740 cu.yd. borrow;** (3) 100 **cu.yd. overhaul per 100 ft. (4)** 14.715 **sq.yd. one course concrete pavement,** (5) **14.715 sq.yd. one course concrete pave**ment (6) **88.6 cu.yd. Class B concrete** masonry **(7) 30.6 cu.yd. Class C concrete** masonry **(8) 5.986 lb. reinforcing, from** Carterville **Concrete Co., Carterville, (1)** $0.50 (2) **$0.40 (3) $0.04 (4) $2.12 (5) $2** (6) $16 **(7) $15 (8) $0.05, total $34,913;** Baker & **Koontz, Carthage, (1) $1 (2)** $0.50 (3) **$0.03 (4) $2.11 (5) $2.06 (6) $21** (7) $19 (8) **$0.035, total $37,443; Bardo** Constr. Co., **Carthage, (1) $0.65 (2) $0.75** (3) $0.03 **(4) $2.225 (5) $2.22 (6) $20 (7)** $20 (8) **$0.055, total $40,314.**

Missouri—State Hy. Dept. at div. office Lebanon, **opened bids July 5, 5.075 mi. road** from Springfield **to St. Louis, Federal Aid** Project 89B, **24 ft., Laclede Co., (a) 13,243** cu.yd. **earth excav., (b) 10,199 cu.yd. bor**row, (c) **35,971 sq.yd. specification C gravel** pavement, **etc., from Case & Killian,** Harshfield, **(a) $0.40 per cu.yd. (b) $0.40** (c) $0.45 **total, $31,259, G. Schneider, Oak**land, (a) **$0.40 (b) $0.40 (c) $0.60, $37,838.** Navaculite **Constr. Co., Marion, Ill., (a)** $0.40 **(b) $0.40 (c) $0.60, $36,947; 4.788** mi. road **east and west of Lebanon, State** Aid Project **20.179, 24 ft., Laclede Co., (a) 24,884 cu.yd. earth excav., (b) $1,217 cu.yd. rock excav., (c) 10,515 cu.yd. brrow, etc., from Davis Constr. Co., Imboden, Ark., (a) $0.35 (b) $1.75 (c) $0.30 total $19,778, G. Schneider, Oakland, (a) $0.35 (b) $2 (c) $0.33, $20,709, J. W. and M. A. Holman, Lebanon, (a) $0.40 (b) $2 (c) $0.40, $22,946.**

Missouri—State Hy. Dept. at div. office Lexington, opened bids July 25, 4.694 mi. **road from Jackson Co. line to Blackburn, 24 ft., State Aid Project 20.164,** Lafayette Co., **from** E. Jucksch, **Oswego, Kan., $21,898; H. C.** Botsford, **1212** South **Bway.,** Leaven**worth, Kan., $22,054;** Diemer Williamson **Constr.** Co., **Brookfield, $23,787.** Noted **July 20.**

In July

We published* 711 *tips on new street and road construction as follows:

Proposed work	165
Bids desired	205
Bids received	87
Contracts awarded	254

Running heavy this season.

Missouri—State Hy. Dept. at div. office Poplar Bluff, opened bids June 24, 8.435 **mi. from Poplar Bluff to** Arkansas, **Federal Aid Project 58C, 24 ft.,** incl. 3 **bridges,** Butler Co., **(a) 11,685 cu.yd. earth** excav. **(b) 494 cu.yd. borrow** (c) **59,618 sq.yd.** specification C gravel pavement, etc., **from C. L. Rogers.** Franklin, Neb., **(a) $0.27 (b) $0.27 (c) $0.30, total $50,074, Little & Dean,** Paris, Tenn., **(a) $0.25 (b) $0.25** (c) **$0.70, $69,704.** L. A. Luck, **Imboden, Ark., (a) $0.34** (b) **$0.29** (c) **$0.65, $71,489;** 7.366 **mi. road from Poplar Bluff** southwest, **Fed**eral **Aid Project 58A, 24 ft., Butler Co., (a)** 32,170 **cu.yd. earth** excav. (b) **496** cu.yd. **borrow** (c) **52.727 sq.yd.** specification **C** gravel pavement, etc., **from Little & Dean, Paris,** Tenn., **(a) $0.35 (b) $0.35 (c) $0.25,** total, **$31,922.** M. E. Gillioz, Monett, **(a) $0.35 (b)** $0.35 **(c)** $0.35, **$38,331, Service Constr. Co., Poplar Bluff, (a) $0.35 (b) $0.35** (c) **$0.38, $39,365.**

Wash., Bellingham—C. H. Purcell, dist. forester, Portland, opened bids **July 21,** grading and building 9 mi. Shuksan-Austin Pass, **Whatcom Co., (a) log culverts with timber trusses, (b) log culverts with framed trestle, (c) concrete pipe with timber trusses, (d) concrete pipe with framed trestle, from Dunning & Burnett, Bellingham, (a) $169,061, (b) $146,776, (c) $184,761, (d) $162,476; Siems & Carlson, Spokane, (a) $187,553, (b)** $168,168, **(c) $187,105, (d) $168,020; M. O'Reilly, Bellingham, (a) $204,718, (b) $181,552, (c)** $202,653, **(d) $179,488.**

California—State Hy. Comn., Sacramento, **grading and paving** 10.86 **mi. highway between Colusa and Long Bridge, Colusa and Sutter Counties,** (1) 40,600 cu.yd. excav. without **classification, (2) 5,000 cu.yd.** gravel or broken stone in sub-base, (3) 16,550 **cu.yd. concrete pavement, (4) 55 cu.yd. Class A Portland cement concrete (culverts and monuments), etc., (a) with corrugated metal pipe, (b) with rein.-con. pipe, from Bonnell, Savage & Fenn, Tacoma, Wash., (1) $0.50 per cu.yd., (2) $1.80 (3) $4.82 (4) $18, total with (a) $113, 765 with (b) $113,973, Frederickson & Shannon, Cory Bldg., Fresno, (1)** $0.5625, **(2) $1.90 (3) $5.45, (4) $21, total with (a) $128,158, with (b) $127,950, Galbraith & Janes, Napa, (1) $0.83 (2) $1.50 (3) $5.50 (4) $20, total with (a) $137,185, with (b) $137,519; grading 11.66 mi. road from Fish Springs School to southeast corner Sect. 33 T 8 S. R. 33 E. M. D. B. & M, Inyo Co., (1) 75,000 cu.yd. excav. without classification, (2) 270 cu.yd. Class A portland cement concrete (culverts and monuments), etc., from Redmond, Page & Pond, Alameda, (1) $0.73 (2) $30, total $67,334, H. Francisco, Los Angeles, (1) $075 (2) $28, total $67,812, L. Summers, Bishop, (1) $0.78 (2) $30.50, total $71,646; surfacing 0.83 mi. road from Arcola School to Borden Station, Madera Co., (1) 1,400 ton asphaltic concrete, from Federal Constr. Co., San Francisco, (1) $9.90, total $13,860, J. A. Costello, Jr., 1083 Shotwell St., San Francisco, (1) $11.50, total $16,100, Thompson Bros., Fresno, (1) $14, total $19,600; grading 6.76 mi. road from** Cottonwood **Creek to First Crossing Kern River, Kern Co., (1) 220,000 cu.yd. excav. without classification, (2) 370 cu.yd. Class A Portland cement concrete (culverts and monuments), (3) 4,700 cu.yd. rubble masonry (retaining walls), (4) 1,300 cu.yd. dry rubble (retaining walls), etc., from W. S. Mead, San Francisco, (1) $0.95 (2) $30 (3) $10 (4) $7.50, total $281,157, Erickson, Petterson, Grier Co., Monadnock Bldg., San Francisco, (1) $1 (2) $25 (3) $10 (4) $6, total $287,177, C. H. Hudson, Marsh-Strong Bldg., Los Angeles, (1) $1.07 (2) $24 (3) $15 (4) $7, total $326,955.** Noted **July 13.**

Cal., Lindsay—Improving various streets, **(1) 10,250 cu.yd. grading, (2) 507,000 sq.ft. 1½ in. warrenite on 3½ in. bituminous, (3) 46,500 ft. concrete gutter, (4) 5,110 ft. concrete curb, etc., from** Clark & Henery **Constr. Co., 38 South Sutter St., Stockton, (1) $1.88, (2) $0.255, (3) $0.28, (4) $0.65;** Federal Constr. Co., Call Bldg., San Francisco, **(1) $2.10, (2) $0.259, (3) $0.28, (4) $0.62;** Valley Paving & Constr. Co., Visalia, **(1) $2.30, (2) $0.26, (3) $0.29, (4) $0.69.** Noted July 13.

CONTRACTS AWARDED

New Hampshire—Paving 1.9 mi. State Highway, Project 149, in **Londonderry,** 19,900 sq.yd. concrete, 2,756 **cu.yd. earth** excav., 3,020 cu.yd. borrow, 1,659 cu.yd. **gravel** base, to Winslow & Cummings, Nashua, $61,505; 1.5 mi. State Highway, Project 152 Portsmouth and Greenland, 1,424 cu.yd. earth excav., 2,950 cu.yd. borrow, 36,900 gal. bituminous macadam, to A. D. Bridges & Sons, Inc., Hazardville, Conn., $31,012.

N. Y., Brooklyn—E. Riegelmann, boro. pres., Boro Hall, paving (1) Bay 32nd St., (2) Diksman St., (3) Division Pl., (4) Dumont Ave., (5) Hegeman Ave., (6) Midwood St., (7) Rutland Rd., (8) 19th Ave., (9) 85th St., (10) Porter Ave., (11) Bradford St., (12) Cooper St., (13) High St., (14) Johnson St., (15) Wyona St., (16) 7th St., (17) 17th St., grading, curbing and laying sidewalks on (18) East 2nd St., grading (19) Hinsdale St., (20) Schenectady Ave. from Crown to Montgomery Sts., also grading, curbing and flagging Empire Blvd, from Troy to Lefferts Aves. and Lefferts Ave. from Schenectady to Utica Aves., curbing and laying sidewalks on (21) Hinsdale St. from Hegeman to Lorraine Aves., curbing and paving (22) Ave. K, (23) Sunnyside Court, to Cranford Co., 52 9th St., (1) $6,393, (3) $3,217, (4) $2,271, (5) $2,453, (6) $6,887, (7) $6,887. (22) $14,464. Grimm Constr. Co., 170 McKinley Ave., (2) **$3,810,** Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (8) $13,056, (9) **$13,380,** (17) $21,162. T. B. Scott, 671 Halsey St., (10) $3,548, (13) $822, (18) $1,604, (21) $2,402, (23) $1,218. Sicilian Asphalt Paving Co., 41 Park Row, New York, (11) $10,180, (12) $35,341, (14) $30,586, (15) $13,296. J. D. Norton, 20 Sterling Pl., (16) $15,975, (20) $12,742. C. C. Dempsey, 516 Prospect Ave., (19) $1,195. Noted Aug. 3.

N. Y., Elmira—Paving 3,010 **sq.yd. North Main St. from West Water to Church Sts.,** warrenite bitulithic, to **Brayer Bros.,** Elmira, $15,445; 300 sq.yd. **Divan Ave. from Lake to Grand Central Aves.,** asphalt **and widening North Main St. from 1st and 2nd Sts.,** to Holleran **Bros., Elmira, $3,653 and $1,259** respectively; **361 sq.yd. Irvine Pl. from College Ave. to Davis St., asphalt, to W.** Longwell, **Elmira, $4,243; East and West Miller Sts., concrete, to E. McGreevy, Elmira, $56,658; 2,659 sq.yd. North Main St. between Clinton and West 5th Sts., and 2,646 sq.yd. Baldwin St. between East 2nd and Clinton Sts., both** warrenite bitulithic, to **Lowman Constr. Co.,** Elmira, **$12,624 and $12,682 respectively;** sewer **in Sly St., to E. Walsh, Elmira, $13,060.** Noted **Aug. 3.**

N. Y., Lockport—Niagara Co. resurfacing 2 mi. **Shawnee-Saunders Settlement Rd., to L. H. Gipp Constr. Co.,** 787 **Richmond** Ave., **Buffalo, $46,926.** Noted **July 20.**

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., (1) widening and repaving widened **portion roadway West 57th St. from 6th to 7th Aves., asphalt on** concrete, (2) **repaving roadway South St. and Marginal St. wharf or place on East River from Peck Slip to Montgomery St., (3) roadway of West St. and Marginal St. wharf or place on North River from Cortlandt to Duane Sts., granite block on concrete, to Asphalt Constr. Co., 208 Bway., (1) $14,817, (3) $354,311; W. J. Fitzgerald, 547 West 45th St., (2) $413,317.** Noted **Aug. 10.**

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., widening and repaving widened portion (1) Madison Ave. from 60th to 61st Sts. (2) roadway 57th St. from 5th to 6th Aves.; repaving (3) roadway 50th St. from Madison to

Streets and Roads (Continued)

6th Aves. (4) roadway 51st St. from point 50 ft. west of westerly house line Park Ave. to 8th Ave., to J. E. Gaffney, 438 East 91st St., (1) $2,714; Asphalt Constr. Co., 208 Bway, (2) $30,480 (3) $22,480; W. J. Fitzgerald, 547 West 45th St., (4) $48,847. Noted Aug. 10.

N. Y., Syracuse—C. L. Cadle, state supt. Pub. Wks., Albany, for Terminal Contr. 89, paving portion Terminal site, constructing railroad and crane tracks, electrical work, etc., here, to J. H. Gallup, Union Bldg., $59,609. Noted Aug 3.

N. J., Trenton—Mercer Co. constructing 2.4 mi. road from Scudders Falls to Washingtons Crossing, 8 in. rein.-con., to Thompson & Glickman, Freehold, $145,421. Noted June 15.

Pa., Phila.—To Barber Asphalt Paving Co., Land Title Bldg., asphalt pavements on Fillmore, Mascher and Wakeling Sts. $27,012, Allegheny Ave., $25,265; Eastern Paving Co., Colonial Trust Bldg., C St. $35,021; Fish-Rutherford, Inc., Real Estate Trust Bldg., granite block pavements on 2nd St. $5,917. Noted July 20.

Pa., Pittsburgh—Repaving 2,900 ft. Warrington Ave., asphalt and block stone, to Booth & Flinn Ltd., Forbes St. Engrs. est. $41,000.

Pa., Scranton—Grading and curbing 9th St., to H. B. Sproul Constr. Co., 218 Adams St., $15,662; new sewer in 22nd Ward, to M. Stipp & Son, 1015 North Main St., $19,812; furnishing 300 ton limestone dust, to Solvay Process Co., Milton Ave., Syracuse, N. Y., $7.10 per ton.

W. Va., Wheeling—Comrs. Ohio Co. surfacing ¾ mi. Glenns Run Rd., to Coss & Otto, Wheeling, $15,600. Noted July 13.

North Carolina—State Hy. Dept., Raleigh, grading, rein.-con. bridges and culverts, and paving with 2 in. asphaltic concrete on 5 in. cement concrete 14.83 mi. State Project 236, Johnston Co., to R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, $432,110, 6.21 mi. State Project 494, Warren Co., to Clifford Eng. Co., Montgomery, W. Va., $189,209, 5.91 mi. State Project 342, Cumberland Co., to A. J. Wardrep, Holston Bank Bldg., Knoxville, Tenn., $161,275; clearing and grading 8.68 mi. State Project 963, Macon Co., to Costello Bros., Knoxville, Tenn., $85,208, 10.36 mi. State Project 952 A, to Brooks-Callaway Co., Forsyth Bldg., Atlanta, Ga., $114,435; grading and rein.-con. paving 7.78 mi. State Project 535, Guilford Co., and 1.63 mi. State Project 764, Surry Co., to Leaksville Lumber Co., Leaksville, $235,779 and $45,962 respectively; grading and concrete paving 8.79 mi. State Project 484, Wake Co., to R. P. Ashby, Tucker Bldg., Raleigh, $257,117; clearing, grading and topsoiling 18.97 mi. State Project 569, Moore Co., to Mayfield Constr. Co., Denmark, S. C., $61,929; grading, gravel surfacing and waterbound macadam paving 7.75 mi. State Project 702 A, Alleghany Co., to O'Brien Constr. Co., Birmingham, Ala., $130,207; grading and penetration macadam paving 8.17 mi. State Project 640, Iredell Co., and grading and bitulithic macadam paving 9.28 mi. State Project 602, Alexander Co., to W. E. Graham, Mt. Ulla, $165,446 and $172,118 respectively; clearing, grading, rein.-con. bridges and culverts and topsoiling 9.73 mi. State Project 132, Gates Co., to J. A. Marrow, Clarksville, Va., $58,110; grading, rein.-con. bridges and culverts and concrete paving 7.22 mi. State Project 173, Perquimans and Pasquotank Counties, to Williams & Williams, South Mills, $217,677. Noted Aug. 3.

Fla., West Palm Beach—Bd. Comrs. Palm Beach Co., paving with penetration macadam, oil surface, 11 mi. Palm City Loop, and 6 mi. Farm Rd. west from Hobe Sound and east to Jupiter Island bridge, to Maule Paving Co., West Palm Beach, $68,994 and $24,074 respectively; 6.8 mi. Ocean Blvd. from Delray to Boca Rotone, to F. N. Brown, West Palm Beach, $45,000. Noted July 27.

Fla., West Palm Beach—Palm Beach Co., paving Stuart Annie Ld., penetration macadam, oil surface, to Maule Paving Co., West Palm Beach, $87,860.

Alabama—State Hy. Dept., Montgomery, grading and gravel surfacing 20.488 mi. road from Tuskegee to Montgomery Co. line, 24 ft. roadway, 18 ft. surface, Macon Co., to Vaughn-Davis Constr. Co., Montgomery, $157,898; 14.617 mi. road from Athens to Elk River at Lauderdale Co. line, 24 ft. roadway, 18 ft. surface, Limestone Co., to E. L. Batson, Birmingham, $157,056; 3 48 mi. road from Calhoun Co. line to Heflin, 22 ft. roadway, 14 ft. surface, Cleburne Co., to Stanley & Singer Constr Co., Lafayette, $25,507. Noted July 27.

Louisiana—State Hy. Dept., Redmond Bldg., Baton Rouge, gravel surfacing 17.08 mi. Sects. A and B, Hammond-Baton Rouge Highway, Federal Aid Project 79, to R. A. Laustalot, Hammond, $138,227. Noted July 13.

Louisiana—State Hy. Dept., Redmond Bldg., Baton Rouge, hardsurfacing 6.83 mi. road from Raceland-Houma Highway to Beatiesville, also gravel surfacing 3.3 mi. east bank highway, 5.36 mi. west bank highway and 5.7 mi. Vacherie Highway, 17,360 cu.yd. washed gravel, to H. M. Weber, Thibodaux, $30,000 and $29,970 respectively; gravel surfacing 4.98 mi. Project 354, Opelousas-Maarksville Highway, Sect. B, 8.88 mi. Opelousas-Lafayette Highway, Sect. A, St. Landry Parish, incl. 8,940 cu.yd. washed gravel and 17,363 cu.yd. sand clay gravel, to Pickett & Hollier, Opelousas, $81,394.

La., Hammond—Paving 18,000 sq.yd. various streets, Kentucky rock asphalt on 5 in. concrete, to S. A. Gano, Maison Blanche Bldg., New Orleans, $63,823.

Ohio—Dept. Highways and Pub. Wks. awarded contracts grading, bridging and paving roads in following counties:

Allen Co., Sect. "Elida" Lima-Delphos Rd., 0.494 mi., rein.-con., to F. A. Frobase & Co., 628 West North St., Lima, $15,131.

Allen Co., Sect. "F" Lima-Delphos Rd., 4.178 mi., bituminous macadam tar, N. B. Putnam, Van Wert, $89,574.

Fulton Co., Sects., "C" and "Wauseon" Wauseon-Napoleon Rd., 0.998 mi., rein.-con., LaBoiteaux & Hayes, Toledo, $28,903.

Fulton Co., Sect. "L-1" Archbold-Fayette Rd., 1.018 mi., asphalt macadam tar, LaBoiteaux & Hayes, Toledo, $18,036.

Harrison Co., Sects. "1-2" and "K," Bridgeport-Cadiz Rd., 5.165 mi., bituminous macadam asphalt, Curry & Hayes, Eaton $153,804.

Jefferson Co., Sect. "A" Mingo-Smithfield Rd., 3.714 mi., bituminous macadam tar, H. F. Dougherty, Steubenville, $100,344.

Jefferson Co., Sect., "New Alexandria" Mingo-Smithfield Rd., 0.227 mi., tar macadam, H. F. Dougherty, Steubenville, $7,698.

Morgan Co., Sect., "C" McConnelsville-Zanesville Rd., 2.1 mi., bituminous macadam asphalt, Wilson Contg. Co., Newark, $56,233.

Muskingum Co., Sect., "F-2" Zanesville-New Lexington Rd., 1.648 mi. brick, Adams Bros. Constr. Co., Zanesville, $82,426.

Putnam Co., Sect "N" Lima-Ottawa Rd., 2.718 mi., Kentucky rock asphalt, Acton Bros., Vaughnsville, $59,969.

Seneca Co., Sect. "Attica" Columbus-Sandusky Rd., 0.35 mi., brick, R. M. Myers, Attica, $29,349.

Shelby Co., Sect. "Anna" Sidney-Wapakoneta Rd., 0.516 mi., rein.-con., J. Franz, Sidney, $17,312.

Shelby Co., Sect. "Botkins" Sidney-Wapakoneta Rd., 0.507 mi., rein.-con., Roth & Schafer, Botkins, $13,974.

Tuscarawas Co., Sect. "P-2" Newcomerstown-Urichsville Rd., 1.338 mi., monolithic brick, W. M. Brode Co., Newcomerstown, $53,483. Noted Aug. 10.

O., Akron—Summit Co., grading and paving to A. F. Wible, 859 Chalker St., 6,918 ft. Cuyahoga Falls-Hudson Rd. 34-B, 16 ft., 15,000 cu.yd. earth excav. $0.48, 12,300 sq.yd. 3 in. bituminous macadam top $0.93, 12,300 sq.yd. 7 in. waterbound macadam foundation course $1, total $32,885, engrs. est. $34,350; to Fairlawn Heights Co., 41 East Mill St., 5 mi. streets in Fairlawn Heights, 16 ft., 1,650 lin.ft. stone curb $1.25, 10,416 cu.yd. earth excav. $0.60, 110 cu.yd. rock excav. $3.50, 35,511 sq.yd. 6 and 3 in. bituminous macadam $2.20, engrs. est. $108 550; to T. E. McShaffrey Constr. Co., 171 South Forge St., 8,834 ft. Brittain-Massillon Rd. 49 D, 17 ft. 4 in., 17,700 lin.ft. 8 x 8 in. concrete curb $0.20, 15,500 cu.yd. earth excav. $0.60, 15,725 sq.yd. 6 in. concrete base $1.45, 15,725 sq.yd. 2 in. bituminous concrete $1.45, total $59,728, engrs. est. $63,770, also 3.046 mi. Krumroy Myersville Rd. 130, Sects. A and B, 16 ft., 24,500 cu.yd. earth excav. $0.55, 26,300 sq.yd. 1½ in. bituminous concrete $1.25, 26,300 sq.yd. 7 in. waterbound macadam foundation course $1.10, total $77,643, engrs. est. $77,900. Noted July 27.

O., Akron—M. P. Tucker, dir. Pub. Serv., grading and paving, etc., 3,900 ft. Dayton St., to S. F. Baker, R. D. 24, South Akron, $16,043, engrs. est. $17,364; 3,043 ft. Orlando Ave., 24 ft. pavement, 5 ft. walks, to T. E. McShaffrey Constr. Co., 171 South Forge St., $48,650, engrs. est. $48,640; 5,255 ft. Roslyn Ave., 24 ft. and 1,000 ft. Carroll St., 26 ft., to Columbus Asphalt Paving Co., Buckeye Bldg., $85,910, engrs. est. $82,583 and $16,144, engrs. est. $16,428 respectively; 11,300 ft. Peckham, Orrin, Bye, Stadelman, Crestview and Greenwood Sts., 5 ft. walks, to M. Kalain, 573 Wilson St., $45,474, engrs. est. $44,099; 1,275 ft. Commins St., 24 ft., to McAlonan Bros., 506 Woodland Ave., $16,178, engrs. est. $17,275. Noted July 20.

O., Centerburg—Grading, curbing and paving 9,500 sq.yd. Preston, Church, Landrum and Valley Sts., brick, to H. Strodbeck, Ashland, $37,500. Noted July 20.

O., Cleveland—Cuyahoga Co. paving Bassett Rd., to Baldwin Bros., 4500 Euclid Ave., $41,251; Bean Rd. 2, to Freshwater Constr. Co., Natl. Bldg., $52,171. Noted July 20.

O., Cleveland—Paving East 107th St., to Bentley Bros., 1836 Euclid Ave., $13,322; East 113th St., to Garland Bros., Pavers Exch., Society for Savings Bldg., $12,191. Noted July 27.

O., East Cleveland (Cleveland P. O.)—Paving 2 streets, brick, to Gould & Maybach, 823 East 140th St., Cleveland, $20,629; 2 streets, asphaltic concrete, to Rieley Bros., The Arcade, Cleveland, $16,939; 1 street, concrete, to D. Minenella, 2244 Murray Hill Rd., Cleveland, $3,275.

O., Euclid—Paving Seabrook, Parkview, Glenside, Eastbrook, Wondergrove, Westbrook, Gilchrist and Lakemont Sts., 19,750 sq.yd. asphalt, 161,600 sq.yd concrete base, 11,360 lin.ft. stone curbing, to River Constr. Co., Schofield Bldg., Cleveland, $80,388. Noted July 27.

O., Fredericktown—Grading and paving 1,100 sq.yd. Mansfield Ave., Main and Railroad Sts., brick, to H. Strodbeck, Ashland, $46,000. Noted July 20.

O., Shaker Heights (Cleveland P. O.)—Paving East 156th and East 157th Sts., asphalt, to Cleveland Trinidad Paving Co., The Arcade, Cleveland, $41,092.

Ind., Indianapolis—Marion Co., paving 16,200 ft. Claypool Rd., 16 ft., 28,782 sq.yd concrete on concrete, to C. O'Hair, 901 North East St., $75,550. Engrs. est. $125,000. Noted Aug. 19.

Michigan—State Hy. Dept., Lansing, grading and surfacing 2.064 mi. Assessment Dist. Rd. 235, Saginaw Co., to J. W. Ederer & Co., Saginaw, $33,215.

Michigan—State Hy. Dept., Lansing, grading and surfacing 2.767 mi. State Trunk Line Rd. 59-1, Sect. B, Macomb Co., to Meredith & McVaugh, 220 Horton Ave., Detroit, incl. 9,660 cu.yd. excav. $0.50, 44.9 cu.yd. 1:2:4 and 27.3 cu.yd. 1:2½:5 concrete $12, 29,220 sq.yd. rein.-con. pavement $1.40, total $47,381 plus cement $25,168.

Michigan—State Hy. Dept., Lansing, grading and surfacing 204 mi State Trunk Line Rd. 50-2, Oakland Co., to Meredith & McVaugh, 220 Horton Ave., Detroit, incl. 107.6 sta. grading, 21,525 sq.yd. rein.-con., $32,978, plus cement $18,646.

Wis., Fond du Lac—Paving 12th, Howard, Oak, South, Grant, Merrill and Rose Sts., 20-25 ft., asphaltic concrete, concrete curb and gutter, to J. Rasmussen & Sons, 7th St., Oshkosh, $85,393. Engrs. est. $80,000.

Ia., Merrill—For 24,000 sq.yd. bitulithic rein.-con. pavement and 2,400 lin.ft. 10-18 in. vitr. clay sewers, to M. L. Flinn Paving Co., Grain Exch. Bldg., Sioux City, $74,800. Noted July 27.

Ia., Waukon—Asphaultic concrete paving 40,350 sq.yd. various streets. incl. 28,350 lin.ft. concrete curb, to T. Carey & Sons, East 6th and Market Sts., Des Moines, $2.41 per sq.yd. for paving, $0.88 per lin.ft. for curb, total 134,098. Noted July 20.

Minn., Faribault—Rice Co., Job 2109. State Rd. 16, 44,791 cu.yd., gravel surfacing, 58,080 lin.ft. surfacing and compacting, to J. A. Dunkel, Webster City, Ia., $11,000. Noted June 22.

Minn., Madelia—Paving about 27,000 sq.yd. rein.-con. pavement, concrete curb, storm water inlets, etc., to Johnson, Drake & Piper, Inc., 809 1st Natl.-Soo Line Bldg., Minneapolis, $88,000.

Minn., St. Paul—Paving 2 mi. Hudson Rd. from Point Douglas Rd. to east city limits, gravel concrete, to Thornton Bros. Co., 304 Central Bank Bldg., $77,445. Noted Aug. 3.

Minn., Winona—Bd. of Park Comrs., 8,533 sq.yd. vitr. brick block paving, 7,365 lin.ft. 6 in. concrete curb, to Schruth & Welsh, 704 1st Natl.—Soo Line Bldg., Minneapolis, $1.99 per sq.yd. Noted July 20.

Kan., Larned—Pawnee Co. grading, bridging and sand clay surfacing 10,283 mi. Santa Fe Trail, Sects. A, B and C, Federal Aid Project 123, Sects. A and B will be done by County forces, c/o V. Stuart, $28,954 and $17,332 respectively; Sect. C, to Missouri Valley Bridge & Iron Co., 1006 Schweiter Bldg., Wichita, $7,741.

Kan., Nickerson—Paving 17 blocks, brick, to J. H. Shears & Sons, Hutchinson, $85,360.

Missouri—State Hy. Dept. at div. office Bloomfield, 4.946 mi. road from Cairo to Poplar Bluff, 24 ft., Federal Aid Project 178 A, Stoddard Co., to Allhands & Davis, Joplin, $35,350. Noted Aug. 3.

Streets and Roads (Continued)

Missouri—State Hy. Dept at div. office Canton, 7.9356 mi. road from Canton northward and southward, 24 ft., Federal Aid Project 39, Lewis Co., to Gaines Bros., Fairland, Okla., $79,856. Engrs. est. $83,466; 8.3712 mi. road from Canton southward and westward, 2 ft., Federal Aid Project 38, Lewis Co., to O. J. Hanick, 4066 Lindell St., St. Louis, $85,625. Noted Aug. 3 and June 1.

Missouri—State Hy. Dept. at div. office Fayette, 4.811 mi. road from Fayette to Missouri River, 24 ft., State Aid Project 20.93, Howard Co., to Kirby & Raines, Fayette, $26,488. Noted Aug. 3.

Missouri—State Hy. Dept. at div. office Liberty, 13.07 mi. road from Liberty to Excelsior Springs, 24 ft., Federal Aid Project 25, Clay Co., 13,000 cu.yd. excav., surfacing with 2 in. asphaltic concrete on 8 in. sledged stone, 18 ft. wide, to Unit Constr. Co., Title Guaranty Bldg., St. Louis, $284,159. Engrs. est. $400,215. Noted Aug. 3.

Missouri—State Hy. Dept. at div. office New London, 3.8 mi. road from New London eastward and westward, 24 ft., State Aid Project 20.168, Ralls Co., to O. J. Hanick, 4066 Lindell St., St. Louis, $21,513. Noted Aug. 3.

Missouri—State Hy. Dept. at div. office Pineville, 4.973 mi. road from Pineville northward and southward, 24 ft., State Aid Project 20.178, McDonald Co., to J. P. Wolfenbarger, Neosho, $26,036. Noted Aug. 3.

N. D., Fargo—W. R. Tucker, aud. Cass Co., grading 18 mi. Federal Aid Project 144, east and west through Casselton, grading to W. H. Noel, Jamestown, $27,374, culverts, etc. to J. A. Jardine, Fargo, $5,976. Noted July 20.

Tex., Clarksville—Red River Co., grading and gravel surfacing 5.39 mi. State Highway 35, 16 ft., to J. McCarthy, Marshall, $6,550 (work only, not incl. materials). County to furnish 8,325 cu.yd. gravel, $21,062. Engrs. est. $30,373. Noted July 6.

Tex., Karnes City—Karnes Co., surfacing with 1 in. bituminous topping of cold Uvalde rock asphalt 14.54 mi. State Highway 9, through Kenedy Rd. Dist. 4, 16 ft., to R. W. Coglazier, 910 Austin St., San Antonio, $88,109, engrs. est. $96,920 incl. 10% for engineering and contingencies; 14.54 mi. State Highway 9 through Rd. Dist. 4, to Wear & Thomas, Rogers, $191,141, engrs. est. $210,255 incl. 10% for engineering and contingencies. Noted July 27.

Tex., Pecos—Reeves Co. grading, surfacing, etc. 11.32 mi. State Highway 27, incl. 15,935 cu.yd. borrow, 512 cu.yd. concrete, 19,277 lb. reinforcing, 18,942 cu.yd. gravel and 3,573 cu.yd. caliche surfacing, to Lee-Moor Contg. Co., Two Republics Bldg., El Paso, $41,289. Engrs. est. $45,418 incl. 10% for engineering and contingencies.

Tex., Tyler—Smith Co. grading, surfacing, etc. 14.73 mi. Highway 37, Federal Aid Project 284, 16 ft., to Smith Co., care of W. R. Castle, chn. Smith Co. Highway Comn., Tyler, $229,094. Noted July 13.

Cal., Clovis—Grading, curbing, guttering and paving De Witt and Pollasky Aves., 4th, 5th and 10th Sts., to Clark & Henery Constr. Co., 38 South Sutter St., Stockton, $64,401. Noted Aug. 10.

Quebec—J. L. Perron, minister Dept. Rds., Quebec, paving St. Hyacinthe-Rougemont Highway, St. Damask Sect., and Notre Dame-St. Hyacinthe Sect., to T. E. Rousseau, 229 St. Joseph St., Quebec, $83,646 and $60,727 respectively; Chemin de Grange Cote, to H. L. St. George, 127 Stanley St., Montreal, $17,576; Grondines Valcartier Sect., to Laganiere & Houde, Quebec, $16,999; highway from Terrebonne to St. Therese and St. Michael Sect. to Terminals Constr. Co., Halifax, N. S., $29,290 and $17,766 respectively; also other contracts amounting to $48,700, to Terminals Constr. Co., Halifax, N. S.

Que., Montreal—Will pave Wellington St. from McGill St. to Tait Race Bridge, Verdun, incl. 9,374 ft. asphalt, 65 ft., by day labor. $278,500.

Ontario — Provincial Highway Dept., Parliament Bldgs., Toronto, 2 mi. concrete highway, from Talbotville southerly, Southwold Twp., to Lumsden Eng. & Transport Co., 6 Adelaide St. E., $65,000.

Ont., Chatham—Concrete pavements on Lorne Ave and St. George St., to Weston Constr. Co., Chatham, William and Water Sts., to G. Conibear, 81 Delaware Ave. Engrs. est. $34,000. Noted Aug. 10.

Ont., Merriton—Paving 4,000 lin.ft. Main St., 12,000 sq.yd. concrete, to Reid & Somers Ltd., 40 Adelaide St. E. $32,000.

Ont., St. Catharines—Dept. Provincial Highways, Parliament Bldg., Toronto, 1½ mi. concrete road from here to Homer, 30 ft., to Frid Constr. Co. Ltd., Clyde Bldg., Hamilton. Engrs. est. $75,000.

Ont., Toronto—York Twp., concrete sidewalks on Dentonia Park Ave., to A. Johnson, 35 Burgess Ave., $1,400; Keene St. to D. Mackay & Co., 289 Ashdale Ave. $1,200; Mould Ave., to S. Simpson, care of F. Barber, engr., 40 Jarvis St., $1,900; Runnymede Rd., to Natl. Contg. Co., 9 Garnock Ave., $4,500; Eastdale, Lumsden, Pritchard and Walnut Aves., to Grant Contg. Co., 50 Front St. E., $3,900; Brunswick Ave. and Humewood Dr., to Canadian Constr. Co., Excelsior Life Bldg., $7,000; Avon and Orla Aves., to P. Licastro, 1,423 Dufferin St., $2,000; Strathearn Blvd., Almeada, Gordon and Kendal Aves., to Britnell Contg. Co., Baxter St., $9,500; Meagher Ave. to H. S. Walton, 60 Gamble Ave., $9,000.

Ont., Windsor—Paving 1½ mi. Tecumseh Rd., concrete, to Merlo, Merlo & Ray, Sandwich St., $120,000.

Industrial Works

PROPOSED WORK

N. H., Manchester—F. P. Carpenter, Mechanic St., had plans prepared by H. W. Rhodes, archt., 574 Congress St., Portland, Me., 1 story, brick and steel garage, service and repair shop, Mechanic St. $50,000.

N. Y., Rochester—Rochester Composite Brick Co., East Ave., plans to rebuild portion of plant destroyed by fire. $80,000. Architect not announced.

N. Y., Rochester—Rochester Telephone Corp., 59 Stone St., having plans prepared by J. F. Warner, archt., c/o owner, 2 story, 145x200 ft., brick and steel building, will be used for service and repair departments, garage, stockrooms and cabinet shop. $130,000.

N. J., Trenton—Panelyte Board Co., 119 North Montgomery St., plans factory on Whitehead Rd. $150,000.

Pa., Carbondale—S. D. Chandler, 82 Main St., plans to rebuild 3 story garage and salesroom, South Main St., recently destroyed by fire. $40,000. Architect not announced.

Pa., Erie—Erie Co. Milk Assn., Erie, plans 3 story, rein.-con., brick and steel warehouse, French St. $66,000. Architect not announced.

Pa., Phila.—City soon takes bids reduction plant. $500,000. Private plans. F. A. Dunlap, city engr.

Pa., Pittsburgh—Donaldson Transfer & Storage Co., 839 West North Ave., having plans prepared by Hunting-Davis Co., archts., Century Bldg., 6 story, 120 x 120 ft. warehouse, Ridge Ave. near Merchant Ave. $150,000.

Pa., Pittsburgh—U. S. Drug & Chemical Co., Pittsburgh, having plans prepared by P. R. Rossello, archt., 406 Congress Bldg., Detroit, 3 story, 100 x 140 ft. rein.-con., brick and steel factory. $200,000.

Tenn., Erwin—B. S. Abernethy, Lincolnton, N. C., and W. C. Heath, Charlotte, N. C., making plans textile plant, capacity 15,000 spindles. Architect not announced.

Tenn., Nashville—M. McKissack, archt., 331½ Cedar St., soon takes bids 4 story, publishing plant and office building, 4th and Cedar Sts., for Natl. Baptist Sunday School Bd. (Negro), Nashville, $250,000.

O., Cleveland—L. Bondy Harness Co., c/o C. Bondy, 730 Bway., having plans prepared by H. Nan, archt., c/o owner, 2 story, 46x110 ft., brick and steel factory and commercial building, 3333 Superior Ave. $40,000.

O., Cleveland—M. Marmorstein, Ulmer Bldg., had plans prepared by W. S. Ferguson Co., archts., 1900 Euclid Ave., 1 story, 40x94 ft., brick and steel garage, plain foundation, East 69th St. and Euclid Ave. $40,000.

O., Cleveland—Wolfe Envelope Co., 1749 East 22nd St., having plans prepared by Christian, Schwarzenberg & Gaede, archts., 1900 Euclid Ave., 1 story, about 84x130 ft., brick, steel and concrete factory addition. $50,000. N. J. Dryfoos, pres.

O., Columbus—Lawwell-McLeish Co., 97 North 4th St., having plans prepared 2 story, 32x187 ft., brick and concrete garage and service station, North 4th St. $40,000. Private plans.

O., East Cleveland—Windemere Transfer & Moving Co., 14136 Euclid Ave., plans 3 or 6 story, 65 x 145 ft., storage building, brick, steel and concrete, Euclid and Doan Aves. $150,000. Architect not selected.

O., Warren—General Fire Extinguisher Co., had plans prepared by G. S. Rider & Co., archts., Century Bldg., Cleveland, 4 story, 80x200 ft., brick and rein.-con. factory. $300,000.

O., Williamsburg—Williamsburg Furniture Co. having plans prepared 2 story factory, to replace one recently destroyed by fire. $40,000. J. F. Knight, pres.

O., Youngstown—Vahey Oil Co., 1028 West Rayen St., plans 2 story, 75 x 162 ft., rein.-con. and brick, garage and service station, Phelps and Front Sts. $65,000. Architect not announced.

Mich., Kalamazoo—City having preliminary surveys made gas plant incl. 6 rein.-con. buildings. $2,000,000 bonds will be voted on at September election. Burns & McDonnell, 400 Interstate Bldg., Kansas City, Mo., engrs.

Mich., Kalamazoo — Kalamazoo State Hospital, Oakland Dr., having plans prepared by L. W. Frye, archt., Ann Arbor, 2 story, 80 x 80 ft. rein.-con., brick and steel warehouse. $60,000.

Ill., Chicago—Ohrenstein & Hild, archts., 232 East Erie St., soon receive bids 1 story, 125 x 125 ft., rein.-con., brick and steel garage, 6747 Ridgeway Ave. $100,000. Owner's name withheld.

Wis., Chippewa Falls—F. A. Bigler, 14 East Central St., having plans prepared by [illegible] J. Hancock, archt., Laycock Bldg., Eau Claire, 2 story, 124x130 ft., brick and concrete garage, plain foundation, Grand Ave. $75,000.

Wis., Milwaukee—S. E. Tate Printing Co., 133 2nd St., having preliminary plans prepared by M. Tullgren & Sons, archts., 425 East Water St., 6 story, 60x120 ft., printing plant and office building, rein.-con. and brick, plain foundation., Bway.

Okla., Sand Springs—Tulsa Stove & Fdry. Co. plans 1 story addition to factory. $50,000. Architect not announced.

Ariz., Superior—Magma Copper Co. plans smelting plant. $500,000. Architect not announced.

Que., Asbestos—Johns Manville Co., Ltd., 450 St. James St., Montreal, plans plant here. $1,000,000.

Ont., Collingwood—J. H. Yates plans concrete and brick tannery. $100,000. Private plans.

Ont., Niagara Falls—Dominion Insulator Co. plans 80 x 350 ft. factory, Portage Rd. $150,000. Architect not announced.

Ont., Saulte Ste. Marie—Algoma Steel Corp., 503 Queen St. E., plans 1 story, brick and steel, heat treatment building. $50,000. Private plans.

Ont., Stratford—Dufton Woolen Mills Co. plans to rebuild plant partially destroyed by fire. Loss $80,000. Prices wanted on all materials.

Ont., Thamesville — D. E. Wallace, Thamesville, plans to rebuild mills recently destroyed by fire.

BIDS DESIRED

N. Y., Cohoes—Sept. 6, by C. L. Cadle, supt. Pub. Wks., Albany, power house at Crescent Dam, here; adv. this issue.

N. Y., Long Island City—Sept. 1, by James Butler, Inc., 390 Washington St., New York, rein.-con. and steel warehouse, concrete pile foundation, Mount St. and Anable Ave., here. $1,750,000. W. Higginson, 21 Park Row, New York, archt. and engr. Noted June 8.

Pa., Phila.—J. J. Carroll, archt., Middle City Bank Bldg., taking bids 2 story, 140 x 215 ft. rein.-con., brick and steel garage, plain foundation, 1745-1751 North Broad St., for L. J. Faulkner, 14 North Paxton St. $100,000.

Pa., Phila.—Hulbert & Sax, engrs., Penfield Bldg., taking bids 4 story, 100 x 143 ft. rein.-con. and brick factory, plain foundation, Eyre and Memphis Sts., for A. J. Reach & Co., Tupil and Palmer Sts. $150,000.

O., Cleveland—Poe Eng. Co., archts., Peoples Bank Bldg., taking bids 1 story, 50 x 125 ft., factory and warehouse, brick and steel, 1450 Hamilton Ave. for Ingraham Waste and Supply Co., 1539 Columbus Rd. $50,000. Noted July 27.

O., Cleveland—G. S. Rider & Co., archts., Century Bldg., taking bids 1 story, 100 x 240 ft., brick and steel foundry, Almira Ave. and East 82nd St., for Crucible Steel Castings Co., Canal Rd. $100,000. W. H. Shepard, pres. Noted June 29.

Ill., Chicago — P. Gerhardt, archt., 64 West Randolph St., receiving bids 3 story, 120 x 240 ft. printing plant, La Salle St. near 26th St., for Illinois Publishing and Printing Co., Hearst Bldg., $500,000.

Wis., Appleton—G. R. & S. Motor Co., 738 Washington Ave., and E. A. Wettengel, archt., 578 Pierce Ave., taking bids 1 story, 32 x 100 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation, Washington Ave. $40,000. Noted July 20.

Tex., San Antonio—Aug. 26, by State Bd. Control, Austin, power house and concrete oil storage tank at Southwest Insane Asylum, here. $110,000.

Cal., Santa Clara—Wolfe & Higgins, archts., Auzerais Bldg., San Jose, receiving bids 1 story newspaper plant, brick, for Santa Clara News.

Industrial Works (Continued)

Ont., Toronto—James, Proctor & Redfern, engrs., 36 Toronto St., taking bids 2 story, rein.-con., brick and steel garage and auto parking station, Court St., for Court St. Auto Parking Service Co. Ltd., 14 Court St. $100,000.

BIDS RECEIVED

Cal., Pittsburg—Pioneer Rubber Co., 68 Sacramento St., San Francisco, 3 rein.-con. factory buildings, here, from Cahill Bros., 110 Sutter St., San Francisco, $150,000.

California—See "Dams."

CONTRACTS AWARDED

Mass., Nantasket—Damon Jr., Hull, 1 story, 100 x 110 ft. garage and repair shop, brick and steel, plain foundation, Atlantic Ave., to B. Weston, Allerton (Hull P. O.) Archts. est. $40,000.

Conn., Manchester—Orford Soap Co., Hillard St., 2 and 3 story, 73 x 150 ft. brick and concrete addition to plant, to H. P. Cummings Constr. Co., Ware, Mass. Noted June 29.

R. I., Greenville—Namquit Worsted Co., Bristol, 1 story, 55 x 170 ft. brick and steel weave shed, to Bowerman Bros., 230 Industrial Trust Bldg Providence. Archts. est. $40,000.

N. Y., Brooklyn—L. Meyer, 374 Flushing Ave., brick, steel and concrete provision plant, Wykoff Ave., to W. Kennedy Constr. Co., 215 Montague St., $100,000.

N. Y., Brooklyn— Towns & James, 219 Duffield St., rein.-con., brick and steel warehouse, 217 Duffield St., to Turner Constr. Co., 244 Madison Ave., New York. Archts. est. $100,000.

N. Y., Jamestown—Jamestown Worsted Mills, 335 Harrison St., 4 story, 70x175 ft. addition to combing and dyeing department, 122x180 ft. dye house and filter house, foundations to Raymond Concrete Pile Co., 140 Cedar St., New York; 200 ft. brick chimney to Alphons Custodis Chimney Constr. Co., 95 Nassau St., New York; general construction to Parklap, Inc., 84 Pine St., New York. Total cost, about $100,000. Work will be done under direct supervision Lockwood, Green & Co., engrs., 24 Federal St., Boston, Mass.

N. Y., Morris Park (Jamaica P. O.)—Long Island R. R., Pennsylvania Sta., New York, 3 story, 40x100 ft. warehouse, and 3 story, 40x80 ft. factory, both rein.-con., to Turner Constr. Co., 244 Madison Ave. New York, under supervision of L. V. Morris, ch. engr.

N. Y., Newburgh—W. R. Crabtree, yarn mill, brick and concrete, plain foundation, to Casper-Ranger Co., Holyoke, Mass. Archts. est. $150,000.

N. Y., New York—Schock Estate, 8 story, 75x100 ft., garage and service station, 503 West 56th St., to Turner Constr. Co., 244 Madison Ave.

N. J., Perth Amboy—Standard Underground Cable Co., 50 Church St., New York, 3 story, 50x150 ft., brick and steel factory, here, to Turner Constr. Co., 244 Madison Ave., New York City. Noted June 8.

Pa., Bridgeport—J. Lees & Sons, Bridgeport, 5 story, 103 x 132 ft. factory, to J. S. Rogers & Co., Drexel Bldg. Phila.

Pa., Phila.—Bayuk Bros., 3rd and Spruce Sts., 4 story, 84 x 109 ft. cigar factory, rein.-con. and brick, plain foundation, to J. S. Rogers, Drexel Bldg., $90,00. Noted June 15.

Pa., Phila.—Congress Cigar Co., 3rd and Spruce Sts., 8 story, 70 x 140 ft. rein.-con. and brick factory, 300-304 South 3rd St., to J. N. Gill Co., Otis Bldg. Archts. est. $150,000.

Pa., Phila.—Hurley Motor Co., 219 North Broad St., 2 story, 110 x 204 ft. service building, 31st and Thompson Sts., to Cramp & Co., Denckla Bldg., $200,000.

Pa., Pittsburgh — Hunting-Davis Co., archts., Century Bldg., 1 story, 41 x 108 ft. brick and tile garage, Western Ave., to Rose & Fisher, Penna Ave., for T. Donaldson, 1100 Western Ave. Noted Aug. 3.

Pa., Scranton—See "Streets and Roads."

Fla., Tampa—White Star Laundry, Inc., 204 Cass St., general contract 2 story, 105 x 172 ft. steam laundry, 1st floor rein.-con., 2nd floor brick and timber, to Logan Bros., 305 Dawson-Thornton Bldg., $69,800.

O., Cleveland—Cleveland Folding Machine Co., 5200 Euclid Ave., 2 story, 96 x 180 ft., brick, steel and rein.-con. factory, East 61st St. near Euclid Ave., to A. A. Lane Constr. Co., 1869 East 55th St. Engrs. est. $75,000.

O., Cleveland—D. Round & Sons, Shop 3, A. B. C. line, 2 story, 52 x 275 ft., brick and steel foundry and shop, to E. R. Russell, 1416 St. Clair Ave. Engrs. est. $60,000. Noted Aug. 10.

O., Cleveland—A. W. Henn and J. L. Free, 1004 Prospect Ave., 1 story, 100x200 ft., brick and steel garage and commercial building, 3746 Prospect Ave., to Austin Co., 16112 Euclid Ave. Archts. est. $75,000.

O., Cleveland—Standard Envelope Co., 1011 Oregon Ave., 1 story, 155x200 ft., brick, steel and concrete factory, East 30th St. and Chester Ave., to Bolton-Pratt Constr. Co., Columbia Bldg. Archts. est. $100,000. Noted July 6.

O., Cleveland—See "Buildings".

O., Portsmouth—Portsmouth Stove & Range Co., Gallia and Campbell Sts., 5 story factory addition, to Ferro Concrete Constr. Co., c/o owner, Archts. est. $75,000.

O., Portsmouth—Universal Motor Co., 9th and Chillicothe Sts., 2 story, 130x296 ft. garage, to F. Carson, Portsmouth, $80,000.

Ind., Indianapolis—see "Sewers".

Ill., Chicago—B. H. Gwathmey, 1508 East 66th Pl., 1 story, 91x127 ft., rein.-con., brick and steel garage, 1947-53 East 57th St., to Berquist Bros., 7467 Exchange Ave. Archts. est. $40,000.

Wis., Milwaukee—S. S. Cyril & Methody Congregation, 1110 Windlake Ave., 1 story, 46 x 50 ft., central heating plant, brick and concrete, plain foundation, Hayes Ave., to Milwaukee General Constr. Co., 427 Mitchell St.; boilers to Downey Heating & Supply Co., 613 Clybourn St. Engrs. est. $40,000.

Wis., Phillips—Kneeland-McClung Co., 1 story, 60 x 210 ft. saw mill, brick, rein.-con. and steel, plain foundation, to W. A. Graham, Phillips. Engrs. est. $75,000. Noted July 13.

Wis., Racine—Belle City Malleable Iron Co., Kewaunee St., 1 and 2 story, 80x100 ft., brick and timber factory and office, plain foundation, to Nelson & Co. Janes Bldg. Engrs. est. $65,000.

Wis., Union Grove—State Bd. Control, Capitol Bldg., Madison, 1 story, 50 x 95 ft., brick, rein.-con. and steel power house, plain foundation, at State Home for Feeble Minded, here, to Immel Constr. Co., 200 North Main St., Fond du Lac, $38,843. Engrs. est. $55,000.

Ia., Burlington—Chicago, Burlington & Quincy R.R., 547 West Jackson Blvd., 2 story, brick addition to freight house, here, to T. S. Leake Constr. Co., 608 South Dearborn St., Chicago.

Minn., Duluth—M. O. Anderson, 1930 East 4th St., will build 1 story, 100 x 140 ft. rein.-con. and brick garage, Superior St. and 14th Ave. E., by day labor. $75,000.

Minn., Minneapolis—Dayton Co., 7th St. and Nicollet Ave., 2 story, 100 x 143 ft. rein.-con., brick and tile garage, 11th St. and 1st Ave. N., general contract to Splady & Haagenson, 1023 Plymouth Bldg. $61,000.

Minn., Minneapolis—Payne Motor Co., 1301 Hennepin Ave., 3 story, 100 x 150 ft. garage and sales building, concrete and brick, 14th St. and Harmon Pl., general contract to H. N. Leighton Co., 127 South 10th St., $117,098.

In July

We published 271 tips on industrial expansion as follows:

Proposed work........ 133
Bids desired........ 37
Bids received........ 5
Contracts awarded........ 96

More than 30 new big projects coming up every week.

Minn., St. Paul—Tilden Produce Co., 65 East 3rd St., 4 story, 50 x 145 ft. produce building, rein.-con., brick and tile, East 3rd St. between Cedar and Minnesota Sts., general contract to E. J. Dunnigan, 315 Guardian Life Bldg. Cost complete $150,000. Noted June 22.

Minn., Winona—Papin Pickling Co., 1 and 2 story, 74 x 141 ft. brick, concrete and tile addition to plant, general contract to Seidlitz & Warner, Winona. Cost complete, $50,000. Noted May 18.

Ont., Leaside—Durant Motor Co. of Canada, Royal Bank Bldg., Toronto, general contract for plant incl. 1 story, 40 x 100 ft., 3 story, 80 x 401 ft., 3 story, 100 x 401 ft., all foregoing rein.-con., 1 story 20 x 200 ft. steel skeleton and galvanized iron, and 1 story, 130 x 500 ft. metal lath, stucco and brick, to N. McLeod, Kent Bldg., Toronto. $750,000. Contractor taking bids on all sub trades. Noted July 27.

Ont., Toronto—Toronto Hydro Electric System, 226 Yonge St., general contract for 2 story, 47 x 64 ft. rein.-con., brick and steel substation, Eglington Ave., to Witchall & Son, 156 St. Helens Ave., $42,000.

B. C., New Westminster — New Westminster Paper Mills Ltd., mill on North Arm of Fraser River, on Indian Reserve, to Dominion Constr. Co., 509 Richards St., Vancouver. Engrs. est. $100,000. Noted July 6.

Buildings

PROPOSED WORK

N. H., Conway—High School—High School Comn., having plans prepared by C. R. Whitcher, archt., 814 Elm St., Manchester, 2 story, brick and steel. $150,000.

N. Y., Brooklyn—Exchange—New York Telephone Co., 15 Dey St., New York, soon lets contract 2 story, 100 x 100 ft., brick, steel and stone, Coney Island Ave. and Ave. B, here. $200,000. McKenzie, Voorhies & Gmelin, 342 Madison Ave., New York, archts. and engrs.

N. Y., Kings Park—Nurses Home—State Hospital Comn., Albany, soon receives bids for completion of 3 story, brick, concrete foundation, with 2 wings, 35 x 52 ft. and 35 x 100 ft., Kings Park State Hospital, here. $175,000. L. F. Pilcher, Capitol, Albany, state architect.

N. Y., New York — Office — Plumbers Trade Journal Publishing Co., 25 West 34th St., having preliminary sketches made by J. Schaeffler, archt. and engr., 11 East 56th St., 6 story, brick, steel and stone, plain foundation, on 37 x 100 ft. lot at 239 West 39th St. Noted Feb. 9.

N. Y., Rochester—Store—McCurdy Co., Inc., Main and Elm Sts., plans to alter present store, build 2 story top addition, and 6 story, brick and steel side addition. Cost to exceed $200,000. Architect not announced.

N. Y., Thiells—Home—New York State c/o L. F. Pilcher, state archt., Capitol, Albany, plans 40 x 150 ft. home and 40 x 247 ft. assembly hall with 57 x 60 ft. wing, all 1 story, stone and concrete, at Letchworth Village, here.' $210,000.

N. J., Wildwood—Hotel—W. Lipkin, Land Title Bldg., Phila., plans 6 story, 200 x 800 ft., 23rd St. and Boardwalk, here. $1,000,000. Architect not selected.

Pa., Carbondale—Store and Office—A. Jacobson, South Main St., plans 4 story (ultimately 8 story) rein.-con., brick and steel, Church St. $150,000 to $500,000. Architect not announced.

Pa., Corry—School—Bd. Educ. having plans prepared by W. G. Eckles, archt., New Castle, 2 story, junior high school. $150,000.

Pa., Pittsburgh—Apartment and Stores—R. G. K. Co., (real estate), 7321 Penn Ave., plans to alter and build addition, 4 story, 175 x 209 ft. rein.-con., brick and steel, Penn Ave. near Lexington Ave. $175,000. Private plans.

D. C., Wash.—Home and School—Dist. Comrs., Dist. Bldg., plan home and school for feeble minded. A. Harris, municipal archt. $250,000 appropriated.

D. C., Wash.—Office—J. W. Greene, 1416 K St., N. W., having plans prepared by G. N. Ray, archt., 1147 Connecticut Ave., N.W., brick and stone, 1400 K St., N.W. $150,000.

D. C., Wash.—School—Dist Comrs., 509 Dist. Bldg., plan to alter and build addition to Armstrong Manual Training School, P St. near 3rd St., N.W. Address Chief Clerk, c-o Eng. Dept., 427 Dist. Bldg., $500,000 appropriated.

W. Va., Bluefield—Hospital—St. Lukes Hospital, Bland St., having revised plans prepared by Mills & Millspaugh, archts., 67 East Long St., Columbus, O., 4 story, 100 x 150 ft., brick and stone. $150,000.

W. Va., Charleston—Store and Office—Kanawha Investment Co. having plans prepared by Mills, Millspaugh & Carmichael, archts., 67 East Long St., Columbus, O., 8 story, 200 x 200 ft., brick and stone. $450,000. Noted July 27.

N. C., Asheville—Station—Southern Ry., 1300 Pennsylvania Ave., Wash., D. C., plans passenger station, here. $1,000,000. J. A. Killian, Knoxville, Tenn., div. engr.

Fla., Orlando—Bank and Office—State Bank & Trust Co., having sketches made by W. L. Stoddart Co., archts., 9 East 40th St., New York City, 9 story.

Fla., Orlando—Office—J. F. Ange and A. Braxton, Sr., having plans prepared by

Buildings (Continued)

M. S. King, archt., Orlando, 10 story, brick and steel, North Orange and Washington Sts. $260,000.

La., Shreveport—Courthouse, Jail, etc.—City authorized bond issue of $4,000,000 for new courthouse, jail, storm sewers, pavements, and fire alarm system.

La., Shreveport—Schools—Voted $1,000,000 bonds for new high school and 7 grammar schools. Architect not selected.

O., Canton—Hospital—Comrs. Stark Co. having revised plans prepared by R. M. Johnson, archt., c?o County Comn., for hospital, (capacity 55 beds), 3rd St., N.E. $160,000.

O., Cleveland—Store—Halle Bros. Dept. Store, c/o S. P. Halle, pres., Huron Rd. and Euclid Ave., plans brick, steel and concrete addition, Huron Rd. $400,000. Walker & Weeks, 1900 Euclid Ave., archts. Noted Dec. 1.

O., Maple Heights (Bedford P. O.)—School—St. Wenceslas Catholic Church, 2666 East 35th St., Cleveland, having plans prepared by W. C. Jansen, archt., Electric Bldg., Cleveland, 3 story, 103 x 150 ft., brick, steel, concrete and stone, Libby Rd., here. $150,000. J. Kondelka, pastor.

O., Oxford—Library—Bd. Trustees Miami University having plans prepared by F. L. Packard, archt., New Hayden Bldg., Columbus, 2 story, brick addition to library on campus. $150,000.

O., Shaker Heights (Cleveland P. O.)—High school—Bd. Educ. had plans prepared by C. W. Bates, archt., 77 12th St., Wheeling, W. Va., 3 story, brick, steel and concrete, Onaway Rd. $600,000.

Ind., Bloomington—Lodge—Lodge 22, F. & A. M., having plans prepared by Rubush & Hunter, archts., 430 Amer. Central Life Bldg., Indianapolis, 3 story, 78 x 112 ft. brick, stone trim. $150,000.

Ind., Evansville—High School—Bd. Educ. having revised plans prepared by J. C. Llewellyn, archt., 38 South Dearborn St., Chicago, 2 story, 250 x 300 ft., brick. $400,000. Noted May 25.

Ind., Frankfort—Church—First Christian Church, Columbia and Walnut Sts., plans 2 story, brick. $150,000. Architect not selected.

Ind., Logansport — School — Bd. Educ. plans 2 story, brick and steel. $240,000. Allen & Gariott, Masonic Temple, archts.

Ind., Michigan City—Lodge—Masonic Temple Assn. having plans prepared by Nicol, Scholer & Hoffman, archts., Lafayette, 3 story, 82 x 82 ft. brick, terra cotta and steel, 6th St. $150,000.

Ind., Muncie—Gymnasium—Indiana State Normal School, Terre Haute, plans 2 story, brick and steel, here. $150,000. Kibele & Gerrard, Muncie, archts.

Mich., Coldwater — High School — Bd. Educ. having plans prepared by R. A. Leroy, archt., Pratt Bldg., Kalamazoo, 3 story, 90 x 120 ft. rein.-con. and brick. $150,000. G. Hadley, 160 North Hudson St., secy.

Mich., Coldwater—Hotel—E. Batterson, archt., Hanselman Bldg., Kalamazoo, preparing plans and takes bids about October, 4 story, 60 x 130 ft. brick and steel, plain foundation, for F. Eaton, c/o Grant Hotel. $250,000.

Mich., Detroit—Apartment—O. Kavieff, archt., 712 Empire Bldg., preparing plans 3 story, 98 x 140 ft. brick and steel, plain foundation, Blaine Ave. $230,000. Owner's name withheld.

Mich., Detroit—Lodge—Jubilee Temple, Odd Fellows Lodge, c/o P. Rossello, archt., 406 Congress Bldg., having plans prepared 3 story, 88 x 130 ft. rein.-con., brick and steel, plain foundation, Mack Ave. $225,000.

Mich., Grand Rapids — Hospital — Sligh Memorial Hospital, c/o Williamson, Crow & Proctor, archts., Gilbert Bldg., having preliminary plans prepared and takes bids early in 1923, 5 story, rein.-con. and brick, Knapp St. $350,000.

Mich., Kalamazoo—High School—R. A. Leroy, archt., Pratt Bldg., takes bids Sept. 15, 4 story, rein.-con., brick, steel and terra cotta, addition, plain foundation, for Bd. Educ. $430,000.

Mich., Lansing—Bank—City Natl. Bank, 101 North Washington St., having plans prepared by E. A. Bowd, archt., 127 West Allegan St., 3 story, brick and steel, South Grand Ave. $[illegible]50,000.

Mich., Lapeer—High School—Bd. Educ. having plans prepared by R. A. Leroy, archt., Pratt Bldg., Kalamazoo, 3 story, rein.-con. and brick. $200,000.

Mich., St. Johns—High School—R. A. Leroy, archt., Pratt Bldg., Kalamazoo, preparing plans and takes bids about Sept. 20, 2 story, 130 x 160 ft. rein.-con. and brick, for Bd. Educ. $175,000.

Ill., Chicago—Office—Graham, Anderson, Probst & White, archts., 80 East Jackson Blvd., preparing plans 19 story, Michigan Ave. near North Water St., for W. Wrigley, Jr., Wrigley Bldg. $5,000,000.

Ill., Chicago—School and Hall—A. Foster, archt., 56 East Randolph St., soon receives bids 3 story, 75 x 125 ft., rein.-con., brick and steel, 19th and Leavitt Sts., for St. Anns Catholic Congregation, c/o architect. $175,000.

Ill., Chicago—Store and Office—Levy & Klein, archts., 111 West Washington St., preparing plans 2 story, rein.-con., brick and steel, Rush and Oak Sts., $300,000. Owner's name withheld.

Ill., Evanston—College—W. S. Holmes, archt., Tussing Bldg., Lansing, Mich., preparing preliminary plans and receives bids next spring, 3 and 4 story, here, for Kindergarten College, c/o E. BaBker. $750,000.

Wis., Green Bay—Hospital—Deaconess Methodist Hospital, 742 South Webster St., having plans prepared by Oppenhamer & Obel, archts., Green Bay, 3 story, 64 x 147 ft., brick and steel addition, plain foundation. $150,000.

Wis., Milwaukee—Apartment—R. Razall, archt., 114 Grand Ave., making plans 3 story, (2 units, each 50 x 112 ft.) brick and concrete, plain foundation, on East Side. $225,000. Owners name withheld.

July Tips

We published a total of 2,172 items on all classes of construction, an average of 543 a week.

Proposed work	696
Bids desired	600
Bids received	173
Contracts awarded	703

Construction industry is not on strike; working hard. Keep your eye on August.

Wis., Milwaukee—Business—C. Niss & Sons, 697 3rd St., having preliminary plans prepared by Tullgren & Sons, archts., 425 East Water St., 3 story, 70 x 150 ft., brick and concrete addition, plain foundation, 3rd St.

Wis., Milwaukee—Club—Milwaukee Elks Lodge, 448 Jefferson St., had plans prepared by R. A. Messmer & Bros., archts., 221 Grand Ave., and soon takes bids 9 story, 110 x 145 ft., rein.-con. and brick, plain foundation, Mason and Marshall Sts. $1,200,000.

Wis., Milwaukee — High School — Our Lady of Mercy Academy, c/o W. Shemners, 378 Natl. Ave., plans 3 story, 106 x 150 ft., rein.-con. and brick, plain foundation, Mineral St. $250,000. Architect not selected.

Wis., Milwaukee — Hospital — Deaconess Hospital, 1815 Grand Ave., having preliminary plans prepared by Leiser & Holst, archts., 105 Wells St., 4 story, 44 x 110 ft., brick and concrete addition, plain foundation, Grand Ave. $150,000.

Wis., South Madison (Madison P. O.)—School—Bd. Educ. having plans prepared by F. L. Kronenberg, archt., Carroll Blk., Madison, 2 story, 60 x 180 ft., high and grade school, brick, rein.-con. and stone, plain foundation. $150,000.

Ia., Cedar Rapids—High School—Bd. Educ., c/o J. A. Motejl, secy., 705 1st Ave., soon receives bids 3 story, 160 x 200 ft., rein.-con., brick, tile, stone and terra cotta. $475,000. F. Tustison Co., 322 Auditorium Bldg., Minneapolis, Minn., engrs. B. Rugh, 811 Security Bldg., archt.

Ia., Cedar Rapids—High School—Bd. Educ., c/o J. A. Motejl, secy., 705 1st Ave., plans 3 story, rein.-con., brick, tile and stone. $350,000. F. Tustison Co., 332 Auditorium Bldg., Minneapolis, Minn., engrs. B. Rugh, 811 Security Bldg., archt.

Minn., St. Paul—Bank—Merchants Natl. Bank, 4th and Robert Sts., having plans prepared by A. Moorman & Co., archts., Chamber of Commerce Bldg., 3 story, 25 x 125 ft. rein.-con., brick and tile addition, 4th St. near Robert St. $150,000.

Minn., St. Paul—Apartment—P. Reilly, 633 Dayton Ave., having plans prepared by J. C. Niemeyer, archt., 641 Endicott Bldg., 3 story, brick and tile, Otis and Dayton Aves. $150,000.

Mo., Kansas City—Hotel—C. O. Jones, 308 Commerce Bldg., soon takes bids 11 story, 48 x 126 ft. brick, 911 Holmes St. $400,000. Brostrom & Drotts, 310 Reliance Bldg., archts.

Mo., Kansas City—Theatre—Washington Theatre Building Co. soon takes bids, brick and terra cotta, Poseo St. and Parade Way. $350,000. G. M. Mack, mgr. V. DeFoe, 720 Scarritt Bldg., archt.

Okla., Pawhuska—Hotel—C. A. and J. L. Duncan, having preliminary plans prepared by E. Forsblom, archt., 405 Sedgwick Bldg., Wichita, Kan., 4 story, 52 x 190 ft., rein.-con., brick and stone. $200,000.

Cal., Daly City—High School—Jefferson Union High School Dist. plans election to vote on $180,000 bonds for high school. Address Owner, c/o County Superintendent of Schools, Redwood City. Architect not selected.

Cal., Sacramento—Club—Knights of Columbus, 1214 K St., plan lodge and club in downtown district. $200,000. Architect not selected.

Cal., Tulare — School — Tulare Union High School Dist. had preliminary plans prepared by Swartz & Ryland, archts., Rowell Bldg., Fresno, various school buildings, incl. girls and boys gymnasium buildings, mechanical arts building, and 6 additional class rooms for present structure. $150,000.

Ont., Oshawa—School—Bd. Educ. having plans prepared by Hutton & Sauter, archts., Bank of Hamilton Bldg., Hamilton, 3 story, 18 room, rein.-con., brick and steel, Center St., $200,000.

BIDS DESIRED

N. H., Nashua—Bank—Aug. 23, by Second Natl. Bank, 185 Main St., brick, steel and stone, plain foundation. $200,000. Mowbray & Uffinger, 56 Liberty St., New York, archts. and engrs. Noted July 20.

N. Y., Albany—School—Aug. 28, by Bd. Contr. and Supply, City Hall, constructing P. S. 20, North Pearl and North 2nd Sts., (1) entire work, (2) plumbing, (3) heating and ventilating, (4) electric work. Pember, Whittemore & Demers, 24 James St., archts.

N. Y., New York—Office—Forty Nine-Fifty Three West 45th St. Corp., c/o Sommerfeld & Steckeler, archts. and engrs., 31 Union Sq., brick, steel and stone, plain foundation, West 45th St. $350,000. Work will be done by separate contracts under supervision of architects. Noted June 2.

N. Y., New York—Apartment—J. H. McNally, c/o E. Djorup, archt. and engr., 1345 Chisholm St., brick, steel and stone, Jerome Ave. $275,000. Work will be done by separate contracts, under supervision of architect.

Pa., Erie—School—Aug. 28, by School Dist., constructing Roosevelt School, 2 story, 167 x 303 ft. concrete, brick and steel. $450,000. W. W. Meyers, Erie, archt. Mayer, Valentine & Cameron, Erie Bldg., Cleveland, O., engrs.

Pa., Phila.—Sales, etc.—F. E. Hahn, archt., 1112 Chestnut St., taking bids 3 story, 26 x 100 ft. brick and steel sales and service building, plain foundation, 1305 North Broad St., for A. N. Greenfield, 15th and Chestnut Sts. $200,000.

Pa., Phila.—Store and Office—Hoffman-Henon Co., archts., Finance Bldg., taking bids 4 story, 50 x 160 ft. brick and steel, plain foundation, 1229 North Broad St. $250,000. Owners name withheld.

Pa., Phila. — Magaziner & Eberhardt, archts., 603 Chestnut St., taking bids, 5 story, 72 x 81 ft. brick and steel, plain foundation, Cherry and Lambert Sts., for Y.M.C.A., 18th and Arch Sts. $200,000.

Pa., Titusville — Theatre and Store — Morosco Holding Co., c/o G. R. Bental, Morosco Theatre, 25 West 43rd St., New York, and E. DeRosa, archt., 110 West 40th St., New York, taking bids 1 story, 40 x 120 ft and 2 story, 87 x 100 ft. brick, steel and terra cotta, West Spring St., here. $150,000. Noted July 13.

D. C., Wash.—Apartment—L. E. Scholtes, 819 15th St., will build apartment house at 2500 Massachusetts Ave., N.W., by separate contracts. $325,000. Private plans.

W. Va., Beckley—Bank and Office—Aug. 18, by R. M. Bates, archt., Commock Watts Bldg., Huntington, 8 story, 50 x 70 ft., brick and stone, Fayette and Main Sts., for Beckley Natl. Bank. $175,000.

N. C., Duke—School—Aug. 23, by Duke School Dist. Com., 2 story, 18 room, brick. $150,000. E. H. Bost, chn. Architect not announced.

La., Baton Rouge—Sanitorium—Aug. 31, by A. Gassler, pastor, Baton Rouge, 4 story, 107 x 323 ft. concrete and brick, for Lady of the Lake Sanitorium. $170,000. W. T. Nolan, Canal Commercial Bank Bldg., New Orleans, archt.

O., Canton—Bank and Office—Aug. 22, by First Natl. Bank, Tuscarawas and Market Sts., 14 story, 85 x 87 ft., brick, steel and concrete. $400,000. F. L. Packard, New Hayden Bldg., Columbus, archt. Noted May 4.

Buildings (Continued)

O., Cleveland—Commercial and Market—Pearl-State Rd. Market Co., c/o C. D. Kamp, pres., c/o Euclid-46th St. Market, taking bids and opens same about Aug. 22. 2 story, 200 x 200 ft., brick, steel and concrete, Pearl and State Rds. $250,000. A. E. Keller, 2570 Overlook Rd., archt. Noted May 11.

O., Columbus—Administration, etc. — Sept. 7, by C. E. Steeb, secy. Bd. Trustees Ohio State University, 3 story, 100 x 180 ft., administration building, $300,000, 4 story, 75 x 145 ft., medical science building, $250,000, 4 story, 120 x 180 ft., college of commerce building, $300,000, on campus, all brick, concrete and stone. J. N. Bradford, Ohio State University, archt. Noted July 20.

O., Columbus—Schools—Aug. 21, by Bd. Educ. at office E. L. McCune, clk., Ohio Natl. Bank Bldg., improving Dana Ave. School, John Boroughs School, on West Sullivant Ave., Linden School, on Cleveland Ave., and Pilgrim School on Taylor Ave. H. D. Smith, 50 East Town St., archt.

O., Lorain—Store—Kirtland Bond Co. taking bids 5 story, brick, steel and concrete, Bway. $150,000. De Kalb & Trevor, 404 Holland Pl., Lima, archts.

O., Oxford—Dormitory—Aug. 25, by Bd. Trustees Miami University, 3 story, 80 x 200 ft., brick, on Campus. $250,00. F. L. Packard, New Hayden Bldg., Columbus, archt.

O., West Park — Church — W. Koehl, archt., Park Bldg., Cleveland, taking bids 2 story, 53 x 118 ft., brick, steel and concrete, West 135th St. and Lorain Ave., here, for St. Vincent De Pauls Church, 1107 Superior Ave., Cleveland. M. J. Flannigan, pastor. $150,000. Noted July 6.

Ind., Bloomington—High School—Aug. 23, by Bd. Educ., 2 story, 101 x 114 ft. brick. $175,000. A Grindle, 122½ Walnut St., archt.

Ind., Bloomington — Theatre — Shrouds-Stoner & Co., archts., Tribune Bldg., Terre Haute, taking bids 1 story, 64 x 130 ft. brick and steel, here, for H. L. Vondersmith, Washington. $150,000. Noted Aug. 10.

Wis., Madison — Office — F. M. Riley, archt., Conklin Bldg., taking bids 3 story. 75 x 150 ft., brick, rein.-con. and stone, plain foundation, Fairchild St., for Madison Gas & Electric Co., 120 East Main St. $150,000.

Wis. Wauwatosa—Home—Aug. 28, by R. A. Messmer & Bros., archts., 221 Grand Ave., Milwaukee, 3 story, 80 x 160 ft. home and 25 x 30 ft. boiler house, brick and concrete, plain foundation, West Main St., for Lutheran Kinderheim, West Milwaukee Ave. $150,000.

Minn., Milaca—Courthouse—Sept. 6, by Mille Lacs Co., 2 story, 75 x 115 ft. rein.-con., brick and tile. $150,000. Croft & Boerner, 1206 Marquette Ave., Minneapolis, archts.

Ont., Toronto—College—Aug. 21, by Darling & Pearson, archts., 2 Leader Lane, 3 story, 50 room, rein-con., brick and steel, Hoskin Ave., for Trinity College, Queen St. W. $500,000.

BIDS RECEIVED

N. Y., New York—School—Bd. Educ., 500 Park Ave., opened bids Aug. 9, general construction P. S. 65, northerly side East 141st St., between Cypress and Powers Aves., Bronx, from E. Deibitsch, 70 East 45th St., $609,000. Frymier & Hanna, 25 West 45th St., $611,450; T. A. Clarke Co., 122 Livingston St., Brooklyn, $617,000.

O., Mt. Sterling—High School—E. R. Julian, clk. Bd. Educ. opened bids Aug. 10, 2 story, 120 x 133 ft., from L. G. Foltz & Sons, 448 Nelson Rd., Columbus, $82,200; G. B. Hicks, South Charleston, $94,900. Noted July 20.

O., Rocky River—High School—Bd. Educ. 2 story, brick, steel and cocrete addition, from F. H. Vogel, Ridge Rd., Cleveland, $126.000; Hearn Constr. Co., 4501 Euclid Ave., Cleveland, $147,360; Willing Bros., Bellevue, $149,231. Engrs. est. $200,000. Noted July 27.

Minn., Mankato—Administration—State Bd. Control, Capital, St. Paul, opened bids Aug. 10, 3 story, irregular shaped, rein.-con., brick and tile at State Teachers College, here, from Fleisher Constr. Co., 1000 Builders Exch. Bldg., Minneapolis, $255,000; J. B. Nelson Constr. Co., Mankato, $255,495; Madsen Constr. Co., 848 Builders Exch. Bldg., Minneapolis, $255,847. Noted July 27.

Cal., Berkeley—Hall—University of California, 2 story, 70 x 186 ft., rein.-con., from R. Trost, 26th and Howard Sts., San Francisco $337,016; K. E. Parker, 519 California St., San Francisco, $337,400; I. M. Sommer Co., Balboa Bldg., San Francisco, $338,428. Noted July 13.

Cal., Stockton—School—Bd. Educ., 13 room school, Burkett Acres, general contract from Shepherd & Riley, Yosemite Bldg., Stockton, $119,207; H. E. Vickroy, 1122 North Commerce St., Stockton, $120,200; Brown & Stafford, Madera, $121,901. Noted July 13.

CONTRACTS AWARDED

N. Y., Astoria (Long Island City P. O.)—School—Bd. Educ., 500 Park Ave., New York, for P. S. 70, 12th Ave., here, to J. MacArthur Co., 22 Ormond Pl., Brooklyn, $597,000. Archts. est. $600,000. Noted Aug. 10.

N. Y., Boonville—School—Bd. Educ., 3 story, 109 x 142 ft., brick school, Ford and Posts Sts., to G. G. Hanlin, Herkimer. Archts. est. $185,000. Noted March 16.

N. Y., Brooklyn—Apartment—Sivin Bldg. Corp., c/o E. M. Adelsohn, archt. and engr., 1778 Pitkin Ave., 4 story, brick, steel and stone, Church Ave., by day labor. $200,000.

N. Y., Brooklyn — Apartment—Deisen Bldg. Corp., c/o Shampan & Shampan, archts. and engrs., 50 Court St., 128 x 129 ft., brick, steel and stone, Kingston Ave. and Montgomery St., by day labor. Archts. est. $200,000.

In July

***We published* 459 *tips on new commercial building construction*:**

Proposed work	209
Bids desired	91
Bids received	12
Contracts awarded	147

$50,000,000 *in contracts.*

N. Y., Brooklyn—School and Convent—Our Lady of Mercy Church, 384 Schermerhorn St., brick, steel and stone, plain foundation, 383 State St., to P. J. Hoey, 166 Montague St. Archts. est. $200,000.

N. Y., Irondequoit (Rochester P. O.)—Temple—Masonic Temple Corp., 61 Clinton Ave., Rochester, c/o D. DeLelya, secy., 3 story, 85 x 400 ft., tapestry brick, Summerdale Ave., here, to F. H. Rapp, 188 Mount Hope Ave., Rochestetr.

N. Y., New York—Apartment—S. Rubin, c/o C. Schaefer, archt., 394 East 150th St., will build 6 story, brick, steel and stone, on Belmont Ave., by day labor. $200,000.

N. Y., New York—Showroom—S. and L. Building Co., c/o I. Margon & C. Glaser, archts. and engrs., 2806 3rd Ave., brick, steel and stone, plain foundation, 184th St. and Ryer Ave., by day labor. $150,000.

N. Y., New York—Theatre—H. G. Wiseman, archt. and engr., 25 West 43rd St., altering brick, steel and stone theatre, to Bertwin Constr. Co., 103 Park Ave., for Manhattan Opera House, West 34th St. Archts. est. $250,000. Noted Aug. 3.

N. Y., Syracuse—Hotel—G. B. Post & Sons, archts. and engrs., 101 Park Ave., New York, 11 story, brick, steel and stone, plain foundation, Harrison and Warren Sts., here, to Amsterdam Building Co., 138 East 44th St., New York, for Syracuse Hotel Corp., Burney Bldg. Archts. est. $2,500,000. Noted June 29.

N. Y., Utica—Hospital—Faxton Hospital Assn., Sunset Ave., brick and steel, Newall St., to Waldo Griffiths, Mayro Bldg. Noted June 23.

N. J., Montclair—Clubhouse—Montclair Golf Club, Verona St., clubhouse, 80 x 145 ft. with 35 x 70 ft. and 34 x 91 ft. wings, timber and stone, to C. J. Smith, 202 Academy St., Trenton, $150,000.

Pa., Ardmore—High School—School Bd., c/o A. Hamilton, 2 story, to F. M. Harriss & Co., 1520 Parrish St., Phila., $446,482. Noted April 20.

Pa., Phila.—Office and Service—Raeburn & Bailey, 32nd and Allegheny Aves., 6 story, 40 x 100 ft., rein.-con. and brick, plain foundation, 207-209 North Broad St., to W. Steele & Sons, 16th and Arch Sts.

Pa., Pittsburgh—Office—Natl. Union Fire Insurance Co., Chamber Commerce Bldg., 3 story, 73 x 129 ft. concrete brick and steel, to W. T. Grange Constr. Co., Keenan Bldg. archts. est. $200,000.

Fla., Tampa — Bank — Exchange Natl. Bank, 601 Franklin St., 3 story, 55 x 85 ft., granite, marble and concrete, 601 Franklin St., to Stone & Webster, 147 Milk St., Boston, cost plus percentage basis. Engrs est. $250,000.

La., Shreveport—Municipal and Jail—Rein.-con. and steel municipal building and jail, to Central Contg. Co., Shreveport, $198,000.

O., Akron—Grade School—Bd. Educ., 2 story, 160 x 200 ft., brick, plain foundation, Tallmadge Ave., general contract, to Akron Storage & Constr. Co., Herberick Bldg. $194,000, heating and ventilating to Kraus Plumbing Co., Akron, $40,000.

O., Cleveland—Apartment—J. L. Free Co., 1004 Prospect Ave., 8 story, 100 x 123 ft., brick, metal joist and concrete, East 89th St. and Carnegie Ave., to Crowell & Little Constr. Co., 3751 Prospect Ave. Archts. est. $400,000.

O., Cleveland—High School—Bd. Educ., 2 story addition, general contract to F. H. Vogel, Ridge Rd., $102,000.

O., Cleveland—Medical School, etc. — Western Reserve University, c/o S. S. Wilson, secy., 10940 Euclid Ave., 1, 3 and 6 story, brick, steel and concrete medical school, power house and animal hospital, Cummington Rd., to Lundoff-Bicknell Co., 5716 Euclid Ave. Archts. est. $2,500,000. Noted July 6.

O., Cleveland—School—Our Lady of Peace Church, 12402 Buckingham Ave., 3 story, 66 x 139 x 188 ft., brick, steel and concrete, East 126th St. and Shaker Blvd., to O'Connell & Bauerle, 2641 East 115th St. Archts. est. $200,000. Former contract rescinded. Noted Aug. 3.

O., Cleveland—Store, Office and Apartment—Essex Impvt. Co., c/o M. Marmorstein, Ulmer Bldg., 2 and 4 story, brick and timber, East 105th St. and North Blvd., to L. Duchon, Essex Rd., Cleveland Heights. Archts. est. $200,000.

O., Cleveland — Store and Office, etc.—Morelease Co., c/o J. Laronge, 214 Williamson Bldg., 3 story, 50 x 200 ft. store and office building, 1 story theatre, seating capacity 1,500, and 4 story apartment building, East 105th St. and St. Clair Ave., to W. F. Thompson & Son Co., 5103 Euclid Ave. Archts. est. $310,000.

O., East Cleveland (Cleveland, P. O.)—Apartment—R. A. Stillwell, 2166 St. James Parkway, Cleveland Heights, 3 story, 66 x 117 ft., brick and steel, Taylorhurst allotment, here, to Pell & Owens, 2391 East 85th St., Cleveland. Archts. est. $150,000.

Ind., Indianapolis — Apartment — D. O. Kearby, 422 Amer. Central Life Bldg., 3 story, 75 x 85 ft. brick and concrete, 611 North Pennsylvania St., to Conder & Culbertson, 623 North Noble St. Archts. est. $150,000. Noted Aug. 10.

Ind., Indianapolis—Apartment—E. G. Spink & Co., Hume Mansur Bldg., will build 6 story, 145 x 217 ft., brick and concrete, rein.-con. flooring, 16th St., by day labor. $400,000. W. K. Eldridge, Hume Mansur Bldg., archt.

Ind., Terre Haute—Apartment—Wabash Apartment Co., c/o J. D. Palmer, archt., McKeen Bank Bldg., 4 story, 82 x 140 ft., brick, to North-Raffin Constr. Co., 914 Chestrut St. Archts. est. $400,000. Noted Aug. 10.

Mich., Houghton—High School—School Dist. 1, three story, 185 x 250 ft. rein.-con., brick and steel, to J. J. Michels, Rice Bldg., $340,000. Noted June 29.

Mich., Marenisco — School — Township School Dist., 3 story, 62 x 106 ft. concrete, brick and tile, plain foundation, to H. Gundlach, Leopold Bldg., Houghton. Archts. est. $150,000.

Ill., Chicago — Apartment — Steinman & Larner, c/o J. H. Klafter, archt., 127 North Dearborn St., 3 story, 93 x 125 ft., rein.-con., brick and steel, Dougas Blvd. and Albany Ave., to Behrens Constr. Co., 2149 Talman Ave. Archts. est. $150,000. Noted July 6.

Wis., Alverno (Rd. Manitowoc)—Infirmary—Franciscan Sisters of Christian Charity, 3 story, 46 x 115 ft. brick and concrete, plain foundation, to Hutter Constr. Co., 128 Western Ave., Fon du Lac. Engrs. est. $150,000.

Wis., Milwaukee—Apartment—O. Brachman, 425 East Water St., 3 story, 68 x 92 ft., brick and concrete, plain foundation, Grand Ave., to H. Riesen, 1388 Humboldt Ave. Engrs. est. $150,000. Noted July 6.

Minn., St. Paul—Hotel—F. H. Tandy (representing owners) Brinsmeade Apts., 15 story, 99 x 112 ft. steel, brick and tile, St. Peter St. between 4th and 5th Sts., to Smith & Vandanaker, 501 Exch. Bank Bldg., cost plus basis. Cost complete $1,600,000.

Wash., Seattle—Bank—Capital Natl. Bank, 413 Main St., 2 story, 60 x 108 ft., concrete and Wilkeson stone, to Rounds-Clist Co., Walker Bldg. Archts. est. $200,000.

Buildings (Continued)

Cal., Palo Alto—Dormitory—University of California, 2 and 3 story, rein.-con., to G. Wagner, 251 Kearny St., San Francisco, on percentage basis. About $400,000. Noted July 20.

Cal., San Francisco—Apartment—O. B. Martin, c/o C. A. Meussdorffer, archt., Humboldt Bank Bldg., 10 story, rein.-con., Hyde and Greenwich Sts., to R. McLeran Co., Hearst Bldg., $200.000. Noted July 13.

Cal., San Francisco—Office Bldg.—R. L. Dunn, c/o J. R. Miller, archt., Lick Bldg., 17 story, fireproof, Sutter and Powell Sts., to P. A. Palmer, Monadnock Bldg., $1,500,000.

Que., Montreal — Church — Church of Sacred Heart, Ontario St. E., 77 x 220 ft. church, 80 ft. high, on Ontario St., E. to U. Boileau, 568 Garnier St. $295,000. Noted Aug. 3.

Que., Montreal—Medical Office—Ross & McDonald, archts. 1 Belmont St. 10 story, 79 x 150 ft. concrete and steel, Sherbrooke and Guy Sts., to Foundation Co. Ltd., St. Catherine St. W., $600,000.

Que., Montreal—School—Catholic School Comrs. Western Dist., 2198 St. James St., 3 story, 60 x 185 ft. rein.-con. and brick, Cote St. Paul Rd., to Fournier Bros., 26 St. James St. $150,000.

Ont., Toronto—Apartment—S. B. Green, 41 Austin Terrace, 4 story, 76 x 135 ft. concrete, brick, stone and tile, King and Queen Sts., masonry contract to Cameron & Stephenson, 42 Palmerston Sq.; steel to McGregor & McIntyre, Shaw St.; carpentry to Skinner & Long, Lake Shore Rd.; heating to G. G. Jackson, 311 Kennedy Ave. Total est. $200,000.

Ont., Toronto — Office—See "Miscellaneous" Car Barns.

Federal Government Work

PROPOSED WORK

Pa., Pittsburgh—Hospital—Treas. Dept., Wash., D. C., plans U. S. Veterans' Hospital, (250 beds) at Aspinwall, here. J. A. Wetmore, acting superv. archt.

Md., Edgewood — Quarters, etc. — Constructing Quartermaster, Edgewood Arsenal, plans 1 general officers house, 5 field officers quarters, 14 captains quarters, stable and plumbing, exterior water and sewer connections, etc.

Va., Hampton Roads—Riprap Protection —Spec. 4699—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans riprap protection for north breakwater, here.

Wis., Racine—Pier—U. S. Engineer, Federal Bldg., Milwaukee, will probably receive bids in September, completion of South Arrow Heal Pier, approximately 1,100 lin. ft. piling, concrete capped. Work incl. moving old pier and some dredging. F. S. Skinner, dist. engr.

Col., Denver — Repairs — Constructing Quartermaster, Denver, plans to repair Fitzsimons General Hospital, recently damaged by fire.

Cal., Mare Island—Riprapping .Dike—Spec. 4700—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans riprapping dike, here.

H. T., Pearl Harbor—Artesian Wells—Spec. 4702—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans 3 artesian wells, here. Bids to be opened at local yard.

BIDS DESIRED

Mass., Northampton—Hospital—Director Veterans Bureau, 1044 Arlington Bldg., Wash., D. C., receiving bids superstructures for 9 patient buildings for Federal Psychopathic hospital, here.

N. Y., Plattsburg—Stables—Aug. 30 at office Construction Quartermaster, Plattsburg Barracks, 2 brick stables, here; adv. this issue.

N. J., Dover — Road — Sept. 1 at office Constructing Quartermaster, 39 Whitehall St., New York, concrete road at Picatinny Arsenal, here; adv. this issue.

Md., Baltimore — Remodeling, etc.—Aug. 31, by Treas. Dept., Wash., D. C., remodeling U. S. Marine Hospital, here; also mechanical equipment for above. J. A. Wetmore, acting superv. archt.

Va., Norfolk—Dredging—Sept. 14, at Office U. S. Engineer, dredging in Pagan River; adv. this issue.

Ga., Augusta—Roads and Walks—Aug. 24, by Treas. Dept., Wash., D. C., roads and walks at U. S. Pub. Health Service Hospital 62, here. J. A. Wetmore, acting superv. archt.

Ala., Mobile—Dredge Pontoons, etc.—Sept. 3, at Office U. S. Engineer, dredge pontoons and discharge pipe for U. S. Dredge Wahalak; adv. this issue.

Cal., Pt. Vicente—House, etc.—Aug. 22 by H. W. Rhodes, supt. lighthouses, Custom House, San Francisco, three 2 story, tile house and fog signal buildings, here.

BIDS RECEIVED

Md., Annapolis—Refrigerating Plant—Spec. 4689—Bureau Yards & Docks, Navy Dept., Wash., D. C., refrigerating plant at U. S. Naval Academy, here, (1) work complete, from Clothel Refrigerating Co., 61 Bway., New York City (1) $1,950 (30 days) (2) $1,880 (30 days) (3) $160; Chatard & Morris, 304 Continental Bldg., Baltimore, (1) $2,050 (2) $2,050 (3) $256; York Mfg. Co., York, Pa., (1) $2,075 (50 days) (2) $2,020 50 days (3) $290. Noted July 27.

N. Y., Tupper Lake—Foundations—Spec. 4698—Bureau Yards & Docks, Navy Dept., Wash., D. C., foundations for 5 buildings at U. S. Veterans Hospital, here, (1) work complete, from W. M. Sutherland Building & Constr. Co., 408 Compton Bldg., St. Louis, Mo., (1) $42,000 (60 days) (2) $3 (3) $0.75 (4) $28 (5) $0.05; Northeastern Constr. Co., 101 Park Ave., New York, 1 $46,800 (60 days) (2) $2 (3) $0.40 (4) $22 (5) $0.06; Guarantee Constr. Co., 140 Cedar St., New York, (1) $49,360 (60 days) (2) $2 (3) $0.50 (4) $20 (5) $.06. Noted Aug. 3.

N. J., Camden—Dredging—U. S. Engineer, 815 Witherspoon Bldg., Phila., Pa., dredging in Delaware River, here, 174,000 cu.yd. scow measurement, from Amer. Dredging Co., 310 Mariner & Merchant Bldg., Phila., $0.34 per cu.yd.; Great Lakes Dredge & Dock Co., 17 State St., New York City, $0.59. Noted July 13.

Cuba, Guantanamo—Chimney and Flue—Spec. 4695—Bureau Yards & Docks, Navy Dept., Wash., D. C., chimney and flue at Naval Station, here, (1) work complete, from Webber Chimney Co., 332 South Michigan Ave., Chicago, (1) $10,890 (2) $1,470 (3) $600 (150 days). Noted July 27.

In July

We published 98 tips on new Federal Government work:

Proposed work	8
Bids desired	48
Bids received	13
Contracts awarded	29

Contracts let three times heavier than in five issues of June.

H. T., Pearl Harbor—Ordnance Buildings, etc.—Spec. 4566—Bureau Yards & Docks, Navy Dept., Wash., D. C., 6 ordnance buildings, railroad track, water main extensions, etc., at Kauhua ammunition depot, naval operating base, here, from J. L. Young Eng. Co., Ltd., Campbell Bldg., Honolulu (1) $132,822, (275 days) (2) $131,800 (275 days) (3) $3,000 (3 days) (4) $7,300 (5 days) (5) $7,000 (5 days) telegraphic modification (1) add $2,000 (2) add $2,000 (3) add $200 (4) add $800 (5) add $800. Newport Contg. and Eng. Co., Law Bldg., Newport News, Va., (1) $181,000 (180 days) (2) $177,600 (180 days) (3) add $4,000 deduct $2,500 (4) $5,000 (10 days) (5) $4,800 (10 days); Hawaiian Contg. Co., Honolulu, (1) $200,000 (180 days) (2) $200,000 (180 days) (3) $7,500 (3 days) (4) $5,500 (3 days) (5) $5,500. Noted June 15.

CONTRACTS AWARDED

Mass., Chelsea—Mortuary—Spec. 4635—Bureau Yards & Docks, Navy Dept., Wash., D. C., mortuary at Naval Hospital, here, to A. Cacciagrano, 294 Washington St., Boston, $6,500 (50 days). Noted July 27.

Mass., Northampton — Foundations — Director Veterans' Bureau, 1044 Arlington Bldg., Wash., D. C., foundations for 9 patient buildings for Federal Psychopathic hospital, here, to Pontiac Constr. Co., 206 Lincoln Bldg., Detroit, Mich., $160,000. Noted June 29.

Va., Hampton Roads—Equipment—Spec. 4667—Bureau Yards & Docks, Navy Dept., Wash., D. C., coal and ash handling equipment, at naval base, here, to W. G. Hudson Corp., 50 Church St., New York City, $47,700 (100 days). Noted Aug. 3.

Va., Hampton Roads—Heating Plant—Spec. 4629—Bureau Yards & Docks, Navy Dept., Wash., D. C., heating plant, here, to Amer. Bridge Co., Wilkins Bldg., Wash., D. C., $24,707. Noted Aug. 3.

Va., Norfolk — Hospital — Treas. Dept., Wash., D. C., for east wing of U. S. Marine Hospital, here, to R. R. Richardson Bank of Commerce Bldg., $78,900.

Va., Norfolk — Mechanical Equipment — Treas. Dept., Wash., D. C., mechanical equipment for east wing U. S. Marine Hospital, here to W. G. Cornell Co., 19 Patterson St., N. E., Wash., D. C., $25,323 (7 months.) Noted July 20.

Ky., Louisville—Metal Work—U. S. Engineer, P. O. Box 72, metal work for Dam 44, Ohio River, Lot "A" to Amer. Car and Fdry. Co., Jeffersonville, Ind., $9,797; Lot "B" to C. Hegewald & Co., New Albany, Ind., $11,809; Lot "C," Penn Bridge Co., Beaver Falls, Pa., $6,410; Lot "D," Amer. Bridge Co., 1304 Union Trust Bldg., Cincinnati, O., $23,740. Noted June 22.

Ky., Louisville—Piling—U. S. Engineer, P. O. Box 72, steel sheet piling for Dam 44, Ohio River, to Lackawanna Steel Co., Lackawanna, N. Y., $31,059. Noted June 22.

Wash., Grays Harbor—Roads—U. S. Bureau Pub. Rds. clearing, and surfacing 4.5 mi. Quinault Forest Reservation Rd., 1,710 ft. 18-36 in. concrete pipe, 53,000 cu.yd. earth and 5,000 cu.yd. rock excav., 10,000 cu.yd. crushed rock or gravel, etc. to Montague-O'Reilly, Commonwealth Bldg., Portland, Ore., $101,073.

Cal., San Francisco—Drydocking, etc.—U. S. Engineer, 240 Montgomery St., drydocking, repairing and painting floating plant, to Hanlon Drydock and Shipbuilding Co., foot of 5th Ave., Oakland, $25,000.

Miscellaneous

PROPOSED WORK

Cast Iron Pipe—Batavia, N. Y.—City plans to purchase carload c.i. pipe, various sizes. J. Carmichael, clk.

Subway, etc.—Buffalo, N. Y.—C. V. Brunner and C. H. Guess, 168 Pearl St., are seeking franchise for constructing subway and elevated railroad system. $100,000,000.

Dumping Platform and Ramp, etc.—New York, N. Y.—J. H. Delaney, comr. Docks and Ferries, Pier "A," foot of Battery Pl., rejected bids opened July 27 for superstructure on pier at East 35th St. consisting of (a) concrete dumping platform and ramp (b) 1,610 sq.yd. granite block, (c) 735 cu.yd. asphalt (d) electrical work. Will readvertise. Noted Aug. 3.

Amusement Park — Carbondale, Pa. — J. McDonough, Poplar St., and others, plan extensive improvements at Newton Lake incl. new bath houses, dance pavilion, roller coaster, concrete road, hotel, etc. $25,000.

Coal Washery — Kulpmont, Pa.—W. L. Connell Coal Co., 416 Lackawanna Ave., Scranton, having plans prepared reconstructing coal washery recently destroyed by fire. $30,000.

Comfort Station—Lancaster, Pa.—Lancaster Co. and city having plans prepared by M. R. Evans, archt., 10½ East Orange St., comfort station, Lancaster Sq. $40,000.

Gas Mains—Montreal, Que.—Montreal Light, Heat & Power Co., Craig St. W., plans 3,000 ft. 12 in. gas main in Delormier Ave. from Sherbrooke St. to Mt. Royal Ave. $16,116, 12,555 ft. from Hochelaga Gas Wks., Bway. St. to Boulevard, 5,742 ft. 30 in., 2,989 ft. 24 in. and 3,824 ft. 20 in. c.i. pipe, $89,422, 2,063 ft. 6 in. c.i. pipe in McCord St. from Wellington to Notre Dame Sts. $8,590. E. S. Stanton, engr. gas distribution.

Amusement Park — New Castle, Pa. — Cascade Park, c/o E. D. McKibben, mgr., plans improvements incl. new dance pavilion, bathing beach, fun house, etc. $100,000. F. Foulke, New Castle, archt.

Oil and Gas Wells—Williamsport, Pa—Clinton Natural Gas & Oil Co., c/o D. D. Kline, secy., plans to drill 10 wells for oil and gas in Kettle Creek Field. $25,000.

Fire Alarm System—Shreveport, La.—See "Buildings."

Gas Line—Shreveport, La.—Bethany Oil & Gas Co., Shreveport, plans trunk pipe line from here to point in Panola Co., Texas, also several large and small lateral lines. $250,000. Engineer not announced.

Conduits — Detroit, Mich. — Bd. Fire Comrs., Larned St., plans 5,000 ft. 2 duct conduit, 8,500 ft. 3 duct conduit and 12,000 ft. 4 duct conduit, 70 manholes. L. Gascoigne, 647 East Larned St., supt.

Pier, etc., Madison, Wis.—Plans municipal bathing pier, tile and stone, boat lockers, shower rooms, dance halls, restaurant and athletic park, on Lake Mendota. $100,000. Engineer not selected.

Transmission Line—Pound, Wis. — Wisconsin Public Service Corp., 559 Marshall St., Milwaukee, having plans prepared for 20 mi. high voltage transmission line from here to Menominee, Mich. Mead & Seastone, State Journal Blk., Madison, engrs.

Miscellaneous (Continued)

Paving Materials—St. Paul, Minn.—Soon takes bids furnishing following materials for paving various streets, etc., 57,786 sq. yd. of 3 in. Y. P. creosoted wood blocks, 12,270 bbl. portland cement, 9,494 cu.yd. concrete sand for base, 6,140 cu.yd. crushed rock or gravel, 288,930 lb. pitch filler, 369,502 lb. asphalt filler for creosoted wood blocks, 15,780 lb. asphalt filler for brick block. O. Claussen, city engr.

BIDS DESIRED

Clearing, etc.—New York, N. Y.—Aug. 25, by G. A. Whalen, comr. Plant & Structures, Municipal Bldg., clearing site, excavating, sheeting and bracing for foundation for proposed repair shop, 16th St. and Ave. C for Dept. Street Cleaning. Noted July 6 under "Industrial Works."

Fine Gravel—New York, N. Y.—Aug. 23. by Bd. Purch., Municipal Bldg., furnishing and delivering fine gravel to Dept. Parks, Manhattan Boro. G. A. Whalen, comr.

Heating and Ventilating Apparatus, etc. —New York, N. Y.—Aug. 22, by C. B. J. Snyder, supt. School Buildings of Bd. Educ., Concord St., Brooklyn, installing heating, ventilating and temperature-regulating apparatus, etc., in P. S. 130 (2nd portion) northeasterly corner of Hester and Baxter Sts., here.

Oak Piles, etc.—New York, N. Y.—Aug. 25, by Bd. Purch., Municipal Bldg., furnishing and delivering oak piles to Dept. Plant & Structures; broken stone and sand grits to Dept. Parks, Bronx Boro; hydrant repair parts and corporation cocks to Dept. Water Supply, Gas & Electricity. G. A. Whalen, comr.

Paving Sand—New York, N. Y.—Aug. 21. by J. Miller, pres. Manhattan Boro, Municipal Bldg., furnishing and delivering 3,000 cu.yd. paving sand.

Boardwalk—Long Branch, N. J.—Aug. 22 by City Comrs., City Hall, renewal and widening boardwalk from point near Morris Ave. to Sea View Ave. J. W. Seaman, 192 Bway., city engr.; adv. this issue.

Sacking Scales—New Orleans, La.—Bd. Port Comrs., New Court Bldg., taking bids 4 automatic sacking scales for grain elevator.

Steam Turbine and Accessories—New Orleans, La.—Oct. 10, by Sewerage and Water Bd., one 6,000 k.w. steam turbine and accessories. A. G. Moffat, secy. Adv. this issue.

Steam Roller—Cleveland, O.—R. H. Mirdock, City Hall, taking bids one 8 ton steam roller.

Truck Scales—Youngstown, O.—Duplex Storage Co., 728 Mahoning Ave., taking bids 20 ton or larger set of truck scales for weighing auto trucks, loads, etc.

Steam Heating System, etc.—Green Bay, Wis.—State Bd. Control, Madison, taking bids steam heating, ventilating and plumbing systems in State Reformatory, here. $25,000. A. Peabody, 2114 Chadbourne Ave., Madison, engr.

Paving Materials—St. Paul, Minn.—Aug. 28, by H. W. Austin, city purch. agt., materials for paving 43 blocks, 57,786 sq.yd. 3 in. creosoted wood blocks, 12,270 bbl. portland cement, 9,494 cu.yd. concrete sand for base, 6,140 cu.yd. crushed rock or gravel, 288,930 lb. pitch filler, 396,502 lb. asphalt filler for wood block. 15,780 lb. asphalt filer for brick. O. Claussen, city engr.

Oil Storage Tank—San Antonio, Tex.—See "Industrial Works."

Tunnel—Merced, Cal.—Aug. 25, by Dirs. Merced Irrigation Dist., 1,300 lin.ft. 10 x 10 ft. tunnel, concrete or gunite lined where necessary, driven through cement rock and hard pan, to carry 300 sec. ft. water, metal flume erected on timber sub-structure with concrete footings, 1,538 ft. of 9 ft. 11 in. and 2,200 ft. of 6 ft. 4 in. metal flume. R. C. Starr, ch. engr.

Car Bodies, etc.—San Francisco, Cal.—Sept. 6, by Bd. Pub. Wks., furnishing and delivering under Contr. 132, Municipal Ry. System, Sect. A, 20 or more car bodies, f.o.b. place of manufacture or San Francisco; Sect. B, street car trucks; Sect. C, street car motor equipment; Sect. D, street car air brake equipment, for city and San Francisco Co. M. M. O'Shaughnessy, city engr.

Transformers, Induction Regulators and Switchgear—Melbourne, Victoria, Australia—Nov. 4, by R. Liddelow, secy. State Electricity Comn. of Victoria, 22-32 William St., transformers, induction regulators and switchgear, Specification 293; adv. this issue.

BIDS RECEIVED

Heating and Ventilating Apparatus, etc. —Maspeth, N. Y.—Bd. Educ., 500 Park Ave., New York, opened bids Aug. 11, installing heating, ventilating and temperature regulating apparatus, etc., in addition to and alterations in P. S. 72, here, from E. Rutzler Co., 404 East 49th St., New York, $48,462; W. J. Olvany, 100 Charles St., New York, $51,402; T. F. Hall, Inc., 405 Lexington Ave., New York, $52,000.

CANAL—MERCED, CAL.

Bids were opened Aug. 1, by Merced Irrigation Dist., for constructing LeGrande Lake-Yosemite Canal, from (A) C. R. Adams, Biggs, (awarded contract for Divisions 2 and 3. Division 1 will be done by District); (B) S. D. Miller, Manteca; (C) Blumenkranz & Vernon, Stockton; (D) C. Thompson, Fresno; (E) J. Phillips, Oakland; (F) Isbell Constr. Co., Fresno; (G) Hewitt & Felch, La Habra; (H) Rose Constr. Co., Forum Bldg., Sacramento; (I) G. Pollock Co., Forum Bldg., Sacramento; (J) P. L. Burr, 512 Mission St., San Francisco; (K) Utah Constr. Co., Phelan Bldg., San Francisco; (L) D. A. Foley & Sons, Aitkin, Minn. The unit bids were as follows:

	Division No. 1				Division No. 2				Division No. 3			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
A	$0.22	$0.37	$0.80	$0.03	$0.185	$0.30	$0.80	$0.03	$0.24	$0.35	$0.80	$0.03
B	....	....	....	....	.285	.60	.90	.01	.285	.57	.90	.01
C	....	....	....	....	.24	.48	.90	.03	.24	.48	.90	.03
D	.49	.49	1.25	.05	.30	.65	1.25	.05	.30	.65	1.25	.05
E	....	....	....	....	....	....	....	....	.28	....		
F	....	....	....	....	.48	.65	1.25	.05	.48	.65	1.25	.05
G	.43	.43	2.00	.02	....	....	....	....	....	....		
H	.50	.50	.50	.10	.50	.50	.50	.10	.50	.50	.50	.10
I	.50	.50	.50	.10	.30	.30	.30	.10	.28	.28	.28	.10
J	.55	.55	1.00	.03	.55	.55	1.00	.03	.55	.55	1.00	.03
K	.53	.53	.53	.05	.53	.53	.53	.05	.53	.53	.53	.05
L	.93	.93	.93	.05	.93	.93	.93	.05	.93	.93	.93	.05

Division 1—Canal 16 ft. wide on bottom, 7.8-ft. deep, 49,900 cu.yd. excavation; 46,500 cu.yd. borrow.
Division 2—6,400 ft. canal, 16 ft. wide on bottom, 7.8 ft. deep.
6,850 ft. canal, 8 ft. wide on bottom, 5.5 ft. deep.
7,450 ft. canal, 5 ft. wide on bottom, 5.5 ft. deep. involving
104,500 cu.yd. excavation, 15,740 cu.yd. borrow.
Division 3—23,535 ft. canal, 8 ft. wide on bottom, 5.5 ft. deep.
16,425 ft. canal, 5 ft. wide on bottom, 5.5 ft. deep.
4,740 ft. canal, 5 ft. wide on bottom, 4.2 ft. deep, involving
90,600 cu.yd. excavation, 22,880 cu.yd. borrow.

Heating and Ventilating Apparatus, etc. —New York, N. Y.—Bd. Educ., 500 Park Ave., opened bids Aug. 11, installing heating, ventilating and temperature regulation apparatus, etc. in additions to and alterations in P. S. 58, Bronx Boro, from E. Rutzler Co., 404 East 49th St., $44,719; W. J. Olvany, 100 Charles St., $46,830; T. F. Hall, Inc., 405 Lexington Ave., $47,000.

Engines and Generators—Rome, N. Y.—C. J. Severance, Pres. Bd. Mgrs. State School for Mental Defectives, opened bids Aug. 7 for engines and d.c. generators, at state school, from W. H. Straut Co., Haverstraw, $14,740; Langdon & Hughes Electric Co., 233 Elizabeth St., Utica, $15,133; I. N. Beeler Co., City Bank Bldg., Syracuse, $15,260. Noted July 13.

Broken Stone, etc.—St. George, N. Y.—J. A. Lynch, pres. Richmond Boro, opened bids Aug. 14, furnishing and delivering (1) 1,000 cu.yd. 1½ in. broken stone of limestone 12-12, (2) 100 cu.yd. screenings of limestone 12-12, (3) 400 cu.yd. grits, from J. E. Donovan, 2205 Richmond Terrace, Port Richmond, (1) $3.60, (2) $3.60, (3) $3.25; J. Johnson Sons, 455 Bway., West New Brighton, (1) $3.48, (2) $4.80, (3) $3. Noted Aug. 10.

Transformers, etc.—San Francisco, Cal.—Bd. Pub. Wks. opened bids transformers, switchboards, and accessory equipment for Moccasin Creek power plant, Hetch Hetchy Project, Contr. 81, from Maloney Electric Co., Rialto Bldg., bidding No. 2 Prop. A, $6,578; Packard Electric Co., (A. S. Lindstrom), 111 New Montgomery St., bidding No. 2, Prop. A, $7,140; General Electric Co., Rialto Bldg., bidding No. 1, Prop. A, $13,429, No. 2, Prop. A, $7,941, Prop. E. $265,000, Prop. AI, No. 1, $13,105, No. 2 same Prop., $7,657, Prop. EI, $253,600; Westinghouse Electric & Mfg. Co., 1st Natl. Bank Bldg., bidding No. 1, Prop. A, $11,069 and No. 2, Prop. A, $7,485, Prop. D, $253,200, Prop. AI, No. 1, $10,300, No. 2 Prop. AI, $7,485, Prop. DI, $238,200; C. F. Henderson, Call Bldg., bidding Prop. A, No. 2, $7,090. Noted July 20.

Transmission Line—Turlock, Cal.—Turlock Irrigation Dist., constructing transmission line, (1) construction complete, (2) labor only, (3) towers, (4) switchboards, (5) copper wire, (6) insulators, (7) alternate for insulators, (8) aluminum wire, from H. S. Tittle, 766 Folsom St., San Francisco, (1) with (5) $153,360, with (8) $142,360, (2) $31,000; W. A. Kraner, Balboa Bldg., San Francisco, (1) with (5) $169,900, with (8) $178,200; P. C. Severin, 180 Jessie St., San Francisco, (2) $46,800; Continental Constr. Co. Los Angeles, (2) $67,000; Western Electric Co., 680 Folsom St., San Francisco, (3) $280 each; General Electric Co., Rialto Bldg., San Francisco, (4) $18,250; J. Roebling Sons, Hathorne and Folsom Sts., San Francisco, (5) $0.1725 per lb.; Aluminum Co. of America, Rialto Bldg., San Francisco, (8) $0.1904 per lb.; Baker-Joslyn Co., 199-1st St., San Francisco, (6) $1.87 each, (7) $2.53 each; Pacific States Electric Co., 575 Mission St., San Francisco, (6) $2.30 each, (5) $0.1662; Ohio Brass Co., Hobart Bldg., San Francisco, (6) $2.35 each; Pacific Coast Steel Co., Rialto Bldg., San Francisco, (3) $110 each; Westinghouse Electric Co., Rialto Bldg., San Francisco, (6) $2.47 each.

CONTRACTS AWARDED

Grain Elevator—Belchertown, Mass.—Ryther & Warren, large grain elevator, to H. P. Cummings Constr. Co., Ware.

Portland Cement—New York, N. Y.—H. Bruckner, pres Bronx Boro, Municipal Bldg., Crotona Park, furnishing 3,500 bags portland cement, to C. J. Mallett, 2523 Glebe Ave., Bronx, $2,397. Return of bags $0.10 per bag. Noted Aug. 10.

Lumber—Niagara Falls, N. Y.—E. J. Fort, city mgr., 106,787 ft. white oak lumber to repair Pierce Ave. Bridge, to Haeberle Lumber Co., 1004 Cedar Ave., $6,407. Noted July 20.

Retaining Wall—Trenton, N. J.—Rein.-con. retaining wall along John Fitch Way from Municipal dock to Delaware River Bridge, to General Contg. & Constr. Co., 117 Emory Ave., $21,075. Noted July 27.

Limestone Dust—Scranton, Pa.—See "Streets and Roads."

Mechanical Equipment—Charlotte, N. C.——Citizens Hotel Co., for electrical, heating and plumbing work in new hotel, to Grinnell Co., Inc., 1 Liberty St., New York City, $148,000.

Levee Work—New Orleans, La.—Bd. State Engrs., Court Bldg., Berryman Levee, Avoyelles Parish, 180,000 cu.yd. excav., to Tensey-Cabott Constr. Co., Minden, $51,982; Cason Levee, Avoyelles Parish, 102,000 cu. yd. excav., and Crooked Bayou Levee, St. Landry Parish, 65,000 cu.yd. excav., to White, Taylor & Cason, Woodville, $26,000 and $25,398 respectively.

Stadium—Madison, Wis.—University of Wisconsin, concrete and steel addition to stadium, to W. F. Tubesing Co., 373 Bway., Milwaukee, $28,952. Noted June 8.

Power Plant Equipment—Detroit, Minn.—For 1 generating unit, steam engine driven, 300 kva. capacity, one 250 hp. water tube boiler, stokers for foregoing, to J. G. Robertson, 2542 University Ave., St. Paul, $30,665. Will receive bids until Aug. 28 for rest of light and power project incl. erection brick and concrete power house, $28,000. Noted July 27.

Crane—St. Paul, Minn.—For one 15 ton hand operated traveling type bridge crane for Water Dept., to Whiting Corp., Harvey, Ill., $1,555. Noted Aug. 3 under waterworks.

Pumps—Port Arthur, Ont.—Provincial Paper Mills Ltd., Port Arthur, 14 centrifugal pumps up to 6,000,000 gal. capacity per day, to Northern Fdry. & Machine Co., Saulte Ste. Marie. Engrs. est. $50,000.

Pumps—Fort William, Ont.—Fort William Paper Co., 10 centrifugal pumps, from 1000 to 5000 gal. per minute capacity, against 60-120 ft. heads, to Northern Fdry. & Machine Co., Saulte Ste. Marie. Engrs. est. $25,000.

Car Barns — Toronto, Ont. — Toronto Transportation Com., Yonge and Front Sts., three 1 and 2 story rein.-con., brick and steel car barns, and brick office, Eglington Ave., general contract to Wells & Gray, Confederation Life Bldg., reinforcing steel to Burlington Steel Co., 60 King St. W., structural steel to Dominion Bridge Co., Imperial Life Bldg.; plumbing and heating to Sheppard & Abbot, 119 Harbord St. Total $225 [illegible].

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

Bids: Aug. 28.

Paving

Waterloo, N. Y.

For paving Stark Street from William Street north to North Street, North Street from Stark Street east to Taylor Street, Center Street from North Street south to the south line of the Catholic Church property, Swift Street from Main Street north to North Street, Church Street from Main Street north to Mechanic Street, William Street from the east line of the Episcopal Church property west to the west side of the entrance to Waterloo Hospital and also from Park Street to Stark Street, Race Street from Huff Street west to west side of lane at Traphagen's Coal Yard, Fayette Street from South Street north to Race Street. Huff Street from Race Street south to South Street, Park Street from Main Street north to William Street in the Village of Waterloo, N. Y., with bituminous macadam, penetration method.

Sealed proposals for the above mentioned work, endorsed "Proposals for Paving" will be received at the office of the Board of Trustees, Waterloo, N. Y., until 12 o'clock M. of August 28th, 1922.

The following estimate of quantities is to be considered only as approximate and bidders are required to form their own judgment of the quantities and character of the work by personal examination of the specifications and drawings relating to it, or such other means as they may prefer. Bidders must not assert any misunderstanding in regard to anything relating to the work.

The Contractors shall have no claim against the Village by reason of any variation between the quantities of the approximate estimate and the quantities of the work as done, nor on account of any misunderstanding or misconception of the nature and character of the work.

The several bids will be computed, tested and canvassed by the quantities and qualities mentioned in the following estimate:

21,700 square yards Bituminous Macadam Pavement (Penetration Method).

Each bid must be made out on the forms of proposals furnished by the Board of Trustees, and must be enclosed in a sealed envelope, addressed to the Board of Trustees, Waterloo, N. Y.

The price for which bidders will agree to execute and perform each class of work to be written in ink in both words and figures in the forms of bid, and all bids will be considered informal which do not contain prices set opposite each and all of the items which are called for in printed forms for bids, or which are otherwise not in conformity with this notice. Bids that contain any omissions, erasures, alterations, additions or items not called for in the itemized "Notice to Contractors," or that contain irregularities of any kind, will be rejected as informal. No bid will be allowed to be withdrawn for any reason whatever, after it has been deposited with the Board of Trustees.

Bidders are requested to state in their bids, under oath, their names and places of residence, the names of all persons interested with them in said bids, also that the bid is made without any connection with any person making another bid for the same contract, and that the bid is in all respects fair and without collusion or fraud.

Contractors will be paid monthly, approximate estimates, 90 per cent, of the amount due for work at that time done.

The person or persons whose bid shall be accepted, will be required to attend at the office of the Board of Trustees with the sureties offered by him or them, and execute the contract and bond within ten days from the date of the service of a notice to that effect, delivered to him in person or mailed to the address given in the bid. In case of failure or neglect to do so he or they will be deemed to have abandoned the contract.

A certified check payable to the order of the Village Treasurer of the Village of Waterloo, N. Y., will be required in the amount of $1,500.00 (Fifteen Hundred Dollars) to accompany each bid.

All deposits except that of the bidder whose bid shall have been accepted, will be returned to the person or persons making the same, within three days after the contract is awarded. If the successful bidder whose bid shall have been accepted, shall refuse or neglect to execute the contract within ten days after the notice that it has been awarded to him or them the amount of the deposit by him or them will be forfeited to and be retained by the Village of Waterloo, N. Y., as liquidated damages for such neglect or refusal; but if he or they shall execute the contract and bond within the time aforesaid, the amount of his or their deposit will be returned to him or them.

A bond in the sum of at least 50 per cent. of the contract price conditioned for the faithful performance of all parts of the contract with sureties to be approved by the Board of Trustees will be required.

The Board of Trustees reserves the right to reject all bids not deemed for the best interest of the Village and adjacent and contiguous property owners.

Plans may be seen at the office of the Board of Trustees, and specifications, forms of proposal, contract, etc., obtained from the Village Clerk.

The Contractor is required to furnish the Engineer, previous to the time fixed for receiving bids, samples of the bituminous material proposed to be used.

By order of the Board of Trustees of the Village of Waterloo, N. Y.

ADELBERT R. MOORE,
Village Clerk.

Bids: Sept. 7.

Concrete Bridge Construction

New Braunfels, Texas.

Sealed proposals for constructing a reinforced concrete highway bridge across the Comal River on San Antonio Street in the City of New Braunfels, Texas, and addressed to the Hon. F. G. Blumberg, Mayor, will be received at the office of the City Clerk, until 3 p.m., Thursday, September 7th, 1922.

The structure consists of a 20 ft. wide roadway with two 5 ft. sidewalks 410 ft. long. The roadway is 43 ft. high above river level, and is carried by five arch spans of two ribs each and by two girder spans of 30 ft. each. The foundation conditions are unusually simple.

The Contractor is required to maintain traffic over existing bridge necessitating the moving of one timber approach trestle 142 ft. long. Five car siding space is available for use of Contractors within one block of west end of bridge. Water will be furnished free by the City.

Instructions, proposal blanks, specifications and detailed plans may be seen at the office of A. D. Nuhn, City Clerk, New Braunfels, Texas, and may be obtained from the Terrell Bartlett Engineers, Calcasieu Bldg., San Antonio, Texas, upon payment of $15.00, which will be refunded only to bona-fide bidders.

Proposals must be accompanied by a certified or cashier's check in the sum of not less than 5% of the amount bid. Bidders must fulfill conditions specified in the "Instruction to Bidders." The City reserves the right to reject any or all bids.

F. G. BLUMBERG, Mayor.

Bids: Aug. 21.

Reinforced Concrete Paving

Princeton, N. J.

Notice is hereby given that sealed bids will be received by Princeton Township Committee for the construction of a reinforced concrete pavement in the Township of Princeton in the County of Mercer, with a cement concrete surface upon an old macadam foundation, estimated amount of concrete surface pavement reuired is 5,327 square yards; and opened and read in public at the office of the Princeton Township Committee, Branch Building, Princeton, N. J., on Aug. 21, at seven p.m., Standard Time.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Sincerbeaux and Moore, Engineers, and approved by the State Highway Commission, have been filed in the office of the said Engineers at 705 American Mechanic Building, Trenton, N. J., and Asbury Park Trust Co. Bldg., Asbury Park, N. J., and First National Bank Bldg., Princeton, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the Engineer on proper notice* and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Princeton Township Committee and must be accompanied by a certificate of surety and a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to Engineer.

By order of Princeton Township Committee.

ELLWOOD J. LAWRENCE,
Chairman.
MARTIN CLAUSEN,
Clerk.

*$10

Bids: Aug. 25.

Memorial Hospital

Butler, Pa.

Contractors who expect to submit proposals for the construction of the Butler County Memorial Hospital to be erected at Butler, Pa., and for which requests for proposals will be advertised shortly, are requested to send their names and addresses on or before noon of Friday, August 25, 1922, to the Butler County Memorial Hospital Committee, c/o Community Building, Butler, Pa., with the following information:

a. A list of buildings of similar character they have constructed within the past ten years.

b. Testimonials from the owners, committees in charge, or architects of such building that the work was completed satisfactorily by the contractor, or if a firm or corporation, by the present officers of such firm or corporation.

c. Any further information that the contractor may desire to furnish.

The committee in charge of said project desires this information in advance of the time actual proposals or bids are requested or submitted for the purpose of investigation and to the end that when bids are received the contract may be let promptly.

BUTLER COUNTY MEMORIAL HOSPITAL BUILDING COMMITTEE.

Bids: Sept. 7.

Sanitary Sewerage System and Sewage Disposal Plant

Spring Valley, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Spring Valley, Rockland County, New York, at the Village Offices, in the Village of Spring Valley, on the 7th day of September, 1922, at the hour of 8 P.M., Daylight Saving Time, for the construction of a sanitary sewerage system and sewage disposal plant. The work will in general consist of about

11.2 miles of 8-inch vitrified pipe sewers. 0 to 20 feet deep.

0.66 miles of 10-inch vitrified pipe sewers, 0 to 18 feet deep.

0.69 miles of 12-inch vitrified pipe sewers, 0 to 24 feet deep.

0.19 miles of 8-inch cast iron pipe sewers, 0 to 12 feet deep.

0.01 miles of 10-inch cast iron pipe sewers, 6 to 10 feet deep.

257 manholes, 0 to 22 feet deep.

Two small sewage lift stations.

One sewage disposal plant.

And various appurtenances of and extensions to the above-mentioned items.

Plans and specifications are on file and may be seen at the office of the Village Clerk, Spring Valley, N. Y., or at the office of the engineer, Waldo S. Coulter, 114 Liberty Street, New York, N. Y. Complete sets of information for bidders, form of contract, specifications and plans may be obtained from the engineer upon a deposit of $15, of which $7.50 will be refunded upon return of same in good condition by October 1, 1922.

Each bid must be accompanied by a certified check for Five Thousand Dollars ($5,000) payable unconditionally to the Treasurer of the Village of Spring Valley, which check must be presented with the bid as a guarantee that the bidder will within ten (10) days after receiving the award enter into and execute a contract for the performance of the work to be done under said contract. Said bid must be in a sealed envelope and marked "Proposal for a Sewerage System and Disposal Plant."

The successful bidder will also be required to furnish a Surety Company bond to the Village of Spring Valley in the amount of Twenty-five Thousand Dollars ($25,000) for the faithful performance of the work to be done under said contract, said bond to be approved by the Village Attorney.

In case of failure to execute the contract and furnish the required Surety Company bond within ten (10) days after due notice that the contract has been awarded to him, the successful bidder shall forfeit his deposit to the Village of Spring Valley as liquidated damages.

The right to reject any or all bids is reserved by the Board of Trustees. All of said work must be completed on or before December 7, 1923.

BOARD OF TRUSTEES OF THE VILLAGE OF SPRING VALLEY,
THEODORE B. BOHR,
President.
JOHN S. VAN ORDEN,
Village Clerk.

Bids: Sept. 5.

High School

Smyrna, Del.

Public notice is hereby given that the Board of Education, of the Smyrna Special School District and Delaware School Auxiliary Assocaition will meet at the office of the Delaware School Auxiliary Association, duPont Building, Wilmington, Delaware, on Sept. 5th, 1922, at the hour of 11 o'clock. Daylight Saving Time, and then and there will receive and open sealed proposals for furnishing labor and material to erect and complete a new High School Building for the Town of Smyrna, Kent County, State of Delaware.

The work for which bids or proposals are hereby invited will consist of semi-fireproof building constructed of brick and concrete walls, with timber and reinforced concrete floor and roof construction. The size of building is approximately 150 ft. x 80 ft. The building will be one and two stories high and contain about 14 Instruction Rooms and Auditorium.

Bids will be received for the erection complete of the entire building under one contract, or for the following divisions separately:

1—For the General Construction, which includes all masonry, carpentry, steel and iron, roofing, painting, and all work kindred thereto.

2—For Plumbing and Gas Fitting, and all work kindred thereto.

3—For Heating and Ventilating and all work kindred thereto.

4—For Electrical Work and all work kindred thereto.

The Board of Education and Delaware School Auxiliary Association reserve the right to accept or reject any or all proposals and to waive informalities at their discretion.

All bids must be in sealed envelopes addressed to the Board of Education of the Smyrna Special School District, care of Delaware School Auxiliary Association, du Pont Building, Wilmington, Delaware, endorsed "Proposals for (Naming the branch of work covered by bid)," with the name of the bidder.

No bid will be considered unless accompanied by a certified check to the order of the Board of Education of the Smyrna Special School District to the amount of 2% of the amount of the bid or a bid bond of like amount, binding the bidder to execute the contract if awarded him. The terms of the proposal with surety required are fixed by the specifications.

Copies of the plans, specifications will be on file in the office of the Delaware School Auxiliary Association, du Pont Building, Wilmington, Delaware, and at the Smyrna High School, Smyrna, Delaware, for the purpose of examination and estimating.

There will be a limited number of copies of the plans and specifications which will be loaned to the prospective bidders on deposit of a certified check to the order of Delaware School Auxiliary Association in the sum of $25.00. If plans and specifications are returned on or before the submission of estimates, the check will be returned, but should the plans and specifications be not returned, the deposit may become forfeited. Applications for the plans and specifications should be made to the Delaware School of Auxiliary Association, Room 8124 duPont Building, Wilmington, Delaware.

THE BOARD OF EDUCATION OF THE SMYRNA SPECIAL SCHOOL DISTRICT, SMYRNA, DEL.
W. O. HOFFECKER, President.
DELAWARE SCHOOL AUXILIARY ASSOCIATION.
DR. JOS. H. ODELL, President.

Bids: Aug. 25.

Construction of Main Sewer to Shorewood and Whitefish Bay.

Milwaukee, Wis.

Published by authority of the Metropolitan Sewerage Commission of the County of Milwaukee.

Sealed proposals for the construction of extensions to the Intercepting Sewer System of the County of Milwaukee, Wisconsin, will be received by the Metropolitan Sewerage Commission at its offices, 508 Market Street, Milwaukee, Wisconsin, until 2:00 o'clock p.m., August 25th, 1922, at which time and place the proposals will be publicly opened and read.

The work to be done embraces the building of approximately the following work:

484 lineal feet of 18 inch Siphon.

4,872 lineal feet of 42 inch Concrete Sewer.

Together with all manholes and other appurtenances.

The time allowed for completion of this contract shall be nine (9) months from the date of the engineer's notice to begin work.

Each proposal submitted must be accompanied by a cash deposit of, or, in lieu thereof, by a certified check drawn upon a National or State Bank or Trust Company, and to the order of the "Metropolitan Sewerage Commission of the County of Milwaukee" to the amount of Twenty five Hundred ($2,500.00) Dollars.

Specifications and blank forms of proposals can be obtained and detailed plans examined at the office of the Metropolitan Sewerage Commission, 508 Market Street, Milwaukee, Wis., and a full set of plans will be sent to any contractor upon receipt of Five ($5.00) Dollars. This sum will be returned upon surrender of the plans in good condition, if returned within thirty days after the award of the contract.

JOHN H. FOWLES,
Secretary.

Bids: Sept. 5.

Two Steel Swing Drawbridges

Fort Lauderdale, Fla.

Sealed proposals for the construction of two steel highway swing drawbridges will be received by the Board of County Commissioners of Broward County, Florida, until 11:00 A.M., September 5, A. D. 1922 and then publicly opened.

Bridge No. 1, is proposed across the Florida Intra-Coastal Canal on the line of the Pompano Beach Road, near Pompano, Florida.

Bridge No. 2 is proposed across the same waterway on the line of the Dania Beach Road, near Dania, Florida.

Specifications for materials and general requirements for superstructures, location and profile of the crossings, and detailed specifications for the abutments, are on file and may be examined at the office of the Clerk of the Board. A complete set of said specifications for both bridges will be furnished prospective bidders by the Engineer, for $5.00 to cover cost of preparation. This amount will not be returned.

Bidders shall submit with their proposal general plans, stress sheets and typical details of the superstructure, and detail of the center piers of the bridges covered by their proposal, subject to the requirements of the specifications furnished by the Engineer.

All bids shall be submitted upon blank forms which may be obtained free of charge from the Engineer.

Each proposal shall be accompanied by a certified check for $500.00 on each bridge, payable to the Chairman of the Board of County Commissioners, as evidence of good faith, and check of the successful bidder will be retained by the said Board as liquidated damages for the cost and expense incurred should the said bidder fail to enter into contract for the work with satisfactory bond as specified, within fifteen days after the acceptance of his proposal.

Any contract awarded under the terms of this advertisement will be subject to granting of permit by the War Department of the United States.

The right is reserved to separate or combine bids; to waive informalities in bids; and to reject any and all bids.

BOARD OF COUNTY COMMISSIONERS OF BROWARD COUNTY, FLORIDA.
H. G. WHEELER, Chairman.
FRANK A. BRYAN, Clerk.
Dated at Fort Lauderdale, Florida, this tenth day of August, A. D. 1922.
H. C. DAVIS, Engineer.

Bids: Aug. 23.

Improvement of Second Street

Henderson, Ky.

Sealed proposals for improvement of Second Street will be received by the Commissioner of Public Works and Property of Henderson, Kentucky, until 12 o'clock noon, standard time, on the 23rd day of August, 1922, for the improvement of Second Street of the City of Henderson, Henderson County, Kentucky, from the east margin of Water Street to the west line of the right-of-way of the Illinois Central Railroad Company, a distance of 5,115 feet to consist of paved carriageways, 18 feet in width on each side of the street, a curb along the center edge of these carriageways and at street intersections, catch basins with connections and inlets at intersections. Each proposal must contain the full name of every person or company interested in the same and must be accompanied by cash or a certified check made payable to the order of the City of Henderson, Kentucky, for a sum equal to five (5) per cent of the total amount of the bid, as a guarantee that contract will be entered into and proposals must be made on the complete work.

Requirements for bidding and instructions to bidders, form of proposal, contract, specifications, form of bond and plans may be obtained from the Commissioner of Public Works and Property of the City of Henderson or at the office of the engineers, Pearse Greeley & Hansen, 39 West Adams Street, Chicago, Illinois, upon receipt of fifteen dollars ($15.00) which sum so deposited will be refunded if said plans, specifications, etc., are returned in good condition within thrty days (30) after the opening of bids.

CITY COMMISSION OF HENDERSON, KENTUCKY,
By CLAY F. HALL.
Mayor.

OFFICIAL PROPOSALS

Bids: Aug. 30.

Highway and Street Paving

Little Rock, Ark.

Sealed bids will be received until ten a.m. of Wednesday August 30th, 1922 at the auditorium of the Board of Commerce, Little Rock, Arkansas, by the Board of Commissioners of Pulaski Road Improvement District Number Ten, for the construction of approximately forty miles of streets and roads. The principal items of construction are as follows:

422,000	sq.yd. Asphalt Surface.
244,000	sq.yd. Five inch Concrete Base.
38,000	tons Broken Stone, additional macadam foundation.
3,100	cu.yd. Concrete in culverts and bridges.
202,000	cu.yd. Excavation.
34,000	lin.ft. Concrete Curb.
185,000	lin.ft. Concrete Road Header.
79,000	Roadway ft. Concrete Road Header.

All proposals or bids must be accompanied by either a certified check drawn on a responsible bank or trust company, or, by a bidders bond made by a surety company authorized to do business in the State of Arkansas. The certified check or bidders bond must be payable to H. S. Turner, Secretary of the Board of Commissioners of Pulaski Road Improvement District Number Ten, for a sum not less than five per cent of the aggregate of the proposals made.

Plans and specifications, as well as additional information, may be secured from the Engineer.

The successful bidder will be required to furnish satisfactory surety construction bond in a sum equaling the amount of the contracts awarded him.

The right is reserved to accept or reject any and all proposals, and to waive informalities.

ROY L. THOMPSON,
Chairman.

H. S .TURNER,
Secretary,
216 Gazette Bldg.,
Little Rock, Ark.
D. A. MACCREA,
Chief Engineer,
215 Gazette Bldg.,
Little Rock, Ark.

Bids: Nov. 4.

Tenders for Plant

Melbourne, Australia.

Tenders are hereby invited for the supply, delivery, etc., of the following for the Morwell Power Scheme.

Copies of Tender Form and Specification will be available upon application to:

Office of the Bureau of Foreign & Domestic Commerce,
United States Department of Commerce,
First National Bank Building,
CHICAGO.

and

Office of the Bureau of Foreign & Domestic Commerce,
United States Department of Commerce,
734 Customs House,
NEW YORK CITY.

SPECIFICATION NO. 293. TRANSFORMERS, INDUCTION REGULATORS AND SWITCH-GEAR.

CHARGE:—£2: 2: 0 for the first 3 copies of Tender Form, Conditions of Contract, and specification complete. These charges will be returned on receipt of a bona-fide tender. A fourth copy and any further copies will be supplied for the sum of 10/6 each.

PRELIMINARY DEPOSIT: A Preliminary Deposit of £100: 0: 0 is to be lodged with Tender.

The Specification may be inspected at the above mentioned offices, and also at the office of:

The Commissioner for Australia in U. S. A.,
Room 3012,
61 Broadway,
NEW YORK.

The Commission does not bind itself to accept the lowest or any tender.

Tenders on prescribed form, properly endorsed and addressed, must be delivered to the undersigned in Melbourne not later than NOON, 4th November, 1922.

R. LIDDELOW,
Secretary,
STATE ELECTRICITY COMMISSION OF VICTORIA,
22-32 William Street,
MELBOURNE,
VICTORIA,
AUSTRALIA.

OFFICIAL PROPOSALS

Bids: Aug. 30.

Concrete Arch and Girder Bridge

Richland (Pulaski), N. Y.

Sealed proposals will be received at the office of the Town Clerk of the Town of Richland, in the Village of Pulaski, Oswego County, New York, until Wednesday, the 30th day of August, 1922, at 1:00 P.M., for the building of a reinforced concrete arch and girder bridge across the Salmon River in the said Town.

Plans and specifications may be seen at the office of

1. Mr. C. A. Jewell, Town Clerk, Pulaski, N. Y.
2. Concrete-Steel Engineering Co., Park Row Bldg., New York.

Copies of the plans and specifications, including form of proposal, may be obtained from the Concrete-Steel Engineering Co. upon making a deposit of $20.00, which will be refunded upon the return of the plans and specifications in good order.

Each proposal must be accompanied by an unconditional certified check on a national bank for 5% of the contract price, made payable to the order of the "Supervisor of the Town of Richland" as evidence of good faith, and to be forfeited to the Town as liquidated damages in case of failure on the part of the bidder to enter into contract for the execution of the work and to furnish a satisfactory surety bond as hereinafter stipulated. Bidders' certified checks will be returned after consideration of the bids, and the check of the successful bidder will be returned as soon as the contract is signed.

The successful bidder will be required to furnish a bond acceptable to the Town of Richland in a sum equal to 50% of the amount of the contract.

The blank form of proposal attached to the specifications shall be used in making out the bid.

The party or parties to whom the contract may be awarded will be required to execute the contract with surety within ten days from the date of service of notice to that effect, and in case of failure or neglect to do so, he or they will be considered as having abandoned it.

Envelopes containing proposal must have endorsed thereon:

"Proposal for Pulaski Bridge."

The right is reserved by the Town to accept any proposal, or to reject any or all proposals.

TOWN OF RICHLAND.
By JOHN BUSH,
Town Superintendent.

Bids: Aug. 29.

Drainage and Ditch Improvement Re-Advertised

Wooster, Ohio.

Notice is hereby given that sealed proposals for the construction of the JOINT WAYNE-HOLMES COUNTY DITCH IMPROVEMENT will be received up until twelve o'clock noon, Eastern Standard Time, on Tuesday, Aug. 29, 1922, at the office of the Secretary of the Joint Board of County Commissioners of Wayne and Holmes Counties at the Court House at Wooster, Ohio.

The work to be done consists of the draining and dredging of Killbuck Creek in Wayne and Holmes Counties, in all, the distance of One Hundred and Fifty-Six Thousand (156,000) feet.

The yardage of earth to be moved is estimated at about 1,780,000 cubic yards, consisting principally of dipper dredge work. The date of completion will be eighteen months from the date of awarding of contract.

A certified check in the amount of $10,000.00 payable to the Joint Board of County Commissioners of Wayne and Holmes Counties, Ohio, must accompany each proposal. Checks of unsuccessful bidders will be returned within ten days of the awarding of the contract.

The said board reserves the right to reject any or all bids. Plans, specifications and proposals are on file at the Secretary's office at the Court House, Wooster, Ohio, or same will be mailed upon application when same is accompanied by a deposit of $20.00, which will be refunded if plans are returned in good condition.

By order of the Joint Board of County Commissioners of Wayne and Holmes Counties.

CHAS. F. SCHOPF,
Secretary.

OFFICIAL PROPOSALS

Bids: Sept. 6.

Canal Water Power Development

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Wednesday, September 6th, 1922, at which place and hour they will be publicly opened and read, for the development of canal water power, pursuant to the provisions of Chapter 532 of the Laws of 1922, as follows:

A-3
CRESCENT POWER HOUSE,
COHOES, N. Y.

For constructing a power house and work incidental thereto, at Crescent Dam, Cohoes, N. Y.

Sheets 1 to 10 inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantity, proposal blanks forms of contract and bonds required, and other information for proposers, may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Eastern Division, Wedgeway building, Schenectady, N. Y.; at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division, at Rochester, N. Y.; at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposit of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provde suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE.
Superintendent of Public Works.

OFFICIAL PROPOSALS

Bids: Aug. 29.

State Road Work

Baltimore, Md.

Sealed proposals for building eight sections of State Highway, as follows:

ALLEGHENY COUNTY—Cont. A-21—One section of state highway from Cumberland toward Old Town for a distance of 3.0 miles—(concrete).

FREDERICK COUNTY—Cont. F-57—One section of state highway from Middletown toward Burkittsville, a distance of 4.0 miles—(concrete).

HOWARD COUNTY——Cont. HO-27—One section of state highway from Laurel toward Scaggsville for a distance of 2.0 miles—(Gravel).

HOWARD COUNTY—Cont. HO-30—One section of state highway from Wash. Blvd. near Savage toward Simpsonville, a distance of 2.0 miles—(Gravel).

ANNE ARUNDEL COUNTY—Cont. AA-25—One section of state highway from Eastport toward Bay Ridge for a distance of 1.0 miles—(Concrete).

CALVERT COUNTY—Cont. C-13—One section of state highway from Yoes Corner toward Broomes Island, a distance of 2.5 miles—(Gravel).

CHARLES COUNTY—Cont. CH-21—One section of state highway from Nanjemoy to Riverside, a distance of 3.9 miles—(Gravel).

ST. MARYS COUNTY—Cont. SM-20—One section of state highway from Chingville to Valley Lee, a distance of 4.0 miles—(Gravel).

Will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 m. on the 29th day of August, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 10th day of August, 1922.

JOHN N. MACKALL, Chairman.
L. H. STEUART, Secretary.

Bids: Aug. 29.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., advanced standard time, which is twelve o'clock noon eastern standard time on TUESDAY, the 29th day of AUGUST, 1922, for the improvement of highways in the following counties:

ERIE	(one highway:2.56)
FRANKLIN	(one highway:6.45)
HAMILTON	(one highway:3.57)
LEWIS	(one highway:6.47)
ORANGE	(one highway:4.06)
SARATOGA	(one highway:5.27)
WASHINGTON	(one highway:6.48)
WYOMING	(one highway:0.59)

ALSO FOR THE REPAIR OF THE FOLLOWING:

(COMPLETION)

(LIVINGSTON)	(one contract:2.91)
MADISON	(one contract:2.36)
OSWEGO	(one contract:2.00)
RENSSELAER	(one contract:1.14)
STUBEN	(one contract:2.50)

Maps, plans, specifications and estimates may be seen and proposals forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or repaired. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "GENERAL INFORMATION FOR BIDDERS" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.

J. C. FINCH,
Secretary.

OFFICIAL PROPOSALS

Bids: Sept. 8.

Highway Route No. 16
Section No. 4

Somerville, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the County of Somerset for the following: The construction of State Highway Route No. 16, Section No. 4, from Pluckamin to Somerville, consisting of 67,749 Square Yards "Surface Type C," one course Reinforced Cement Concrete Pavement, with Drains and Appurtenances.

Work is to be performed under County Reimbursement Act, Chapter 183, laws of 1918, and amended by Chapter 317, laws of 1920.

Bids will be received at the Court House at Somerville, on

FRIDAY, SEPTEMBER 8th, 1922,

at 11:00 a.m., Daylight Saving Time (10 A.M. Eastern Standard Time).

Drawings, specifications and form of contract and bond for the proposed work are on file in the office of H. C. Van Emburgh, County Engineer, at the Court House, Somerville, and in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of ten dollars ($10.00) upon application to H. C. Van Emburgh, County Engineer. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, enclosed in sealed envelopes, addressed to the Board of Chosen Freeholders of the County of Somerset, and bearing the name and address of the bidder and the name and section of the route on the outside. Bids must be accompanied by a certified check drawn to the order of Edwin Garretson, County Treasurer, for not less than ten per cent (10 per cent) of amount of the bid, provided that said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form will be furnished on application to H. C. Van Emburgh, County Engineer.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a statement of equipment properly filled out.

By order of a resolution of the Board of Chosen Freeholders of the County of Somerset, passed at a meeting held on Friday, August 4, 1922.

WM. S. WOODRUFF,
Clerk.

Bids: Aug. 28.

County Road Letting

Waukegan, Ill.

Notice is hereby given that sealed proposals will be received at the office of the undersigned, at the Court House, Waukegan, Illinois, until 1:30 o'clock p.m., (Standard Time), August 28th, 1922, by the Road and Bridge Committee, for the improvement of Section X-15d (Grand Avenue, from Gurnee Westerly to the Lake Villa Road pavement) with a Portland cement concrete roadway; earth shoulders; culverts; drainage, etc.

Length of pavement—4.742 miles.

50,211 square yards of pavement.

Certified check for five per cent of amount of proposal, payable to Roy W. Bracher, County Treasurer, shall accompany each bid.

Right is reserved to reject any or all bids.

Dated at Waukegan, Illinois, this 10th day of August, A. D. 1922.

CHAS. E. RUSSELL,
Co. Supt. of Highways.

Sewer Contract to Sublet

Locust Valley, N. Y.

Will let sub-contracts for 2½ miles of sewers located 25 miles out of New York. Box 242, Locust Valley, L. I., N. Y.

OFFICIAL PROPOSALS

Bids: Sept. 1.

Highway Work

Somerville, N. J.

Notice is hereby given that sealed bids will be received by the County of Somerset for the following: The construction of State Highway Route No. 9, Section 7A, from Grove Street, through East Main Street, North Gaston Avenue and Union Avenue to the easterly borough line of Somerville, consisting of 12,450 sq.yd. of "Surface Type C" one course reinforced cement concrete pavement with intersections, drains and appurtenances.

Work is to be performed under County Reimbursement Act, Chapter 183, Laws of 1918, and amended by Chapter 317, Laws of 1920.

Bids will be received at the Court House at Somerville on Friday, Sept. 1st, 1922, at 10.30 a.m., Daylight Saving Time, (Eastern Standard Time, 9.30 a.m.).

Drawings, specifications and form of contract and bond for the proposed work are on file in the office of H. C. Van Emburgh, County Engineer, at Court House, Somerville, and in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of ten dollars ($10.00) upon application to H. C. Van Emburgh, County Engineer. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, enclosed in sealed envelopes, addressed to the Board of Chosen Freeholders of the County of Somerset and bearing the name and address of the bidder and the name and section of the route on the outside. Bid must be accompanied by a certified check drawn to the order of Edwin Garretson, County Treasurer, for not less than ten per cent (10 per cent) of amount of the bid, provided that said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form will be furnished on application to H. C. Van Emburgh, County Engineer.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a statement of equipment properly filled out.

By order of a resolution of the Board of Chosen Freeholders of the County of Somerset passed at a meeting held on Friday, August 4th, 1922.

WM. S. WOODRUFF, Clerk.

Bids: Sept. 5.

Storm Sewer

Plainfield, N.J.

Bids will be received by the Common Council of the City of Plainfield, N. J., at the City Hall on Tuesday, September 5, 1922, at 8:30 p.m. (daylight saving time) for constructing about 1,000 lin.ft. of 7 ft. — 0 in. x 2 ft. — 5 in. reinforced concrete storm sewer and appurtenances.

Amount of certified check, $1,000.00.

Amount of surety company bond, 100% of contract price.

Common Council reserves the right to reject any or all bids or to waive defects in bids.

Plans and specifications may be obtained from City Engineer.

ALEXANDER W. VARS,
City Engineer.

Dated August 17, 1922.

Bids: Oct. 10.

Steam Turbine and Accessories

New Orleans, La.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans up to 12 o'clock, noon, Tuesday, October 10th, 1922, for furnishing one 6,000 kw. STEAM turbine and accessories.

Specifications and blank forms of proposals may be obtained at Room 303, No. 526 Carondelet Street, New Orleans.

The right is reserved to reject any or all bids.

A. G. MOFFAT,
Secretary.

GEO. G. EARL,
General Superintendent.
Aug. 10th, 1922.

OFFICIAL PROPOSALS

Bids: Aug. 31.

Sewage Treatment Works Contract A

Marion, Ohio

Sealed proposals will be received at the office of the Director of Public Service in the City Hall, Marion, Ohio, until 12 o'clock noon (Official Marion Time), August 31st, 1922, and then publicly opened and read, for the construction of Sewage Treatment Works, Contract A.

The work contemplated comprises the construction of grit chambers, two-story settling tanks, pumping station, dosing tanks, trickling filters, final settling tanks, sludge-drying beds, buildings and appurtenances. The following quantities give a general idea of the amount and character of the work to be done:

Excavation	46,000 cu.yd.
Concrete	8,750 cu.yd.
Steel Reinforcement	250 tons
C. I. Piping	225 tons
Stone for Trickling Filters..	22,500 cu.yd.
Buildings	50,000 cu.ft.

Copies of plans and specifications and blank proposals may be obtained at the office of the Director of Public Service, City Hall, Marion, Ohio, or at the office of George B. Gascoigne, 648 Leader-News Building, Cleveland, Ohio, after August 16th, 1922. A deposit of Twenty Dollars ($20.00) will be required for each set of plans and specifications taken from the above offices. If a bid is submitted this deposit will be refunded upon the return of said plans and specifications in good condition. Similar deposits will be required for additional sets of plans and specifications taken from the above offices, there being no refund for their return. All checks for said plans and specifications shall be made payable to the City of Marion.

The proposals shall contain the full name and address of the party or parties making the same and all persons interested therein, and shall be accompanied by a proposal bond signed by a surety company authorized to do business in the State of Ohio or by a certified check on a solvent bank located in Marion for Ten Thousand Dollars ($10,000.00) made payable to the City of Marion, as surety that if the bid be accepted a contract will be entered into and the performance of it properly secured.

No proposal will be entertained unless made on the blanks furnished by the Director of Public Service and delivered at the office of the Director of Public Service in the City Hall, Marion, Ohio, previous to 12 o'clock noon (Official Marion Time) on the day specified.

The City, through its Director of Public Service, reserves the right to reject any or all bids, to waive any informalities in the bids received, and to accept any bid which is deemed most favorable to the City of Marion, Ohio.

THE CITY OF MARION, OHIO.
E. A. SCHULTZ,
Director of Public Service.

Bids: Aug. 28.

Sewer, Manholes, etc.

Portsmouth, Va.

Sealed proposals will be received at the office of the City Manager, Municipal Building, this City, until 3 p.m. August 28th, 1922, for the construction of approximately 10,218 lineal feet of 8 inch T.C. sewer, 1,228 lineal feet of 102 inch T.C. sewer, 447 lineal feet of 10 inch "Class B" Cast Iron Pipe (American Water Works Std.), manholes 34, drop manholes 5, flush boxes 15, 12,150 lineal feet of 4 inch T.C. (house connections), 3,000 feet B.M. Creosoted short leaf Y.P. lumber, together with appurtenant structures, in streets and alleys of West Park View and Park View.

Certified check for $2,500.00. Bond 33⅓%.

Plans, profiles, specifications, etc., at the City Engineer's Office.

The right is reserved to reject any or all bids.

JOS. F. WEAVER JR.
City Engineer.

DITCHING CONTRACT WANTED

Anyone having work to sublet, suitable for a 30-ft. span Bay City Dryland Dredge.

Write to
N. B. MILLER, Milan, Tenn.

OFFICIAL PROPOSALS

Bids: Aug. 31.

Main Sanitary Sewer Contract B

Marion, Ohio

Sealed proposals will be received at the office of the Director of Public Service in the City Hall, Marion, Ohio, until 12 o'clock noon (Official Marion Time), August 31, 1922, and then publicly opened and read, for the construction of Main Sanitary Sewer—Contract B.

The following quantities give a general idea of the amount and character of the work to be done:

8,400 lin.ft. of 42 in. circular sewer.
1,060 lin.ft. of 39 in. circular sewer.
20 manholes.
2 special concrete structures.

Copies of plans and specifications and blank proposals may be obtained at the office of the Director of Public Service, City Hall, Marion, Ohio, or at the office of George B. Gascoigne, 648 Leader-News Building, Cleveland, Ohio, after August 16, 1922. A deposit of Ten Dollars ($10.00) will be required for each set of plans and specifications taken from the above offices. If a bid is submitted this deposit will be refunded upon the return of said plans and specifications in good condition. Similar deposits will be required for additional sets of plans and specifications taken from the above offices, there being no refund for their return. All checks for said plans and specifications shall be made payable to the City of Marion.

The proposal shall contain the full name and address of the party or parties making the same and all persons interested therein, and shall be accompanied by a proposal bond signed by a surety company authorized to do business in the State of Ohio or by a certified check on a solvent bank located in Marion for Five Thousand Dollars ($5000.00) made payable to the City of Marion, as surety that if the bid be accepted a contract will be entered into and the performance of it properly secured.

No proposal will be entertained unless made on the blanks furnished by the Director of Public Service and delivered at the office of the Director of Public Service in the City Hall, Marion, Ohio, previous to 12 o'clock noon (Official Marion Time) on the day specified.

The City, through its Director of Public Service, reserves the right to reject any or all bids, to waive any informalities in the bids received, and to accept any bid which is deemed most favorable to the City of Marion, Ohio.

THE CITY OF MARION, OHIO.
E. A. SCHULTZ,
Director of Public Service.

Bids: Sept. 5.

Bridges and Culverts

Augusta, Ga.

SEALED PROPOSALS will be received by the Streets and Drains Committee of the City Council of Augusta until 12 o'clock (noon) Tuesday, September 5, 1922, and at that time publicly opened in the Mayor's office, for constructing the following bridges or culverts:

Greene Street bridge, over the Third Level of the Canal, near the Margaret Wright Hospital. Clear span 20 feet; length, 100 feet or more.

Jackson (8th) Street bridge, over the Third Level of the Canal. Clear span 20 feet; length approximately 60 feet.

Plans and specifications can be obtained from the undersigned after August 20th, upon depositing $10.00 as a guarantee of the safe return of plans and specifications.

All bids must be accompanied by a check of 5% of the amount named in bid.

Address all bids to J. W. Westmoreland, Clerk of Council.

The City reserves the right to reject any and all bids.

W. H. WISE,
City Engineer and Commissioner of
Public Works.

Say this Over and Over
Again to Yourself
Swart Service Really Serves

HARMON V. SWART
Contract Bonds
Compensation Insurance
92 William St., New York

OFFICIAL PROPOSALS

Bids: Aug. 30.

State Highway Construction

Raleigh, N. C.

Sealed bids for the construction of the following projects will be received by the North Carolina State Highway Commission at Raleigh, N. C., until 10 a.m., on the 30th day of August, 1922, when they will be opened and read:

Hard surface (Concrete or Asphaltic Paving projects), including grading, reinforced concrete or cast iron pipe, structures, etc.

Project No.	County	Length (Miles)
184	Pitt	7.14
328	Columbus	7.03
412	Durham	8.80
460	Orange	9.87
528	Davidson	10.24
589	Rockingham	9.81
590	Rockingham	2.10
608	Anson	7.88
615	Cabarrus	3.88
658	Mecklenburg	9.55
761	Surry	2.22
765	Surry	3.40
785	Wilkes	2.52
821	Cleveland	1.58
822	Cleveland	10.47
901A	Buncombe	7.57
876	Rutherford	4.83

Topsoil, Sand Clay, or Gravel projects, including grading, drainage pipe, structures, etc.

106	Bertie	7.12
157A	Martin	12.41
157B	Martin	12.36
712	Ashe	11.06
784	Wilkes	4.97
847	McDowell	3.84
882	Rutherford	15.80

MACADAM PROJECTS

Penetration or waterbound Macadam Projects, including drainage pipe, structures, etc.

380	Pender	8.98

BRIDGE PROJECTS

317	Brunswick	1-140 ft. steel through span.
589	Rockingham	15-40 ft. spans and 1-150 ft. arch.
673	Davidson	5-150 ft. R.C. Arch Spans.
848	McDowell	4-45 ft. R.C. Deck Girders.
858	Mitchell	1-125 ft. R.C. Arch and 2-45 ft. Deck Girders.

Specifications, proposal forms, etc., may be obtained from the State Highway Commission at Raleigh, N. C.

Plans may be seen in the Raleigh office, or in the offices of the District Engineer.

Bridge plans may be obtained from the State Highway Commission at Raleigh, N. C., upon Payment of Five ($5.00) dollars per set.

The right is reserved to reject any or all bids.

By order of the North Carolina State Highway Commission.

Bids: Aug. 28.

Concrete Road Construction

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Council of the Borough of Freehold, N. J., for the reconstruction of Throckmorton Street and opened and read in public in the Municipal Building on Monday, August 28th, 1922, at eleven a.m. day light saving time.

The work consists of approximately 3,000 cu.yd. of excavation; 10,000 sq.yd. of reinforced concrete and 4,000 lin.ft. of concrete curb.

Drawings and specifications for the proposed work, prepared by Chas. A. Niles, Borough Engineer, are on file at the office of said Engineer at the Municipal Building, Freehold, N. J., and plans and proposal forms may be obtained upon the deposit of $5.00, which amount will be refunded upon return of the plans before the time specified for opening the bids.

All bids must be submitted on the forms furnished by the Borough, enclosed in a sealed envelope, bearing the name and address of the bidder, the name of the proposed work, and addressed to the Mayor and Council of the Borough of Freehold. All bids must be accompanied by a certified check for a sum not less than 10% of the amount bid and a surety company certificate stating that said surety company will provide the bidder with the required bond.

The Borough Council reserves the right to reject any or all bids if deemed to the best interests of the Borough to do so.

H. M. BURKE,
Borough Clerk.

OFFICIAL PROPOSALS

Bids: Sept. 6.

State Highway Work

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the County of Monmouth for the following:

Construction of State Highway Route No. 4, Section No. 5A, Maple Avenue, Red Bank, estimated amount of sheet asphalt surface on a portland cement concrete foundation is 27,307 square yards.

Work is to be performed under County Reimbursement Act, Chapter 183, laws of 1918, and amended by Chapter 317, laws of 1920.

Bids will be received at the Court House at Freehold, N. J., on Wednesday, September 6th, 1922, at 11:00 M. Daylight Saving Time.

Drawings, specifications and form of contract and bond for the proposed work are on file in the office of George K. Allen, Jr., County Engineer, at Red Bank, N. J., and in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of ten dollars ($10.00) upon application to George K. Allen, Jr., County Engineer. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, enclosed in sealed envelopes, addressed to the Board Chosen Freeholders of the County of Monmouth and bearing the name and address of the bidder and the name and section of the route on the outside. Bid must be accompanied by a certified check drawn to the order of C. Asa Francis, County Treasurer, for not less than ten per cent (10 per cent) of amount of the bid, provided that said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form will be furnished on application to George K. Allen, County Engineer.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a statement of equipment properly filled out.

By order of a resolution of the Board of Chosen Freeholders of the County of Monmouth passed at a meeting held on Wednesday, May 24th, 1922.

WILLIAM A. STEVENS.
Clerk.

Bids: Aug. 28.

Sewer

Portsmouth, Va.

Sealed proposals will be received at the office of City Manager Municipal Building, this city, until 3 p.m. August 28th, 1922, for the construction of approximately 771 linear feet of 12 inch T.C. sewer, 365 linear feet of 15 inch T.C. sewer, 290 linear feet of 18 inch T.C. sewer, 240 linear feet of 21 inch T.C. sewer, 170 linear feet of 24 inch T.C. sewer, 260 linear feet of 27 inch T.C. sewer, 809 linear feet of 36 inch sewer, 1,065 linear feet of 42 inch sewer, 555 linear feet of 48 inch sewer, manholes 13, inlet catch basins 11, inlet boxes 15, together with all appurtenant structures, in West High St. et. al.

Plans, profiles, specifications, etc., at the office of City Engineer.

The right is reserved to reject any or all bids.

Certified check $2,500. Bond 33⅓%.

JOS. E. WEAVER JR.,
City Engineer.

Bids: Aug. 30.

Artesian Well Connections, Pumping Plant and Electric Equipment

Madison, N. J.

For estate of H. McK. Twombly near Madison, N. J., specification and plans may be seen at office of the Engineers on and after Monday August 21st.

Bids will be received by the Engineers up to 12 noon Wednesday, August 30th, 1922.

TRIBUS AND MASSA,
Consulting Engineers,
15 Park Row, New York.

OFFICIAL PROPOSALS

Bids: Aug. 22.

Boardwalk Construction

Long Branch, N. J.

Public notice is hereby given that sealed proposals are invited and will be received by the Board of Commissioners of the City of Long Branch, New Jersey, for the renewal and widening of about forty-three hundred (4300) lineal feet of boardwalk extending from a point near Morris Avenue northwardly to Sea View Avenue.

Said bids will be opened and read at a regular meeting of the Board of Commissioners held at City Hall on Tuesday evening, August 22, 1922, at 8 o'clock p.m. (daylight saving time) or as soon thereafter as the matter can be presented.

Drawings and specifications for the proposed work prepared by J. W. Seaman, City Engineer, have been filed in the office of the City Clerk and at the office of the Engineer, at 192 Broadway, Long Branch, New Jersey, and may be procured by prospective bidders upon a deposit of Ten Dollars ($10.00) which will be refunded upon the return of the plans and specifications at or before the time the bids are received.

Bids must be made on the standard proposal forms in the manner prescribed therein and required by the specifications and must be enclosed in sealed envelopes bearing the name and address of the bidder and marked, "Bids for re-building boardwalk," addressed to Frank C. Quinn, City Clerk, and must be accompanied by a certified check for not less than ten per cent (10%) of the amount bid upon proposed work as stated in the proposal, drawn to the order of Frank L. Howland, City Treasurer, or cash in equal amount and to be delivered at the place and at the hour above named.

Dated, Long Branch, N. J., August 10, 1922.

FRANK C. QUINN,
City Clerk.

Bids: Aug. 28.

Water Mains, Hydrants, Etc.

Sibley, Ill.

The Village of Sibley, Ill. has voted a bond issue for the construction of nine blocks of water mains and the necessary hydrants, etc., to complete the job, also for a new storage battery and switchboard for their electric plant. Bids will be received on the above Monday Evening, August 28th. Further particulars may be secured from S. M. Waldon, Village Treasurer, Sibley, Ill.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, 616 Army Building, New York City.—SEALED PROPOSALS will be received here until 11 a.m., Eastern Standard Time, August 19, 1922, and then opened, for dredging in Passaic River, N. J. Further information on application.

U. S. ENGINEER OFFICE, BUFFALO, N. Y.—SEALED PROPOSALS will be received here until 11 a.m. (Eastern standard time) Aug. 25, 1922, and then opened, for constructing Office-Storehouse Building and six Operating Houses at Black Rock Lock and Storehouse at Ferry Street Bridge, Buffalo, N. Y. Further information on application.

UNITED STATES ENGINEER OFFICE, NORFOLK, VA.—Sealed proposals will be received here until 12 m., August 23, 1922, and then opened, for dredging on the 40-foot channel, Norfolk Harbor, Va. Further information on application.

SEALED PROPOSALS for constructing a concrete road at Picatinny Arsenal, Dover, N. J., will be received and publicly opened at 11 a.m. daylight saving time, Sept. 1, 1922 at Constructing Quartermaster's Office, Room 510, 39 Whitehall St., N. Y. C., N. Y. Information at above address.

U. S. ENGINEER OFFICE, Mobile, Ala.—Sealed proposals will be received here until 11 o'clock a.m., September 5, 1922, and then opened, for dredge pontoons and discharge pipe for the U. S. 20-inch hydraulic pipe-line dredge Wahalak. Further information on application.

UNITED STATES ENGINEER OFFICE, Norfolk, Va.—Sealed proposals will be received here until 12 m., September 14, 1922, and then opened, for dredging in Pagan River, Va. Further information on application.

U. S. GOVERNMENT

PROPOSALS FOR SPURDIKE CONSTRUCTION.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9:00 a.m., Sept. 5, 1922, and then opened, for construction of spurdikes at Southwest Pass, Mississippi River. Further information on application.

PROPOSALS FOR SPURDIKE CONSTRUCTION.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9:00 a.m., Sept. 5, 1922, and then opened, for construction of spurdikes at Head of Passes, Mississippi River. Further information on application.

PROPOSALS FOR BULKHEAD CONSTRUCTION.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9:00 a.m., Sept. 5, 1922, and then opened, for bulkhead construction at Southwest Pass, Mississippi River. Further information on application.

PROPOSALS FOR STONE.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9:00 a.m., Sept. 7, 1922, and then opened, for furnishing and delivering stone for Southwest Pass, Head of Passes, and South Pass, Mississippi River. Further information on application.

PROPOSALS FOR STEEL OIL BARGES.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 8:00 a.m., Sept. 5, 1922, and then opened, for construction and delivery of two 4,000-barrel steel oil barges in the Mississippi River, at New Orleans, La. Further information on application.

PROPOSALS FOR SAND AND GRAVEL—U. S. Engineer Office, 329 Customhouse, New Orleans, La., Sealed proposals will be received here until 9:00 A.M., Sept. 1, 1922, and then opened, for furnishing sand and gravel for Southwest Pass, Mississippi River. Further information on application.

U. S. ENGINEER OFFICE, Providence, R. I. Sealed proposals will be received here until 11 o'clock A.M., Eastern Standard Time, Aug. 28, 1922, and then opened for dredging in Bridgeport Harbor, Conn. Further information on application.

U. S. ENGINEER OFFICE, 815 Witherspoon Bldg., Philadelphia, Pa. Bids are wanted until September 6, 1922, for dredging in Delaware River on Bellevue, Cherry Island and Liston ranges. Further information on application.

U. S. ENGINEER OFFICE, Providence, R. I. Sealed proposals will be received here until 11 o'clock A.M., Eastern Standard Time, August 31, 1922, and then opened, for dredging in Pawtucket (Seekonk) River, R. I. Further information on application.

U. S. ENGINEER OFFICE, BALTIMORE, MD., Sealed proposals will be received here until 1 p.m., daylight saving time, August 21, 1922, and then opened for dredging in Baltimore Harbor and Channels, Md. Further information on application.

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in Hudson River, N. Y., will be received here until 12 M., September 5, 1922, (daylight saving time) and then opened. Further information on application.

PROPOSALS AND BIDS on the construction of two stables, brick 61 feet by 112 feet each at Plattsburg Barracks, N. Y. will be received at the office of the Construction Quartermaster at said barracks up to 10:00 a.m. standard time, August 30, 1922, at which time the said bid will be opened. Plans and specifications for said project are on exhibition at the office of the Quartermaster, Plattsburg Barracks, N. Y. and at the office of the Quartermaster General, Washington, D. C. Copies of said plans and specifications will be supplied upon request accompanied by a deposit of twenty-five dollars. Said deposit will be refunded on the return of plans and specifications in good order. Joseph H. Dent, Captain Quartermaster Corps Constructing.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Aug. 28	Shakopee, Minn.	Aug. 17
Aug. 28	Sibley, Ill.	Aug. 17
Aug. 29	Brooklyn, N. Y.	Aug. 24
Aug. 29	Charlotte, N. C.	Aug. 10
Aug. 29	St. George, N. Y.	Aug. 24
Aug. 29	New York, N. Y.	Aug. 24
Aug. 30	Columbus, Neb.	Aug. 24
Aug. 30	Scituate, R. I.	Aug. 3
Aug. 30	Madison, N. J.	Aug. 17
Aug. 30	Tredford, Neb.	Aug. 24
Aug. 30	Dinuba, Calif.	Aug. 24
Aug. 30	Villisca, Ia.	Aug. 24
Sept. 1	Royalton, Minn.	Aug. 24
Sept. 8	Port Dover, Ont.	Aug. 24
Sept. 9	Voorheesville, N. Y. Adv. Aug. 24.	Aug. 24
Sept. 15	Grants Pass, Ore.	July 27
Sept. 15	Plaquemine, La.	Aug. 3
Sept. 25	Tulsa, Okla. Adv. Aug. 24.	Aug. 24
Oct. 1	Ponchatoula, La.	Aug. 3

SEWERS

Bids Close		See Eng. News-Record
Aug. 28	Stewart, Minn.	Aug. 17
Aug. 28	Long Island City, N. Y.	Aug. 24
Aug. 28	Portsmouth, Va.	Aug. 24
Aug. 28	Montreal, Que.	Aug. 24
Aug. 29	South Bend, Ind. Adv. Aug. 24.	Aug. 24
Aug. 29	Newark, N. J.	Aug. 10
Aug. 29	Havana, Ill.	Aug. 24
Aug. 30	Brooklyn, N. Y.	Aug. 24
Aug. 31	Marion, O. Adv. Aug. 17 and 24.	Aug. 17
Aug. 31	Two Rivers, Wis.	Aug. 24
Sept. 4	Redwood City, Calif.	Aug. 17
Sept. 5	Plainfield, N. J. Adv. Aug. 17 and 24.	Aug. 17
Sept. 6	Gardnerville, Nev.	Aug. 17
Sept. 6	Little Falls, N. J.	Aug. 24
Sept. 6	Rye, N. Y. Adv. Aug. 24.	Aug. 24
Sept. 7	Phila., Pa. Adv. Aug. 24.	Aug. 24
Sept. 7	Spring Valley, N. Y. Adv. Aug. 17 and 24.	Aug. 17
Sept. 8	Port Dover, Ont.	Aug. 24
Sept. 15	Eveleth, Minn.	Aug. 17
Sept. 19	Newark, N. J.	Aug. 24

BRIDGES

Bids Close		See Eng. News-Record
Aug. 28	Maynard, O.	Aug. 17
Aug. 29	Wellington, New Zealand	July 13
Aug. 29	Alabama	Aug. 24
Aug. 29	Bessemer, Mich.	Aug. 24
Aug. 30	Newton, Ill.	Aug. 17
Aug. 30	Richland, N. Y. Adv. Aug. 17 and 24.	Aug. 17
Aug. 30	North Carolina	Aug. 17
Aug. 30	Quebec	Aug. 24
Aug. 30	Marine City, Mich.	Aug. 24
Aug. 31	Oroville, Calif.	Aug. 24
Sept. 1	Knoxville, Tenn.	July 27
Sept. 1	Ohio	Aug. 24
Sept. 2	Bagby, Calif.	Aug. 24
Sept. 5	Houston, Tex.	Aug. 10
Sept. 5	Ft. Lauderdale, Fla. Adv. Aug. 17 and 24.	Aug. 17
Sept. 5	Augusta, Ga.	Aug. 17
Sept. 5	Greenfield, Ind.	Aug. 17
Sept. 5	Williamsport, Pa.	Aug. 24
Sept. 5	Stockton, Calif.	Aug. 24
Sept. 7	New Braunfels, Tex. Adv. Aug. 17 and 24.	Aug. 17
Sept. 7	Savannah, Ga.	Aug. 17
Sept. 7	Nashville, Tenn.	Aug. 3
Sept. 8	Vicksburg, Miss. Adv. Aug. 24.	Aug. 24
Sept. 11	California	Aug. 24
Sept. 14	Tennessee Adv. Aug. 24.	Aug. 24
Oct. 1	Siam	July 13
Oct. 31	Sydney, Australia	Jan. 12
Sept. 1, 1923	Sydney, New South Wales, Australia	Aug. 3

DAM

Bids Close		See Eng. News-Record
Sept. 5	Beacon, N. Y. Adv. Aug. 24.	Aug. 24

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Aug. 28	Biggs, Calif.	Aug. 17
Aug. 29	Wooster, O. Adv. Aug. 17 and 24.	Aug. 17
Aug. 29	Olivia, Minn.	Aug. 24
Aug. 31	Grenada, Miss.	Aug. 24
Aug. 31	Garner, Ia.	Aug. 24
Sept. 1	Colorado Springs, Colo.	Aug. 24
Sept. 4	Jeanerette, La.	Aug. 24
Sept. 7	Aberdeen, S. D.	Aug. 24

STREETS AND ROADS

Bids Close		See Eng. News-Record
Aug. 26	New Albany, Ind.	Aug. 24
Aug. 28	California	Aug. 10
Aug. 28	Crown Point, Ind.	Aug. 24
Aug. 28	Youngsville, Pa.	Aug. 17
Aug. 28	Waukegan, Ill.	Aug. 17
Aug. 28	Waterloo, N. Y. Adv. Aug. 17 and 24.	Aug. 17
Aug. 28	Freehold, N. J. Adv. Aug. 17 and 24.	Aug. 17
Aug. 28	Greenfield, O.	Aug. 17
Aug. 28	Cleveland Heights (Warrensville P. O.), O.	Aug. 24
Aug. 28	Quebec	Aug. 24
Aug. 28	Montreal, Que.	Aug. 24
Aug. 29	Connecticut Adv. Aug. 24.	Aug. 24
Aug. 29	Maryland Adv. Aug. 17 and 24.	Aug. 17
Aug. 29	New York Adv. Aug. 17 and 24.	Aug. 17
Aug. 29	Michigan	Aug. 17
Aug. 29	El Dorado, Kan.	Aug. 10
Aug. 29	St. George, N. Y.	Aug. 24
Aug. 29	Michigan	Aug. 24
Aug. 29	Coburg, Ont.	Aug. 24
Aug. 29	West View, Pa.	Aug. 24
Aug. 29	Alabama	Aug. 24
Aug. 30	Newburgh, N. Y. Adv. Aug. 24.	Aug. 24
Aug. 30	North Carolina	Aug. 3
Aug. 30	North Carolina	Aug. 10
Aug. 30	Little Rock, Ark. Adv. Aug. 10 to 24.	Aug. 10
Aug. 30	Michigan	Aug. 17
Aug. 30	North Carolina Adv. Aug. 17 and 24.	Aug. 17
Aug. 30	Columbus, O.	Aug. 17
Aug. 30	Wisconsin	Aug. 24
Aug. 30	Brooklyn, N. Y.	Aug. 24
Aug. 31	Sacramento, Calif.	Aug. 17
Aug. 31	New York, N. Y.	Aug. 24
Aug. 31	Saline, Kan.	Aug. 24
Aug. 31	Oroville, Calif.	Aug. 24
Aug. 31	Michigan	Aug. 24
Sept. 1	Georgia	Aug. 17
Sept. 1	St. George, S. C.	Aug. 17
Sept. 1	Blue Earth, Minn.	Aug. 17
Sept. 1	Wellington, Kan.	Aug. 17
Sept. 1	Somerville, N. J. Adv. Aug. 10 to 24.	Aug. 17
Sept. 1	Long Island City, N. Y.	Aug. 24
Sept. 1	Ohio	Aug. 24
Sept. 1	Cleveland, O.	Aug. 24
Sept. 1	Valley Falls, Kan.	Aug. 24
Sept. 1	Wauwatosa, Wis.	Aug. 24
Sept. 1	Dunbar, Pa.	Aug. 24
Sept. 2	Lincoln, Neb.	Aug. 24
Sept. 5	Washington	Aug. 10
Sept. 5	Spencer, Ind.	Aug. 24
Sept. 5	New Jersey Adv. Aug. 24.	Aug. 24
Sept. 5	Oskaloosa, Ia.	Aug. 24
Sept. 5	Quebec	Aug. 24
Sept. 5	Marshall, Minn.	Aug. 24
Sept. 5	Fresno, Calif.	Aug. 24
Sept. 5	Yuba City, Calif.	Aug. 24
Sept. 5	Safety Harbor, Fla.	Aug. 24
Sept. 6	Stockton, Calif.	Aug. 24
Sept. 6	Albion, Ind.	Aug. 24
Sept. 6	Goshen, Ind.	Aug. 24
Sept. 6	Red Bank, N. J. Adv. Aug. 17 and 24.	Aug. 17
Sept. 8	Somerville, N. J. Adv. Aug. 17 and 24.	Aug. 17
Sept. 11	Crescent City, Calif.	Aug. 17
Sept. 12	Mound City, Kan.	Aug. 24
Sept. 12	Bridgeton, N. J. Adv. Aug. 24.	Aug. 24
Sept. 14	Mobile, Ala. Adv. Aug. 24.	Aug. 24
Sept. 14	Tennessee	Aug. 24
Sept. 18	Charleston, Miss. Adv. Aug. 24.	Aug. 24
Sept. 19	New Orleans, La.	July 6
Sept. 29	Tulsa, Okla.	Aug. 24

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Sept. 1	Long Island City, N. Y.	Aug. 17
Sept. 1	Phila., Pa.	Aug. 24
Sept. 6	Cohoes, N. Y. Adv. Aug. 17 and 24.	Aug. 17

BUILDINGS

Bids Close		See Eng. News-Record
Aug. 28	Asbury Park, N. J.	Aug. 24
Aug. 28	Boston, Mass.	Aug. 24
Aug. 28	Wauwatosa, Wis.	Aug. 17
Aug. 28	Erie, Pa.	Aug. 17
Aug. 28	Albany, N. Y.	Aug. 17
Aug. 28	Montreal, Que.	Aug. 24
Aug. 28	Maple Heights (Bedford P. O.), O.	Aug. 24
Aug. 28	Greenville, O.	Aug. 24
Aug. 29	Toronto, Ont.	Aug. 24
Aug. 29	Lykens, Pa.	Aug. 24
Aug. 30	Atlanta, Ga.	Aug. 24
Aug. 31	New York, N. Y.	Aug. 3
Aug. 31	Baton Rouge, La.	Aug. 17
Aug. 31	Owen Sound, Ont.	Aug. 24
Sept. 1	Michigan City, Ind.	Aug. 24
Sept. 1	Syracuse, N. Y.	Aug. 24
Sept. 1	Knoxville, Tenn.	July 20
Sept. 5	Smyrna, Del. Adv. Aug. 10 to 24.	Aug. 10
Sept. 5	Teaneck (Englewood P. O.), N. J. Adv. Aug. 24.	Aug. 24
Sept. 6	Milaca, Minn.	Aug. 17
Sept. 7	Columbus, O.	Aug. 17
Sept. 11	Oakland, Calif.	Aug. 10
Sept. 16	St. Thomas, Ont.	Aug. 24
Sept. 30	Duluth, Minn.	July 13
Oct. 1	Duluth, Minn.	Aug. 3

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Aug. 25	Office, Storehouse, etc.—Buffalo, N. Y. Adv. Aug. 3 to 24.	Aug. 3
Aug. 26	Tunnel, Conduit, etc.—Wash., D. C.	Aug. 24
Aug. 28	Remodeling — Raleigh, N. C.	Aug. 3
Aug. 28	Dredging — Providence, R. I. Adv. Aug. 10 to 24.	Aug. 10
Aug. 30	Circulating Loop — Mare Island, Calif.	July 27
Aug. 30	Stables—Plattsburg, N. Y.	Aug. 17
Aug. 31	Canal—Klamath Falls, Ore.	July 27
Aug. 31	Dredging — Providence, R. I. Adv. Aug. 10 to 24.	Aug. 10
Aug. 31	Remodeling, etc. — Baltimore, Md.	Aug. 17
Sept. 1	Refrigerating Plants—Perryville, Md.	July 20
Sept. 1	Sand and Gravel—New Orleans, La. Adv. Aug. 10 to 24.	Aug. 10
Sept. 1	Road—Dover, N. J. Adv. Aug. 17 and 24.	Aug. 17
Sept. 5	Dredging — New York, N. Y. Adv. Aug. 3 to 24.	Aug. 3
Sept. 5	Steel Gates — Nashville, Tenn.	Aug. 3
Sept. 5	Dykes, etc.—New Orleans, La.	Aug. 3
Sept. 5	Spur-dikes — New Orleans, La. Adv. Aug. 10 to 24.	Aug. 10
Sept. 5	Dredge Pontoons, etc.—Mobile, Ala. Adv. Aug. 17 and 24.	Aug. 17
Sept. 6	Motors, etc.—Yuma, Ariz.	July 27
Sept. 6	Dredging—Phila., Pa.	Aug. 10
Sept. 6	Riprap Protection — Hampton Roads, Va.	Aug. 24
Sept. 7	Stone—New Orleans, La. Adv. Aug. 10 to 24.	Aug. 10
Sept. 8	Mezzanine—St. Louis, Mo.	Aug. 24
Sept. 12	Hospital — Northampton, Mass. Adv. Aug. 24.	Aug. 24
Sept. 13	Guard House, etc.—San Diego, Calif.	Aug. 24
Sept. 14	Dredging—Norfolk, Va.	Aug. 17
Sept. 15	Repairing Jetty—Providence, R. I. Adv. Aug. 24.	Aug. 24
Sept. 15	Barges—New Orleans, La. Adv. Aug. 24.	Aug. 24
Sept. 18	Barges—Florence, Ala. Adv. Aug. 24.	Aug. 24
Sept. 18	Turbine—Florence, Ala. Adv. Aug. 24.	Aug. 24
Sept. 21	Jetty Repairs—Jacksonville, Fla. Adv. Aug. 24.	Aug. 24

MISCELLANEOUS

Bids Close		See Eng. News-Record
Aug. 28	Mechanical Equipment—Sacramento, Calif.	Aug. 3
Aug. 28	Paving Materials—St. Paul, Minn.	Aug. 17
Aug. 28	Ornamental Lighting System —St. Paul, Minn.	Aug. 24
Aug. 28	Road Roller, etc.—West Allis, Wis.	Aug 24

Bids Close		See Eng. News-Record
Aug. 29	Ornamental Lights — Long Branch, N. J. .... Adv. Aug. 24.	Aug. 24
Sept. 1	Dumping Platform and Ramp —New York, N. Y........	Aug. 24
Sept. 2	Heating Mains—San Antonio, Tex.	Aug. 24
Sept. 5	Fire Alarm System, etc.—Kansas City, Mo.	Aug. 10
Sept. 6	Truck Bodies, etc.—San Francisco, Calif..............	Aug. 17
Sept. 6	Refrigeration Work—Marcy, N. Y. .... Adv. Aug. 24.	Aug. 24
Sept. 8	Mechanical Equipment — Wilmington, Del. .... Adv. Aug. 24.	Aug. 24
Sept. 15	Piping, etc. — Hammond, Ind. .... Adv. Aug. 24.	Aug. 24
Sept. 16	Strain & Pin Type Insulators —Melbourne, Australia ...	July 27
Oct. 10	Steam Turbine, etc.—New Orleans, La. .... Adv. Aug. 17 and 24.	Aug. 17
Nov. 4	Transformers, etc. — Melbourne, Australia	Aug. 17

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Batavia—Plans 6 in. mains in 400 ft. Bank St., 750 ft. State St., 500 ft. Hutchins St., 180 ft. Lewis Ave., 900 ft. Walnut St., 300 ft. Walnut Pl., 900 ft. Elmwood Ave., 375 ft. School St., 650 ft. Otis St., 650 ft. James St., 650 ft. Ross St., 1,075 ft. Trumbull Pl., 325 ft. Seneca Ave., 500 ft. Eleanor Pl., 375 ft. Hutchins Pl., $30,000.

N. Y., Lyons—Wayne Co. plans 2 mi. 6 in. mains from Wayne Co. Home to Lyons. $18,000. Engineer not announced.

W. Va., Martinsburg—Making plans renewing mains. $15,000. T. Sparrow, Queen and Burke Sts., city engr.

Miss., Pelahatchee—See "Miscellaneous."

O., East Youngstown—Mahoning Valley Water Co., 403 Mahoning Bank Bldg., Youngstown, plans new booster station to supply additional water to large mills. $15,000. T. Evans, supt. Engineer not announced.

Ia., Wayland — Making plans waterworks. $25,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Minn., Pelican Rapids—Having preliminary survey made for new waterworks system. $25,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, engrs.

Wash., Everett—Purchased 21 acre site for new 3 unit reservoir, (1 unit will be built at this time). Proposed storage dam will have capacity of 20,000,000 gal. A. B. Cutter, 3410 Norton St., engr.

Wash., Tacoma—Bd. Pub. Wks. plans repairs to water system, incl. lining one end McMillin reservoir with gunite, lining 300 ft. of 48 in. spillway pipe with steel and gunite, reinforcing footings; also replacing pipe, incl. 1,145 ft. 30 in. c.i. pipe. $51,500. I. S. Davisson, 923 South 8th St., engr.

Ont., Brockville—Soon takes bids reconstructing pumping machinery. $5,800. G. K. Dewey, clk.

BIDS DESIRED

N. Y., Brooklyn — Aug. 29, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Ocean Parkway, Concourse Dr. and Surf Ave., here.

N. Y., New York—Aug. 29, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Marginal St., west of New York Central R.R., Manhattan Boro; Rodman Pl., Unionport Rd. and Pelham Parkway N., Astor, Birchall, Bronxwood, Fish, Grand, Mace, Morgan, Needham, Tyndall, Wilcon and Young Aves., West 180th and Sagamore Sts., Bronx Boro.

N. Y., St. George — Aug. 29, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Bloomfield, Cannon, Drake and Hughes Aves., etc., here.

N. Y., Voorheesville—Sept. 9, by Bd. Village Trustees, Hose House, furnishing about 450 ton 8 in. Class "B" c.i. pipe, also constructing concrete reservoir, hauling and laying about 3½ mi. 8 in. Class "B" c.i. pipe. W. W. Chadsey, 434 State St., Schenectady, civil and sanitary engr.; adv. this issue. Noted May 18.

Ia., Villisca—Aug. 30, for 100,000 gal. steel tank and 60 ft. tower. T. S. De Lay, Creston, engr. Noted April 27.

Minn., Royalton—Sept. 1, by city, deep well pump machinery. J. J. Chirhart, clk. R. E. Borrowman, St. Cloud, engr.

Neb., Columbus—Aug. 30, by Henningson Eng. Co., engrs., Natl. Bldg., Omaha, 10 ton c.i. pipe, resetting pumps, one 250,000 gal. steel tank on 120 ft. steel tower, brick power house, 375 cu.yd. concrete and 6,500 lb. reinforcing in pump house, tank and tower foundations, here. $36,882.

Neb., Tredford—Aug. 30, at City Clerks Office, purchasing 4 and 6 in. c.i. pipe, 2 in. galvanized steel pipe, 250 g.p.m. centrifugal pump, 140 head, one 13,500 gal. pneumatic tank, etc. $10,000.

Okla., Tulsa—Sept. 25, by Water Comn., for Contrs. 1-11 inclusive of Spavinaw Water Supply Project. Tremmell & Holway, 329 Kennedy Bldg., engrs. D. H. Maury, 1445 Monadnock Blk., Chicago, consult. engr.; adv. this issue.

Calif., Dinuba—Aug. 30, by C. T. Reagan, city clk., automatic pressure regulator, enclosed in steel cabinet, Electric Controller & Mfg. Co.'s, or 1033-A, or equal; safety switch, oil immerse automatic compensator, No. 1 Electric Controller & Mfg. Co.'s, or equal; overland protective panel, H. T. Electric Controller & Mfg. Co.'s, or equal; centrifugal pump, Cameron make No. 4, type D.V. or equal; motor, Robbins & Meyers make, type K or equal. C. E. Sloan, Santa Fe Bldg., San Francisco, engr.

Ont., Port Dover — Sept. 8, by J. S. Martin, reeve, 7 mi. of 6 and 8 in. c.i. water mains, 40 hydrants, 2 centrifugal pumps, one gasoline and one electrically driven, pumphouse, 200,000 gal. standpipe, 150 ft. high. $60,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

BIDS RECEIVED

O., Cleveland—Cuyahoga Co. opened bids Aug. 16, constructing Impvt. 8 of county water supply system, 25,400 ft. 6-12 in. c.i. pipe, from D. Pfahl & Co., Berea Rd., $88,532; Hadded-Mall Co., Schofield Bldg., $89,062; Gantose Constr. Co., Columbia Bldg., $90,403.

CONTRACTS AWARDED

Fla., Vero—Waterworks system (well not included), to E. G. Ladd, 530 Riverside Ave., Jacksonville. $52,000. Noted June 29.

O., Cleveland—Cuyahoga Co. for Impvt. 14 of county water supply system, 24,570 ft. 4-12 in. c.i. pipe, to Gantose Constr. Co., Columbia Bldg., $92,250. Noted Aug. 17.

O., Columbus—See "Streets and Roads."

O., Rome (Hilliards P. O.)—Franklin Co. (Columbus), 13,500 ft. c.i. mains in Sewer Dist., Prairie 1, here, to Burnip Constr. Co., 223 East Broad St., Columbus, $25,314. Noted Aug. 17.

Minn., West Concord—Waterworks improvements; steel tower and tank, to Minneapolis Steel and Mchy. Co., Minnehaha Ave., Minneapolis, $6,989; erecting pump house, removing present building, shaft extension and pulley, etc., to F. E. Wright, West Concord, $2,950. Project complete will cost $35,000. Noted Aug. 3.

N. D., Valley City — Improving water works system incl. concrete reservoir, 500,000 gal. capacity also vitr. segment brick storm sewers, to Haggart Constr. Co., 60 Bway., Fargo, $90,581 and $22,653 respectively.

Calif., Reedley—Erecting steel tank and tower, to Pittsburg-Des Moines Steel Co., Rialto Bldg., San Francisco, $6,599. Noted Aug. 17.

Sewers

PROPOSED WORK

Pa., Jersey Shore—Plans sewage disposal plant. $25,000. Engineer not announced.

Pa., Pittsburgh—Plans sanitary sewers in Vera Way, Shady and Timberland Aves., Elysian, Selwyn, Parviss and Wightman Sts. $25,000, also sanitary sewer in Pioneer Ave., $35,000.

Pa., Pottstown—Plans to issue $200,000 bonds for sewerage system and sewage disposal plant.

O., Canton—Preparing plans and specifications new addition to sewage disposal plant. $700,000. McClasky & Reese, Canton, engrs.

O., Columbus—Making plans for relief sewer in Arcadia Ave. $25,000. R. H. Simpson, city engr.

O., Massillon—Making preliminary surveys sewerage system in west end of city. $25,000. H. P. Howald, city engr.

Minn., Pelican Rapids — Having preliminary surveys made sanitary sewerage system. $40,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, engrs.

Okla., Tulsa—Bd. Comrs. receives bids about the middle of October, for 11th St. Relief Sewer. Bond issue $900,000. C. Schultz, city engr., W. W. Horner, St. Louis, Mo., consult. engr.; adv. this issue.

Calif., Delano — Had plans prepared 1 rein.-con. settling tank, 2 sludge beds, each to have excavated roadways and 200 ft. 6 in. underdrain, 910 ft. concrete cradle, 2 concrete flush tanks, 138 concrete manholes, 51 concrete dropmanholes, 80,509 ft. 8-24 in. bell and concrete pipe, 2,738 wyes. City will furnish pipe and wyes. J. Bates, Rowell Bldg., Fresno, engr.

Ont., Ford—Preparing plans new sewers, $100,000. Prices wanted on materials. M. E. Brian, City Hall, Windsor, engr.

Ont., Riverside (via Windsor)—Preparing plans trunk sewerage system and sewage disposal plant. $150,000. Prices wanted on all materials. W. Code, City Hall, Riverside (via Windsor), engr.

Ont., Simcoe—Takes bids early in September, storm and sanitary sewers in Argyle, Robinson, Queen and West Sts. $30,000. G. R. Marston, city engr.

BIDS DESIRED

N. Y., Brooklyn—Aug. 30, by E. Riegelman, boro pres., Boro Hall, relief sewer in Pitkin Ave. between Powell St. and Stone Ave.; sewers in New York Ave. between East New York Ave. and Empire Blvd., Lefferts Ave. between Nostrand and New York Aves., Sterling St. between Nostrand and New York Aves., East 39th St. from Clarendon Rd. to Ave. D, Ave. D from East 40th to East 37th Sts., with temporary connection at Ave. D and East 37th St., 18th Ave. between 53rd and 57th Sts., East 13th St. between end of existing sewer about 163 ft. south of Ave. K and Ave. L, 55th St. between Ft. Hamilton Parkway and 11th Ave., 11th Ave. between 55th and 56th Sts., Creamer St. between Otsego and Columbia Sts., New York Ave. between Midwood and Hawthorne Sts., Ridge Blvd. between Bay Ridge and Ovington Ave.; sewer basins on southwest corner of Foster Ave. and East 26th St., northeast corner of Ave. K and East 8th St.

N. Y., Buffalo—See "Streets and Roads."

N. Y., Long Island City—Aug. 28, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Newtown Rd., Homan, Lewis and Atfield Aves., Hosack, Proctor and 89th Sts.

N. Y., Rye—Sept. 6, by Village Trustees for c.i. main sewer. G. E. Hill, 45 7th Ave., New York City, engr.; adv. this issue. Former bids rejected. Noted July 27.

Pa., Erie—See "Streets & Roads."

Pa., Phila.—Sept. 7, Southwest sewage pumping station, 40th Ward Lowland Drainage. F. H. Caven, dir.; adv. this issue.

Va., Portsmouth—Aug. 28, at office of City Manager, Municipal Bldg., sewers and appurtenances in streets and alleys of West Park View and Park View, incl. 11,446 lin. ft. terra cotta sewer, 447 lin.ft. 10 in. Class B c.i. pipe, 12,150 lin.ft. 4 in. terra cotta house connections, etc.; in West High St. et al., 2,096 lin.ft. 12-27 in. terra cotta sewer, 2,429 lin.ft. 36-48 in. sewer, etc. J. E. Weaver, Jr., city engr.

Ind., South Bend—Aug. 29, by Dept. Pub. Wks., River Park Trunk sewer Dist. No. 1 $70,000. V. C. Sweeney, clk.; adv. this issue.

Ill., Havana—Aug. 29, by Bd. Local Impvts, sewers in various streets. $32,000. C. H. Kreiling, Havana, engr.

Wis., Two Rivers — Aug. 31 by J. Doleyish, clk., 910 ft. 27 and 30 in. monolithic concrete and 5,981 ft. 10-24 in. vitr. pipe sewers in West 19th, Washington and Monroe Sts. C. J. Popelka, City Hall, engr.

Ont., Port Dover — Sept. 8, by J. S. Martin, reeve, 2,000 ft. of 15 and 18 in. glazed tile sewer from town limits to Black Creek. $30,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Que., Montreal—Aug. 28, by Executive Com., 1,916 ft. sewer in Mariette St., from Sherbrooke St. to Canadian Pacific Ry., 195 ft. George Etienne Cartier St. from St. Ambroise St. to point 195 ft. north, 143 ft. Racine St. from Blvd. Gouin southerly, 2,239 ft. Jacques Hertel St. from Monk Blvd. to Orchard St., all foregoing 2 x 3 brick; 420 ft. 12 in. tile pipe in Trudel Lane from St. Martin to Richmond Sts. R. Bauset, city clk.

BIDS RECEIVED

N. Y., New York — See "Streets and Roads."

Sewers (Continued)

CONTRACTS AWARDED

Conn., New Britain—Contract B of East Side Trunk Sewerage System, 2,300 lin.ft. 24 in. sewer pipe, etc., to Berardino & Manocchio, Hartford, $37,363; constructing 765 ft. tunnel across Piper Brook, under railroad tracks, and into East St., 1,735 ft. 24 in. vitr. pipe sewer, to Battaglia & Liardi, Hamilton St., New Britain, $16,375.

N. Y., Eastwood — See "Streets and Roads."

N. Y., Rochester—See "Streets and Roads."

Pa., Pittsburgh—Sewers in Spring Garden Ave., to C. Donatelli, 1313 Collier St., $39,072.

O., Columbus—See "Streets and Roads."

Mich., Menominee—Main trunk sewer to Nebel Bros., Gladstone, $34,410. Noted June 22.

Wis., Milwaukee—Intercepting sewer in Watertown Plank Rd. from 40th St. to City of Wauwatosa, to Mid West Constr. Co., 253 Walker St., $114,000. Noted Aug. 17.

N. D., Valley City—See "Waterworks."

Que., Montreal—To A. Thezand, 885 St. Catherine St. E., 750 ft. 2 x 3 brick sewer in Bordeaux St. from Gilford to St. Jerome Sts., $3,040, 4,125 ft. in Laverdure St. from Gouin Blvd. to 42nd Ave., $19,490.

Waste Disposal

PROPOSED WORK

Okla., Tulsa—Soon receives bids additioɪ to incinerator. $35,000. C. Schultz, city engr.

Bridges

PROPOSED WORK

N. Y., Auburn—Plans new steel bridge encased in concrete, utilizing abutments of present bridge, State St. $38,000. M. F. Dullea, city engr.

Pennsylvania—New York Central R.R., Grand Central Terminal, New York, and Bessemer & Lake Erie R.R., Erie, plans to eliminate grade crossings on Route 82 near Osgood, and build overhead bridge. $71,000. F. H. Hardin, New York, ch. engr. New York Central R.R., H. T. Porter, Greenville, ch. engr. Bessemer & Lake Erie R.R.

Pa., Pottstown—Montgomery Co. plans Ferry bridge, rein.-con., 45 ft. wide. $550,000. D. A. Keefe, Athens, engr.

W. Va., Clarksburg—Harrison Co. plans constructing, reconstructing and improving bridges. $30,000. C. N. Parrish, clk.

Tenn., Knoxville—Making plans repairing bridge, incl. replacing bolts, floor joists expansion joints, brackets that support side walls and several buckle plates, also resurfacing. $30,000. Taking bids for creosoted block. $1,000. G. R. Stephen, Knoxville, engr.

Wis., Wauwatosa—Road and Bridge Comn., Milwaukee Co., soon receives bids 80 ft. rein.-con. arch bridge on West Main St. $40,000. State Hy. Comn., Madison, engrs. Noted Jan. 12.

Calif., San Luis Obispo—San Luis Obispo Co. rejected bids 110 ft. steel truss bridge, 21 ft. roadway, concrete abutments, over Cholame Creek. Will readvertise. W. B. Burch, Lowe Bldg., San Luis Obispo, engr. Noted July 27.

BIDS DESIRED

Alabama—Aug. 29, by W. S. Keller, state highway engr., Montgomery, 3 concrete bridges, deck girder type, on Greenville-Camden Rd., Wilcox Co., incl. 994.27 cu.yd. Class A concrete, 157,537 lb. reinforcing, 2,800 lin.ft. concrete piles, 599 sq.yd. of 4 in. Class A concrete surfacing, etc.

Miss., Vicksburg—Sept. 8, by Bd. Supervs. Warren Co. at office of J. G. Sherard, chancery clk., bridge over Big Black River at Baldwins Ferry, 12 mi. from here, on Baldwins Ferry Highway. H. R. Rhodes, co. engr.; adv. this issue.

Tennessee—Sept. 14, by Dept. Highways, Nashville, superstructure for bridge over Cumberland River near Clarkesville. D. Q. McComb, ch. engr.; adv. this issue.

Ohio—Sept. 1, by Dept. Highways and Pub. Wks., Columbus, bridges in following counties:

Guernsey Co., Sect. "I" National Rd., $9,326.

Guernsey Co., Sect. "K" National Rd., $9,765.

Crawford Co., Sect. "G" Bucyrus-Crestline Rd., $12,697.

Butler Co., Sect. "C" Hamilton-Scipio Rd., $1,458.

Butler Co., Sect. "J" Hamilton-Middletown Rd., $2,051. L. C. Herrick, dir. highways.

Ohio—Sept. 5, by W. H. Duffy, dir. Pub. Serv., Columbus, for Rathbone Bridge and road improvement in Concord Twp., Delaware Co., 860 cu.yd. earth excav., for road, 565 cu.yd. earth excav. for abutments, 2,200 cu.yd. earth excav. in borrow pit, 380 cu.yd. rock excav., 2,850 cu.yd. earth embankment, 2,980 cu.yd. concrete, 2,590 sq.yd. macadam road, new bridge span and raising existing bridge, etc. $125,000. R. H. Simpson, City Hall, Columbus, engr.

Mich., Bessemer—Aug. 29, by State Hy. Dept., Lansing, building Bridge 270103, concrete girder with 3 spans, 130 ft. long. Gogebic Co.

Mich., Marine City—Aug. 30, by State Hy. Dept., Lansing, Bridge 770901, 135 ft. swing, 1,020 cu.yd. rein.-con., 99,220 lb. reinforcing. Noted Aug. 17.

Wyo., Sheridan—Receiving bids and opens same about Sept. 11, concrete arch bridge, 1 or 2 spans, over Big Goose Creek, on Doucks St., $30,000. E. C. Gwillim, city engr. Noted July 27.

California—Sept. 11, by State Hy. Comn., Sacramento, rein.-con. bridge with 100 ft. main arch span, four 15 ft. girder spans, abutments, piers and retaining walls; also constructing railroad abutment, over Susan River near Fredonia, Lassen Co. A. B. Fletcher, state highway engr.

Calif., Bagby—Sept. 2, by Supervs. Mariposa Co., (Mariposa), 180 ft. steel span bridge over Merced River, here, 108 ft. approaches. Alternate bids for timber or concrete approaches and floor. A. E. Cowell, 639 19th St., Merced, engr. Noted Aug. 10.

Calif., Oroville — Aug. 31, by Supervs. Butte Co., bridges as follows: (1) over east channel Butte Creek on Goodspeed Watt Rd., 84.8 cu.yd. A rein.-con., 69 cu.yd. excav., 46 cu.yd. backfill; (2) over Mud Creek, on Hicks Lane, 152 cu.yd. A. rein.-con., 91 cu.yd. excav., 68 cu.yd. backfill; (3) over West channel, Butte Creek, 245.5 cu.yd. A. rein.-con., 130 cu.yd. excav., 100 cu.yd. backfill; (4) over Wyman Ravine on Watt Colony Rd., 84.8 cu.yd. A. rein.-con., 62 cu.yd. excav., 40 cu.yd. backfill; (5) over Overflow Channel on Rock Creek, on Keefer Rd., 58.9 cu.yd. A, rein.-con., 30 cu.yd. excav., 21 cu.yd backfill. H. H. Hume, co. road engr.

Calif., Stockton—Sept. 5, by Supervs. Sacramento and San Joaquin Counties, 640 ft. bridge over Dry Creek, concrete pile, timber deck. F. E. Quail, surveyor of San Joaquin Co.

Quebec—Aug. 30, by J. L. Boulanger, deputy minister Dept. Rds., Quebec, rein.-con. bridge on De Ligne Brook Chambly, iron bridge on River du Nord, rein.-con. bridge on Foisy River, St. Sauvour Parish, Terrebonne Co. $100,000.

BIDS RECEIVED

Pennsylvania—State Hy. Dept., Harrisburg, opened bids Aug. 8, bridge over Rayston River, near Tatesville, Bedford Co., (1) concrete, (2) steel, from Concrete Steel Bridge Co., Clarksburg, Va., (streets address not available) (1) $30,235, (2) $35,207, Whittaker & Diehl, Union Trust Bldg., Harrisburg, (1) $30,437, (2) $31,000, Independence Bridge Co., May Bldg., Pittsburgh, (2) $39,400; steel bridge over west branch of Susquehanna River in Clearfield Co., from G. A. Flink, 222 Market St., Harrisburg, $23,475, Independence Bridge Co., May Bldg., Pittsburgh, $24,400, Walter & Gregg, Pittsburgh, (streets address not available). $25,000.

Calif., Stockton—Supervs. San Joaquin Co. opened bids, 9 rein.-con. bridges on Jack Tone Rd., from L. W. Larsen, Route 1, Box 85, Turlock, $15,292; 2 rein.-con. bridges on McKinley Ave., also West Lane Bridge, rein.-con., girder type, latter involves 522 cu.yd. concrete, 39 ton reinforcing steel, from Davidson & Nicolsen, 180 Jessie St., San Francisco, $8,343 and $16,680 respectively. Noted July 20.

CONTRACTS AWARDED

N. Y., Rochester—New concrete bridge over Erie Canal bed on South Ave., to Seneca Eng. Co., Rochester, (street address not available) $55,642. Noted May 25.

Alabama—W. S. Keller, state highway engr., Montgomery, 15 bridges all concrete girder type except two 100 ft. arch bridges, one 102 ft. 6 in. steel span and one 80 ft. steel span on Guin-Winfield Rd., Marion Co., to Smith Co., 30 3rd Ave. W., Birmingham, $127,771. Noted Aug. 17.

Ohio—Dept. Highways and Pub. Wks., Columbus, 1,115 ft. rein.-con. viaduct, on Sect. "R" Cleveland-Buffalo Rd., Ashtabula Co., to Pitt Constr. Co., Fulton Blk., Pittsburgh, $348,034. Noted Aug. 10.

Ohio—Dept. Highways and Pub. Wks., Columbus, 2 steel bridges on Sect. "N" Hillsboro-Washington Rd., Highland Co., to Perkins Structural Steel Co., Wooster, $10,362; bridge on Sect. "U" Columbus-Portsmouth Rd., Pickaway Co., to M. M. Kirton, Circleville, $12,170; 11 ft. slab top bridge on Sect. "P" Milford Hillsboro Rd., Brown Co., to F. M. Mark, Washington C. H., $2,571. Noted Aug. 17.

O., Cleveland—Cuyahoga Co. concrete arch bridge on Highland Rd., to Nelson & Kelly, West 126th St., $23,603. Noted Aug. 17.

Colorado—State Hy. Dept., Denver, concrete bridge and approaches (Marsh type) across South Platte River just north of Ft. Morgan, Morgan Co., to Colorado Bridge & Constr. Co., Gas & Electric Bldg., Denver, $80,101.

Calif., Eureka—F. M. Kay, clk. Humboldt Co., 3 steel truss bridges over Bluff, Slate and Antelope Creeks, to Padgett & Kelly, Eureka, $33,000. Noted July 27.

B. C., Revelstoke — Provincial Government, Victoria, substructure incl. 2 cylindrical piers sank 70 ft. below low water, and steel superstructure for four 154 ft. one 212 ft., one 110 ft., and 2 small approach spans over Columbia River, total length 1,000 ft., 16 ft. wide, substructure and erection of steel trusses, to Grant, Smith & Co. and McDonell, 436 Prior St., Vancouver, $140,000; fabrication of steel, to J. Coughlan & Sons, Front and Columbia Sts., Vancouver, $60,000.

Dams

BIDS DESIRED

N. Y., Beacon—Sept. 5, by City Council, 525 Main St., repairs to Dam 537, South Mountain, Mt. Beacon Reservoir. G. W. Kreiger, Jr., Poughkeepsie, consult. engr.; adv. this issue.

BIDS RECEIVED

N. Y., Newburgh—W. J. McKay, city mgr., opened bids Aug. 14, 2 dams at Silver Stream, alternate A, from Mapes & Erway, Warren, O.; alternate B from Ward & Tully, 189 Montague St., Brooklyn. Noted Aug. 3.

CONTRACTS AWARDED

Calif., Marysville—Yuba Development Co., Hobart Bldg., San Francisco, (a) enlarging dam, (b) constructing power house, to Bent Bros., 1714 Eagle Ave., Los Angeles, (a) $330,680, (b) $12,974. Noted Aug. 17, under "California."

B. C., Ocean Falls—Pacific Mills Ltd., 510 Hastings St. W., Vancouver, raising height of existing dam at Link Lake near here, by 15 ft., incl. 16,000 cu.yd. concrete, 50 ton steel, to Robertson & Rendell, 504 Credit Foncier Bldg., Vancouver, $250,000.

Railways

PROPOSED WORK

Georgia—Crescent Lumber Co., Hillacooche, plans 6 mi. line to take care of operations on tract company has purchased. $25,000.

BIDS RECEIVED

New York—Transit Comn., 49 Lafayette St., New York, opened bids Aug. 15, installing tracks for portion of 14th St.-Eastern Line, in Boroughs of Manhattan and Brooklyn, from T. H. Reynolds Constr. Co., 50 Park Pl., New York, $241,470. Noted Aug. 3.

CONTRACTS AWARDED

British Columbia—British Columbia Electric Ry., Hastings and Carrol Sts., Vancouver, will build 1 mi. double track on 9th Ave. from Trafalgar St. to Alma Rd., by day labor. $70,000. A. C. Eddy, c/o owner, engr.

Excavation and Dredging

PROPOSED WORK

N. C., Greenville—Pitt Co. Drainage Comrs. plan drainage 20 mi. Swift Creek. G. T. Leach, Washington, chn. D. D. 2.

La., New Iberia—Bd. Drainage Comrs. Bayou Carlin Drainage Dist., plans drainage system. $46,000. C. L. Provost, secy.-treas.

Minn., Redwood Falls—Redwood Co. rejected bids 4 sections Co. Ditch 33, 111,850 cu.yd. excav. G. P. Smith, Central Bank Bldg., St. Paul, engr. Noted June 29.

BIDS DESIRED

La., Jeanerette—Sept. 4, by Bd. Drainage Dist., dredging St. Marys, Iberia and old Delahousaye Canals, either by yard or mile. Proposals will also be received for drainage boat. J. Moresci, secy.

Miss., Grenada—Aug. 31, by Bd. Comnrs., Potacocowa Creel, D. D., Carrol and Grenada Counties, 2.21 mi. open ditch, 90 ft. base, 7 ft. average cut, 1:1 side slopes and 3.2 mi. of levee, 6 ft. crown, 2:1 slopes, 10

Excavation and Dredging (Continued)

ft. average fill, all to form floodway to control Potacocowa Creek, 391,500 cu.yd. dragline earth excav., and 5.75 acres clearing. Morgan Eng. Co., Goodwyn Institute Bldg., Memphis, Tenn., engrs.

Ia., Garner—Aug. 31, by C. Jacobs, aud. Hancock Co. and E. F. Peterson, aud. Kossuth Co., (Algona) D. D. 120-7, 60,000 cu.yd. excav., 57,874 lin.ft. 6-36 in. tile, 8,000 cu.yd. cleanout. $35,000.

Minn., Olivia—Aug. 29, by Rentville Co., Ditch 86, 6 mi. north of Renville, 118,200 lin.ft. 5-28 in. tile. $40,000. A. O. Schmidt, co. aud.

S. D., Aberdeen—Sept. 7, by Brown Co. drainage project 1,000,000 cu.yd. excav. $150,000.

Colo., Colorado Springs—Sept. 1, by Dirs. Beaver Park Land & Water Co., 301 Mining Exch. Bldg., Brush Hollow-Reservoir near Penrose, embankment will contain about 308,000 yd. earth with rip rap face, (5,500 yd.), puddle core, concrete spillway. $225,000. G. C. Anderson. 533 Consolidated Realty Bldg., Los Angeles, Calif., engr.

CONTRACTS AWARDED

La., Lawtell—C. N. Bertrand, pres. Bd. Comrs. St Landry Parish, Bank of Lawtell, excav. and dredging 600,000 cu.yd. and building gravity drainage system, to McWilliams Dredging Co., Exch. Bldg., Memphis, Tenn., $11.40 per cu.yd. Noted July 13.

Minn., Fairmont—Martin Co., Co. Ditch 105, Martin and Jackson Counties, 9,639 cu.yd. excav., 36,650 lin.ft. 6-30 in. tile, and Co. Ditch 104, Martin Co., 762 cu.yd. excav., 25,405 lin.ft. 6-24 in. tile, to A. Sanderson, Blue Earth, $28,000.

Streets and Roads

PROPOSED WORK

N. Y., Elmira—Chemung Co. plans paving 3 mi. Elmira-Lowman Rd., concrete. $40,000.

N. Y., Jamestown—Plans paving Monroe, Peach and Murray Sts., with No. 1 Hillside brick blocks on 5 in. concrete. $25,000. L. Bergman, City Hall, city engr.

N. Y., Jamestown—Plans repaving East 2nd St. from Winsor St. to city line, 40 ft. $30,000. Estimate based on sheet asphalt, but brick will also be considered. L. Bergman, City Bldg., city engr.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., rejected bids opened July 25, grading, curbing, recurbing, flagging, reflagging, paving, etc., 46th St. from Jackson to Roosevelt Aves. Will readvertise. Noted Aug. 3.

N. Y., Niagara Falls—Soon takes bids paving 24th St. from Ferry Ave. to Pine St., wood or granite block, $36,580, brick or asphalt, $34,270. Former bids rejected. W. B. Bennett, Convention Hall, city engr. Noted July 27.

N. Y., Rochester—Plans widening East Ave. between boundary and Fairport Rd., from present width of 16 ft. to 24 ft. $50,000. C. A. Poole, city engr.

N. Y., Rochester—Monroe Co. plans Allen Creek Rd. $7,000, Cheese Factory Rd. $10,000 and Bay Rd. $3.200, in Pittsford; Cheese Factory Rd. $8,000 and Lincoln Mills Bridge $3,600, in town of Menden. G. C. Wright, co. engr.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, rejected bids opened Aug. 8, reconstructing with concrete pavement roadway Richmond Turnpike, etc. Will readvertise. Noted Aug. 17.

New Jersey—State Hy. Dept., Trenton, plans improving Old Bridge-Matawan Rd., Middlesex Co. $90,000. T. S. Wasser, Broad St. Bank Bldg. ,Trenton, engr.

N. J., Elizabeth—Union Co. plans paving ½ mi. Front St. from Park Ave., Scotch Plains, to Watchung Ave., Plainfield. $45,000. J. L. Bauer, co. engr.

Pa., Ambridge—Plans to vote $155,000 bonds for paving Merchant St. Address C. F. Straube, burgess.

W. Va., Clarksburg—Harrison Co. plans improving and repairing roads. $465,502. C. N. Parrish, clk.

Alabama—State Hy. Dept., Montgomery, plans grading and surfacing 11.98 mi. road from Decatur to Russellville, Morgan Co. line to Moulton, Lawrence Co., 2½ in. bituminous macadam. $300,000. W. S. Keller, state highway engr.

Tenn., Knoxville—See "Bridges."

O., Akron—M. P. Tucker, dir. Pub. Serv., takes bids in September, grading, paving and laying sidewalks on 2,800 ft. North Main St., 54 ft., vitr. brick or asphalt, $70,000, 2.000 ft. Aqueduct St., 30 ft., 3,700 lin. ft. stone curb, 3.000 cu.yd. earth excav., 7,200 sq.yd. vitr. brick or asphalt, $38,000, 900 ft. Middlebury Ave., 24 ft. pavement, 1,750 lin.ft. stone curb, 2,400 sq.yd. vitr. brick or asphalt, $12,000; grading and laying sidewalks on 3,500 ft. Englewood Ave., 6 ft. walks, 39,800 sq.ft. cement sidewalks, 5,650 cu.yd. earth excav., $19,000, 2,000 ft. Lakemont and Hillcrest Sts., 6 ft. walks, 21,000 sq.ft. 4 in. cement sidewalk, 7,500 cu.yd. earth excav., $12,000. E. A. Kemmler, Delaware Bldg., engr.

O., Canton—Kent Co. plans paving 1.5 mi. Canton Sherman Church Rd., brick, asphalt, concrete or similar material, $25,000; 5 mi. Canton-Navarre Rd. from end of present pavement to Massillon Rd., brick, concrete or asphalt, to exceed $100,000.

O., Columbus—W. H. Duffy, dir. Pub. Serv., cancelled bids which were to be opened Aug. 15, grading, curbing, laying water mains and sewer connections and paving 6,485 ft. 5th Ave., from Perry St. to alley west of Parker St., 30 and 36 ft., brick $120,440, asphalt $108,193; 2,099 ft. 5th Ave. from Sunbury Ave. to point 490 ft. east of Nelson Rd., 30 ft., brick $37,158, asphalt $35,205. Will readvertise. R. H. Simpson, city engr. Noted Aug. 10.

O., Dayton—Will vote on $300,000 bonds in November paving East 3rd St. from railroad to Linden St., 2nd St. from Wilkinson to St. Clair Sts., East 5th St. from Stone to Linden Sts., Valley St. from Ohio to Lukaswitz Sts., Ridge St. from Main to Riverside Sts., Cornell St. from Salem St. to corporation line, Riverview St. from Yunker to Vermillion Sts., West 3rd St. from Bank to Summit Sts., Home St. from Western St. to corporation line, Germantown St. from Washington St. to Bway., Cincinnati St. from Washington to Bolender Sts., Washington St. from Main to Germantown Sts., St. Paul St. from Huffman to Wyoming Sts., brick, asphalt, wood block and concrete. $500,000. I. E. Houk, city engr.

O., Newark—Had plans prepared 6 mi. graveling and paving, incl. grading and graveling Ridge Ave., paving North Vernon Rd., Hudson Ave., South Williams, 8th, Mound, Channel and Columbia Sts., brick, asphalt or concrete. $55,000.

O., Warren—Trumbull Co. will sell $136,000 bonds Aug. 30 to improve 3 mi. Youngstown-Conneaut Rd. (County Highway 13). R. G. Taylor, co. surv.

Ind., Angola—Steuber Co. plans grading and gravel surfacing 15,370 ft. Lynn Collins Rd., 18 ft. $26,500. F. Hubbel, Angola, engr.

Ind., Greencastle—Putnam Co. plans paving 7,921 ft. James B. Scott Rd., 16 ft., 14,071 sq.yd. waterbound macadam on concrete. $31,000. A. Plummer, Greencastle, engr.

Ind., Jeffersonville—Comrs. Clark Co. received no bids Aug. 8 paving 9,343 ft. James Hilzer Rd., 16 ft., 16,597 sq.yd. waterbound macadam on concrete. $39,000. Will readvertise. Noted Aug. 3.

Ind., Lawrence—Dearborn Co. plans surfacing 31,498 ft. Jacob Hoffmeier Rd., 16 ft., broken stone. $42,000. H. Fitch, Lawrenceburg, engr.

Ind., Marion—Grant Co. plans paving 10,600 ft. Lewis E. Bryant Rd., 16 ft., 19,730 sq.yd. asphalt on concrete, $44,500; 14,237 ft. Julius C. Lake Rd., 16 ft., 25,547 sq.yd. asphalt on asphalt. $52,000. G. Swisher, Marion, engr.

Ind., Winamac—Pulaski Co. plans gravel surfacing 23,892 ft. R. A. Phillips Rd., 16 ft. $31,000. R. E. Nutt, Winamac, engr.

Michigan—State Hy. Dept., Lansing, plans grading and gravel surfacing 2⅜ mi. State Trunk Line Rd. 49-5, Sect. B, Livingston Co. F. F. Rogers, state highway comr.

Michigan—State Hy. Dept., Lansing, rejected bids Aug. 1, grading and surfacing 2.266 mi. State Trunk Line Rd. 17-5, Van Buren Co., 25,287 sq.yd. concrete. Project will probably be deferred until 1923. Noted July 27.

Michigan—State Hy. Dept., Lansing, rejected bids Aug. 9, grading and surfacing 1.063 mi. State Trunk Line Rd. 31-12, Sect. A, Huron Co. Deferred until 1923. Noted Aug. 3.

Mich., Detroit—Plans paving with 3½ in. sheet asphalt on 8 in. concrete, 9,500 sq.yd. Central Ave. from Warren to Tireman Aves., 26 ft., $36,190; 3,000 sq.yd. Arlington Ave. from Six Mile Rd. to Stender Ave., 26 ft., $12,500; 6,500 sq.yd. Savannah Ave. from Woodward Ave. to John R St., 26 ft., $30,330; 800 sq.yd. Terminal Ave. from Detroit Terminal R.R. to Edlie St., 26 ft., $3,900; also 5 alleys with one course concrete totaling $20,150.

Mont., Havre—Hill Co. soon receives bids surfacing 10 mi. Highway Project 132, Gildford to Rudyard, gravel and crushed rock. $25,000. E. J. Doreen, Havre, engr.

Missouri—State Hy. Dept., Jefferson City, plans 3,244 mi. road from Osceola north and southwest, 24 ft., State Aid Project 20.175, St. Clair Co., 9,587 cu.yd. earth and 1,690 cu.yd. rock excav., 2,172.8 cu.yd. concrete masonry, etc.; 2.806 mi. road from Unionville northward and southward, 24 ft., State Aid Project 20.198, Putnam Co., 22,233 cu.yd. earth excav., 12,660 cu.yd. borrow, 199.6 cu.yd. concrete masonry, etc.; 1.476 mi. road from St. Clair, southwestwardly, 24 ft., State Aid Project 20.204, Franklin Co., 7,792 lin.ft. grading, 10,389 sq.yd. specification C gravel pavement, 12 ft.; 3.144 mi. road from Vienna, northward, 24 ft., State Aid Project 20.98B, Maries Co., 16,600 lin.ft. grading, 22,315 sq.yd. specification C gravel pavement, 12 ft.; 2.386 mi. road from Dell southeastwardly, 24 ft., State Aid Project 20.90, Benton Co., 12,037 cu.yd. earth excav., 5,260 cu.yd. borrow, 149.1 cu.yd concrete masonry, etc.; 2.824 mi. road from Salem southwestwardly, 24 ft., State Aid Project 20.205, Dent Co., 14,880 lin.ft. grading, 19,960 sq.yd. specification C gravel pavement, 12 ft.; 3.523 mi. road from Hawkins Stove southwestwardly, 24 ft., State Aid Project 20.99B, Maries Co., 18,604 lin.ft. grading, 25,010 sq.yd. specification C gravel pavement, 12 ft. B. H. Piepmeier, state highway engr.

Colorado—State Hy. Dept., Denver, rejected bids grading 7.477 mi. Cocketopa Pass Rd. beginning at point about 6 mi. west of Saguache and extending westerly toward Cochetopa, Federal Aid Project 119-B, Saguache Co., 16 ft. $48,632. Will readvertise. Noted Aug. 3.

Colo., Denver—Making plans concrete paving 12 blocks Alley Paving Dist. 86. $27,409. A. K. Vickery, City Hall, engr.

Calif., Fresno—Fresno Co. had plans prepared improving about 1 mi. Ventura Ave., 9,800 cu.yd. earth work, 1,280 lin.ft. concrete curb, 262,250 sq.ft. 5 in. concrete base with 1½ in. asphaltic surface. C. P. Jensen, co. surv.

Calif., Lindsay—Rejected bids improving various streets. New bids later. H. Watts, city engr. Noted Aug. 17.

Calif., Martinez — Had plans prepared paving, etc., Green, Ward and Talbart Sts., 65,000 sq.ft. grading, 3.844 lin.ft. concrete curb, 7,875 sq.ft. concrete gutter, 55,200 sq. ft. asphaltic concrete with 1½ in. warrenite surface, 2,026 lin.ft. 4 and 6 in. vitr. sewer, etc. B. H. Greene, city engr.

Calif., Marysville—Supervs. Yuba Co. rejected bids improving 6 mi. Knox Rd., Sects. 1 and 2. Will readvertise. L. B. Crook, co. surv. Noted Aug. 3.

Calif., San Rafael — City Trustees rescinded contract awarded to S. P. Brownlee, San Rafael, surfacing various streets. New bids will be called early next year. Noted Aug 10.

Ont., Hamilton—Takes bids in 3 or 4 weeks new concrete sidewalks and curbs, $65,000, asphalt pavements, $55,000. Prices wanted on materials. E. R. Gray, city engr.

BIDS DESIRED

Connecticut—Aug. 29, by C. J. Bennett, state hy. comr., Hartford, paving North Westchester Rd. in Colchester, trap rock macadam; Water St., Derby, plain cement concrete; Main St., Naugatuck, sheet asphalt; Hanover and Baltic-North Franklin Rd., local stone or trap rock; South Main St., Seymour, vitr. brick on concrete, and plain cement concrete. E. C. Welden, div. engr.; adv. this issue.

N. Y., Brooklyn—Aug. 30, by E. Riegelmann, boro pres., Boro Hall, paving Ave. U from Ocean to Flatbush Aves., preliminary 7 in. concrete, Amboy St. from Livonia to Lott Aves., Bay 28th St. from Bath to Benson Aves., Ave. H from Ocean Parkway to Coney Island Ave., Snyder Ave. from New York to Brooklyn Aves., Sterling Pl. from Buffalo to Ralph Aves., 53rd St. from 16th to 17th Aves., repaving Ridge Blvd. from 86th St. to Shore Rd., Wilson Ave. from Cornelia to Moffat Sts., all foregoing sheet asphalt on 6 in. concrete; grading, curbing and flagging Troy Ave. from Crown St. to East New York Ave., 16th Ave. from 75th to 79th Sts.; curbing and paving 61st St. from 18th to 19th Aves., asphalt on 6 in. concrete; grading sidewalk space, curbing and laying sidewalks on Glenwood Rd. between Brooklyn Ave. and East 40th St.

N. Y., Long Island City—Sept. 1, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing, and laying sidewalks on Potter Ave. from Van Alst Ave. to Goodrich St., 1st Ward, Hinman St. from Metropolitan Ave. to Wayne St., 2nd Ward; paving Potter Ave. from Barclay St. to 2nd Ave., 1st Ward, 101st

Streets and Roads (Continued)

(Jerome) Ave. from 111th St. (Greenwood Ave.) to Van Wyck Ave., both sheet asphalt on concrete; grading Jackson Ave. from Junction Ave. to 51st St., 2nd Ward; grading, curbing, laying sidewalks and paving Chaffee St. from Hughes St. to Catalpa Ave., sheet asphalt on concrete; curbing and laying sidewalks on Opdyke St. from Alburtis Ave. to 51st St.; grading and curbing, etc. 101st (Jerome) Ave. from 111th St. (Greenwood Ave.) to Van Wyck Ave.

N. Y., Newburgh—Aug. 30, by W. J. McKay, city mgr., City Hall, paving and improving Renwick St. between tracks of West Shore R.R. and Liberty St., also South St. between Water and Liberty Sts., granite block or vitr. hillside brick; adv. this issue.

N. Y., New York—Aug. 31, by Park Bd., Municipal Bldg., repaving heavy traffic road Southern Blvd. in southwesterly portion of Botanical Garden, Bronx Boro. F. D. Gallatin, pres.

N. Y., Rochester—Bd. Contr. and Supply, receiving bids asphalt paving Sumner Park $13,100 and Arnett Blvd. $11,300; sewers, walks and grading, Inglewood Dr. $9,200. C. A. Poole, city engr. Noted June 29.

N. Y., St. George—Aug. 29, by J. A. Lynch, pres. Richmond Boro, Boro Hall, reconstructing roadway of Richmond Turnpike from Bulls Head to Linoleumville factory, concrete.

New Jersey—Sept. 5, by State Hy. Dept., Trenton, constructing Route 7, Sect. 1, Corlies Ave., Neptune Twp., Monmouth Co., warrenite bitulithic on cement concrete. A. L. Grover, ch. clk.; adv. this issue.

N. J., Bridgeton—Sept. 12, by Bd. Freeholders Cumberland Co., reconstructing Sect. 1 of Landis Ave. also improving Cohansey Rd. W. M. Sharp, co. engr.; adv. this issue.

Pa., Dunbar—Sept. 1, by Twp. Supervs. 1 mi. brick surface on concrete, 16 ft. $75,000. Union Eng. & Constr. Co., Union Trust Bldg., Uniontown, engrs.

Pa., Erie—Taking new bids paving 3 streets Mill Creek Tube, brick, block or asphalt. $30,431. F. G. Lynch, city engr. Noted July 20.

Pa., West View—Aug. 29, by C. A. McClain, boro. secy., grading, paving and curbing Norwich St., Mt. Vernon and Ann Arbor Aves., 40 ft. $25,000. Blum, Wildin & Co., Bakewell Bldg., Pittsburgh, engrs.

Fla., Safety Harbor—Sept. 5, by A. E. Shaver, clk., pavements on various streets, incl. 8,000 cu.yd. excav., 5,180 sq.yd. vitr. brick, (relayed), 3,450 sq.yd. vitr. brick asphalt filler, 7,176 sq.yd. vitr. paving brick, 7,176 sq.yd. asphalt paving block, 6,002 sq.yd. sheet asphalt, 6,002 sq.yd. 5 in. rock, 5,358 lin.ft. 6 x 18 in. and 11,750 lin.ft. 4 x 15 in. concrete curbing, etc.

Alabama—Aug. 29, by W. S. Keller, state highway engr., Montgomery, grading and gravel surfacing 12.265 mi. Greenville-Camden Rd., Wilcox Co., incl. 20.35 acres clearing and grubbing, 157.74 cu.yd. Class F concrete, 628.6 cu.yd. Class A concrete, 61,469 lb. reinforcing steel, 28,800 cu.yd. gravel, etc.

Ala., Mobile—Sept. 14, paving, curbing and building storm sewers in various streets. W. Smith, city engr.; adv. this issue.

Miss., Charleston—Sept. 18, at Court House, grading and graveling 18½ mi. road between Philipp and Coward Rd. Dists. 4 and 5, Tallahatchie Co. Elliott & Harman Eng. Co., Bank of Commerce and Trust Co. Bldg., Memphis, Tenn., engrs.; adv. this issue.

Tennessee—Sept. 14, by State Hy. Dept., Nashville, surfacing Federal Aid Projects 22 and 24, section of State Highway 39 between Hamilton Co. line and eastern end of Federal Aid Project 72, Marion Co., 35,200 sq.yd. bituminous macadam, 16 ft., 35,060 sq.yd. reconstructed base course, 1,760 cu.yd. reconstructed base course stone, 1,840 boulders along shoulder, etc.; constructing Federal Aid Project 65-B, section of State Highway 1, between Cannon Co. line and McMinnville, Warren Co., 41,324 cu.yd. common excav., 60,732 sq.yd. 2½ in. bituminous macadam, 411.49 cu.yd. concrete, 33,302 lb. deformed steel bars, 62,819 sq.yd. "C" 8 in. hand placed coarse stone base also bridges over 20 ft. span, etc. D. Q. McComb, ch. engr.

Ohio—Sept. 1, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties:

Ashland Co., Sect. "D" Mansfield-Wooster Rd., 3.527 mi., brick, $56,066.

Hancock Co., Sect. "Arcadia" Lima-Sandusky Rd., 0.461 mi., sheet asphalt, $32,470.

Huron Co., Sect. "P" Columbus-Sandusky Rd., 3.551 mi., waterbound macadam, $43,497.

Huron Co., Sect. "G-1" Oberlin-Norwalk Rd., 1.746 mi., brick, $53,777.

Noble Co., Sect. "K" Caldwell-Marietta Rd., 0.956 mi., plain concrete, $37,588.

Wayne Co., Sect. "O" Wooster-Mansfield Rd., 3.355 mi., brick, $140,097.

Lake Co., Sect. "B" Cleveland-Buffalo Rd., 1.089 mi., brick, $55,183.

Marion Co., Sect. "H" Marion-Galion Rd., 0.131 mi., brick on concrete, $10,756.

Huron Co., Sect. "J-2" Bellvue-Norwalk Rd., 0.9 mi., concrete curb, $5,074.

Huron Co., Sect. "N" Oberlin-Norwalk Rd., 1.32 mi., concrete curb, $7,659.

Huron Co., Sect. "O" Oberlin-Norwalk Rd., 1.28 mile, concrete curb, $7,174. L. C. Herrick, dir. highways.

O., Cleveland—Sept. 1, paving drives in Highland Park Cemetery, asphalt. $45,000. Former bids rejected. R. Hoffman, 618 City Hall, engr. Noted July 27.

O., Cleveland Heights (Warrensville P. O.)—Aug. 28, paving Cedar Rd. from Coventry to Lee Rds., Greyton Rd. from Taylor to Winsford Rds., Nela View Rd. from Taylor to Winsford Rds., Roanoke Rd. from Noble to Monticello Rds., brick, sheet asphalt or bituminous macadam. To exceed $25,000. H. H. Canfield, city engr. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Ind., Albion—Sept. 6 (change of date), by Comrs. Noble Co., gravel surfacing 5.2 mi. A. J. Rich Rd., 18 ft., $55,523; 8.7 mi. Samuel Weimer Rd., 18 ft., $72,070; 11.4 mi. Krieger Rd., 24 ft. $114,533. W. T. Knox, Albion, engr. Noted July 27.

Ind., Crown Point—Aug. 28, by Comrs. Lake Co., grading and gravel surfacing 33,400 ft. Bixenman Rd., 16 ft. $36,814. R. Seely, Hammond, engr.

Ind., Goshen—Sept. 6, by Comrs. Elkhart Co., paving 13,840 ft. Fish Lake Rd., 18 ft., 27,679 sq.yd. concrete on concrete. $63,250. C. L. Kinney, Goshen, engr. Noted Aug. 17.

Ind., New Albany—Aug. 26, by Comrs. Floyd Co., grading and gravel surfacing 31,287 ft. Elizabeth and New Albany Ridge Rd., 16 ft. $35,000. M. M. Boland, New Albany, engr. Noted Aug. 17.

Ind., Spencer—Sept. 5, by Comrs. Owen Co., paving 13,274 ft. Henry Reutschler Rd., 18 ft., crushed stone. $27,300. L. Drescher, Spencer, engr. Noted Aug. 17.

Michigan—Aug. 29, by State Hy. Dept., Lansing, grading and surfacing 1.986 mi. State Trunk Line Rd. 11-17, Sects. A, B and C, Manistee Co., 5,233 cu.yd. excav., 18,628 sq.yd. bituminous concrete or waterbound macadam. F. F. Rogers, state highway comr.

Michigan—Aug. 31, by State Hy. Dept., Lansing, grading and surfacing 2.97 mi. State Trunk Line Rd. 39-5, Sect. A, Barry Co., 7,941 cu.yd. excav., 27,878 sq.yd. gravel, also 4.206 mi. Federal Aid Project 63, Sect. B, Bay Co., 24,994 cu.yd. excav. F. F. Rogers, state highway comr.

Wisconsin—Aug. 30, by State Hy. Comn., at div. office 2, Stephenson Bldg., Milwaukee, grading and surfacing 2.86 mi. Brown Deer-Menomonee Falls Rd., Federal Aid Project 255, Milwaukee Co., 13,311 cu.yd. earth excav., 30,196 sq.yd. concrete surfacing, 29,895 lb. reinforcement in pavement, 10,500 bbl. cement in place, alternate bids on contractor furnishing all cement or state furnishing cement, (contractors are to present bids in both ways). A. R. Hirst, Madison, highway engr.

Wis., Wauwatosa—Sept. 1, by A. V. Brigham, clk., grading and concrete paving 3,860 sq.yd. 10th Ave. from Washington to North Aves., 870 sq.yd. Windsor Ave. from 10th to 11th Aves., 1,870 sq.yd. Thomas Ave., from Grand Ave. to city limits, 2,600 sq.yd. 55th St. from Grand Ave. to Blue Mound Rd., 2,800 sq.yd. 58th St., from Grand Ave. to Blue Mound Rd. $25,000. J. E. Lowther, City Hall, engr.

Ia., Oskaloosa—Sept. 5, at office of T. H. Carlin, city clk., 15 blocks paving, also 40,000 yd. resurfacing, 1,200 ft. curbing and guttering, 12,500 ft. gutter flag. H. C. Hawkins, city engr. Noted July 13.

Minn., Marshall—Sept. 5, by Lyon Co., gravel surfacing 13 mi. State Rd. 8, and 3.4 mi. State Rd. 7. $25,000. C. W. Anderson, Marshall, engr.

Kan., Mound City—Sept. 12 at office Clerk Linn Co., earthwork on 3,056 mi. La Cygne-Pleasanton-Prescott Rd., Sect. A, Project 132; 5.735 mi. La Cygne-Pleasanton-Prescott Rd., Sect. B, Project 109, both 29 ft. 6 in. C. E. Kenney, Mound City, engr.

Kan., Salina—Aug. 31, by C. Banker, city clk., paving, curbing and guttering Elm St. from Oakdale to Ohio Sts., and from 3rd to River Sts., Penn Ave. from Ash St. to Riverside Ave., Iron Ave. from Delaware to Penn Aves., Ash St. from Oakdale to Front Sts., 11th St. from Iron Ave. to State St., 12th St. from State to Ash Sts; curbing and guttering Jamestown Ave. from Front to Oakdale Sts., 26,700 sq.yd. paving, 10,300 lin.ft. curbing and guttering. $100,000. W. L. Theisner, Salina, engr.

Kan., Valley Falls—Sept. 1, by E. E. Samson, city clk., for 7,000 yd. paving, 2,100 lin.ft. curbing and guttering, 460 lin.ft. stone sewer. Black & Veatch, Mutual Bldg., Kansas City, Mo., engrs.

Neb., Lincoln—Sept. 2, paving Dist. 496, 15,750 sq.yd. asphaltic concrete sheet asphalt and 10,400 lin.ft. combination curb and gutter; Dist. 392, 5,530 sq.yd. asphaltic concrete and 4,000 lin.ft. curb and gutter. G. Bates, engr.

Neb., York—A. B. Chatterton, city clk., taking bids and opens same about Sept. 1, paving 400 lin.ft. East 12th St., 5½ blocks of alleys, 14th St. from Lincoln to Grant Sts., 8th, 12th and 13th Sts. from Lincoln to Nebraska Sts., East Ave. from 12th to 10th Sts., East 10th St. from East St. to Elmer Ave., East St. from 7th to 8th Sts., East 8th St. from East to Blackburn Sts., Elmer St. to point 217 ft. north of East 8th St., Iowa and Grant Sts. from 5th to 3rd Sts., 4th St. from Lincoln to Grant Sts., Lincoln St. from 3rd St. S. to Beaver, 5th St. from Academy to Greenwood Sts., Grant St. from 7th to 8th Sts. Work involves 8,127 lin.ft. concrete curb, 20,796 lin.ft. combination concrete curb and gutter, 35,014 sq.yd. vertical fibre brick, asphaltic concrete or concrete on concrete, etc. $168,000. Scott & Scott, Bankers Life Bldg., Lincoln, engrs.

Okla., Tulsa—Sept. 29 at office C. Schultz, city engr., paving 18 blocks, asphaltic concrete, sheet asphalt, concrete, vibrolithic concrete, Willite or rock asphalt.

Colo., Denver—Sept. 2, by Manager Impvts. and Parks, concrete paving 11 blocks, West 44th Ave. Paving Dist. $27,510. A. K. Vickery, City Hall, engr.

Calif., Fresno—Sept. 5, by Supervs. Fresno Co., paving 4.37 mi. Route 20, Sect. A, Co. Highway system from Sanger to Adams Ave., 5 in. asphaltic concrete. $87,400. C. P. Jensen, Cory Bldg., Fresno, engr.

Calif., Oroville—Aug. 31, by Supervs. Butte Co., improving Oroville-Pentz Rd., Route 22, Sect. B, incl. (1) grading 4.8 mi., 5,478 cu.yd. earthwork, unclassified, (2) 2,400 ton broken stone base, 1½ in., (3) 7,160 ton broken stone base, 3 in. deep and ¾ in. to ⅜ and ⅜ in. to dust surfacing rock, (4) 382,000 sq.yd. asphaltic concrete wearing surface, 1½ in. thick, (5) 248 ton asphaltic oil penetration grade "E" spread. Items (2) and (4) are to be considered together as an alternative for items (3) and (5); grading and graveling 3 mi. Middle Honcut Cross Rd., 4 in. thick, 12 ft. wide; crushed rock surfacing ¾ mi. Neal Rd.; asphaltic macadam surfacing on 2 in. base, Laurel St., Stirling City; improving Oroville-Bangor Rd., Route 25, Sect. B, incl. 2,650 ton broken stone surfacing, 272 ton asphaltic oil grade "E"; improving Oroville-Pentz Rd., Sect. C, Route 22, incl. (1) grading 6.4 mi., 7,650 cu.yd. earthwork, unclassified, (2) 3,200 ton broken stone base, 1½ in. thick, (3) 9,520 ton broken stone base, 3 in. deep, ¾ in. to ⅜ in. and ⅜ in. to dust surfacing rock, (4) 506,000 sq.yd. 1½ in. asphalt concrete surfacing, (5) 330 ton asphaltic oil, penetration, grade "E" spread. Items (2) and (4) are alternative for items (3) and (5) together. H. H. Hume Co. Road Engr.

Calif., Stockton—Sept. 6, by Supervs. San Joaquin Co., grading, gravel and rock oil top on Mt. Diablo Ave., $16,596; grading and gravel surfacing Imp. Norton Lane Rd., $16,801, Imp. Ashley Rd., $12,900; grading and constructing Imp. Central Ave., near Lodi, oil macadam, $2,600; grading Imp. Hoag Rd., east of Bellota, $6,500. F. E. Quail, co. surv.

Calif., Yuba City—Sept. 5, by Supervs. Sutter Co., 1 mi. Franklin Rd. from Bunce Lateral to Walton Ave., Alternate A, 15 ft. x 5 in. rein.-con., 18,000 sq.yd. grading, 1,250 cu.yd. paving; alternate B, 15 ft. x 4 in. asphaltic macadam, incl. old rock base, 700 ton crushed rock base, 9,500 sq. yd. asphaltic surface. O. W. Lanzendorf, co. engr.

Quebec—Aug. 28, by J. L. Boulanger, deputy minister of pub. wks., Quebec, 3,787 ft. road, waterbound or bituminous macadm.

Quebec—Sept. 5, by J. L. Boulanger, deputy minister pub. wks., Quebec, 11,490 ft. macadamized road in northeastern part of St. Anne de Beaupre Parish.

Que., Montreal—Aug. 28, by R. Bauset, city clk., asphalt pavements as follows: 2,070 ft. D'Argenson St., 5,000 ft. Butler St., 1,968 ft. St. Denis St., 1,968 ft. De St. Valier St., 1,240 ft. Shappard St., 1,555 ft. De Biencourt St., 2,250 ft. Hadley St., 2,437

Streets and Roads (Continued)

ft. Green St., 2,817 ft. Forsythe St., 1,744 ft. Davison St., 3,206 ft. Bellechasse St., 1,022 ft. Cartier St., 28-42 ft. wide; 38,290 ft. concrete sidewalks, on Francois Barry, Belanger, Begin, Benoni, Maplewood, 44th, Boyer, St. Denis, Lajeunesse, De Chateaubriand, Beaumont, Olympia, Fortune, Villeray, Clarke, Beaubien, Drolet, Jarry, Rosemount, Gounod, Dublin and Omer Sts., 5 and 6 ft. wide.

Ont., Cobourg—Aug. 29, by James, Proctor & Redfern, engrs., 36 Toronto St., Toronto, 1 mi. pavement, 25,000 sq.yd. asphalt, concrete or bitulithic. $100,000.

B. C., Prince Rupert—Receiving bids and opens same about Aug. 26, grading and paving 5,531 ft. 4th and 5th Aves., bituminous macadam, also 8,000 lin.ft. concrete sidewalks. $40,100. A. Whittaker, city engr.

BIDS RECEIVED

New York—H. S. Sisson, comr. State Hy. Dept., Albany, opened bids Aug. 15, improving (1) 4.13 mi. Highway 1642 Cascade-Moravis, Cayuga Co., engrs. est. $162,024, (2) 3.54 mi. Highway 8021-B, Marathon-Cortland, Parts 2 and 3, Cortland Co., engrs. est. $135,516, (3) 5.19 mi. Highway 8128 Essex-Willsboro, Part 1 and Highway 1641, Essex-Willsboro, Part 2, Essex Co., engrs. est. $145,249, (4) 7.96 mi. Highway 1643, Greenwood Lake-Tuxedo, Orange Co., engrs. est. $220,188, reconstructing (5) 3.11 mi. Repair Contr. 3022, Highway 615, New Lebanon-Brainard, Columbia Co., engrs. est. $101,776, (6) 0.24 mi. Repair Contr. 1352 Highway 549, Poughkeepsie-Pleasant Valley, Dutchess Co., engrs. est. $23,545, (7) 3.04 mi. Repair Contr. 3017 Highway 612, Pawling-Dover Town Line, Dutchess Co., engrs. est. $108,841, (8) 3 mi. Repair Contr. 3015 Highway 5332, Lowville-Carthage, Lewis Co., engrs. est. $88,019, (9) 2.08 mi. Repair Contr. 1354 Highway 392, Oak Orchard, Part 1 and Highway 393 Oak Orchard, Part 2, Orleans Co., engrs. est. $52,442, from S. Rosoff, Warsaw, (1) $146,065; W. D. Fote, Olean, (1) $150,852, (2) $133,837; M. H. Ripton, Rochester, (1) $56,747, (8) $87,859; Lord Coopy & Co., Morrisonville, (3) $136,729; United Building & Constr. Co., Inc., Lodi, N. J., (3) $136,764; Hogeboom & Canfield, Inc., Kingston, (3) $139,533; J. J. Hart, 1009 Western St., Pittsburgh, Pa., (4) $207,077; Ward & Tully, Inc., 189 Montague St., Brooklyn, (4) $215,408; J. L. Hayes Constr. Co., 58 South Bway., Yonkers, (4) $215,648; C. B. Lindholm, 53 North St., Pittsfield, Mass., (5) $99,919; Fowler & Bank, Inc., Mt. Kisco, (5) $101,424, (7) $102,088; Spoor-Lasher Co., Inc., 56 Market St., Poughkeepsie, (6) $22,088; Steam Shovel Excavation Co., Inc., Brooklyn, (7) $106,029; Sperry Eng. Co., 82 Church St., New Haven, Conn., (7) $107,623; G. A. Smith, State St., Lowville, (8) $86,689; Dale Eng. Co., Mann Bldg., Utica, (9) $47,162; Municipal Constr. Co., U. C. N. B. Bldg., Utica, (9) $50,346; Ribstein-Holter Co., Inc., Rochester, (9) $50,925. Noted Aug. 3.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids Aug. 16, paving (1) Crown St. from Albany to Troy Aves., (2) East 2nd St. from Elmwood Ave. to Ave. I, (3) East 15th St. from Kings Highway to Ave. R, (4) Kermit Pl. from East 8th St. to Coney Island Ave., (5) Ave. L from Coney Island Ave. to East 14th St., (6) Riverdale Ave. from Williams to Alabama Aves., (7) 10th Ave. from 38th to 39th Sts., and from 46th to 47th Sts., (8) 59th St. from 16th to 17th Aves., all foregoing asphalt on 6 in. concrete, repaving (9) Washington Ave. from Wallabout Canal to Flushing Ave., granite on 6 in. concrete, (10) 18th Ave. from 52nd to 60th Sts., asphalt on 6 in. concrete, resurfacing (11) Diamond St. from Meserole to Norman Aves., etc., asphalt, grading, curbing and laying sidewalks on (12) East 15th St. from Ave. V to Gravesend Neck Rd., grading, curbing and flagging (13) 10th Ave. from 38th to 39th Sts., recurbing and paving (14) DeKalb Ave. from Fulton St. to Vanderbilt Ave., (15) 66th St. from 12th to 13th Aves., both asphalt on 6 in. concrete, from

Cranford Co., 52 9th St., (1) $8,222, (2) $2,807, (3) $8,813, (4) $2,353, (5) $10,209, (6) $3,163, (7) $6,952, (8) $7,798, (10) $29,378, (11) $44,791, (14) $51,814, (15) $6,299.

Cleveland Trinidad Paving Co., Flushing, (1) $8,748, (6) $3,245, (10) $32,000.

Borough Asphalt Co., 1301 Metropolitan Ave., (1) $8,872, (2) $2,665, (3) $9,372, (4) $2,133, (5) $10,876, (6) $3,300, (7) $6,947, (8) $8,035, (11) $58,543, (15) $6,495.

Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (2) $2,597, (3) $9,092, (4) $2,175, (5) $10,492, (7) $6,787, (8) $7,619, (15) $6,124.

J. Meehan & Son, 74 Cortland St., New York, (9) $103,040.

M. J. O'Hara, 717 65th St., (9) $104,917.

Leonard Paving Co., Inc., 233 Bway., New York, (9) $110,824.

Uvalde Asphalt Paving Co., 1 Bway., New York, (10) $34,792, (14) $65,116.

A. E. Castle, 3313 Tilden Ave., (12) $3,151, (13) $1,013.

G. M. Mandatto, 129 29th St., (12) $3,204.

T. B. Scott, 671 Halsey St., (12) $3,413.

L. Mangieri, 190 31st St., (13) $1,100.

Grimm Constr. Co., 170 McKinley St., (13) $1,109.

Sicilian Asphalt Paving Co., 41 Park Row, New York, (14) $47,807. Noted Aug. 10.

N. Y., New York — H. Bruckner, pres. Bronx Boro, opened bids Aug. 16, paving (1) East 178th St., grading, setting curb, laying sidewalks and crosswalks on (2) Weiher Court, etc., (3) Rochambeau Ave., sewers in (4) Mayflower Ave., (5) Tyndall Ave., (6) Kingsland Ave., (7) Delafield Ave., (8) Guion Pl., (9) Pierce Ave., from C. D. Beckwith, Inc., 2875 Bway., (1) $5,641, (2) $5,330; Asphalt Constr. Co., 208 Bway., (1) $6,585; Brusstar Constr. Co., Inc., Harlem River and 150th St., (1) $6,661, (2) $6,316; Interboro Asphalt Co., 233 Bway., (2) $5,620; M. DelBalso, 660 East 221st St., (3) $18,924, (8) $1,935; T. De Roma, (3) $19,956; Lamura Contg. Co., (3) $20,700; J. L. Sigretto, 1475 Woodhaven Ave., Woodhaven, (4) $12,623, (9) $24,886; McLaughlin & Buckley, 337 East 134th St., (4) $13,647, (5) $9,444, (6) $6,100, (7) $8,681, (8) $1,965; C. E. Farrell Contg. Co., 1981 Pilgrim Ave., (4) $13,730, (8) $2,016; Gregorio & Gabrille, (5) $9,275, (7) $8,801; D. Bonacci, (5) $10,444, (6) $6,860, (7) $9,008; J. V. Timoney Constr. Co., Inc., 220 East 201st St., (6) $7,219; Fordham Contg. Co., (9) $26,694; F. Gasparrini, (9) $25,536. Noted Aug. 10.

N. Y., Syracuse—Bd. Contract & Supply, opened bids July 31, paving (1) East Colvin St., concrete (2) Lilac St., vitr. brick and asphalt (3) Janesville Ave., concrete (4) Renwick Ave., asphalt, (5) East Adams St., from Mondo Constr. Co., City Bank Bldg., (1) $52,776 (3) $36,126; J. H. Gallup, Union Bldg., (1) $59,231 (3) $42,340 (4) $56,725 (5) $27,012; McCarthy & Rock, Potsdam, (1) $63,345; G. B. Dickison, Union Bldg., (2) $24,586; T. Holihan, 164 Lewis St., Rochester, (2) $26,880;; F. J. Baker, University Blk., (2) $24,833 (3) $45,189 (4) $54,690 (5) $27,740; Dale Eng. Co., Mann Bldg., Utica, (4) $53,093 (5) $26,386. Noted July 27.

Alabama—W. S. Keller, state highway engr., Montgomery, opened bids Aug. 15, grading, concrete surfacing and constructing 120 ft. steel span bridge, on 4.82 mi. Montgomery-Selma Rd., Selma-Uniontown Rd. and Dixie Overland Highway, from Worthington & Co., 1st Natl. Bank Bldg., Birmingham, $139,698; Hancock Bros., 162 Conti St., Mobile, $148,371; J. S. Peterson, Montgomery, $150,583. Noted July 27.

O., Cleveland—Opened bids Aug. 9, paving (1) East 30th St. from St. Clair to Chester Aves. (2) East 138th St. from St. Clair Ave. to Woodworth Rd., with (a) granite (b) asphalt (c) brick, from Bentley Bros., 1836 Euclid Ave., (1a) $70,202 (1b) $69,050; Rieley Bros., The Arcade, (1a) $71,591 (1b) $70,057 (2c) $8,607; H. G. Herring, c/o Pavers Exch., Society for Savings Bldg., (2c) $8,460. Work involves 5,050 cu.yd. earth excav., 13,900 sq.ft. brick on 6 in. concrete, 76,700 sq.ft. asphalt or granite block, 5,300 lin.ft. stone curb, 6,600 ft. 4 in. sewer pipe gutter.

Wisconsin — State Hy. Comn., Madison, grading and surfacing Spooner Cameron Rd., Project 251, Washburn Co., from Ord Co., Duluth, Minn., (street address not available), $15,353, Universal Eng. Co., Ingram Blk., Eau Claire, $18,840, Tilseth & Wilson, Menomonie, $19,377, Webster-Milltown Rd., Project 265-C, Polk Co., from Ord Co., Duluth, Minn., $18,114. Noted July 27.

Missouri—State Hy. Dept. at div. office Bloomfield, opened bids July 26, 9.943 mi. road from Gray Ridge westwardly, 24 ft., Federal Aid Project 118 B, Stoddard Co., (1) 24,670 cu.yd. earth excav., (2) 4,798 cu.yd. borrow, (3) 22,546 sq.yd. specification B gravel pavement, etc., from Novaculite Constr. Co., Marion, Ill., (1) $0.31 per cu.yd., (2) $0.31, (3) $0.53, total $28,950; W. A. Leach, Poplar Bluff, (1) $0.235, (2) $0.235, (3) $0.75, $31,905; J. H. Hewitt, Little Rock, Ark., (street address not available), (1) $0.27, (2) $0.26, (3) $0.77, $32,775.

Colorado—State Hy. Dept., Denver, gravel surfacing, (1) 3.634 mi. road beginning 1¾ mi. northwest of Grand Junction and extending northwest toward Fruita, Federal Aid Project 209, Mesa Co., 18 ft., (2) 8.341 mi. Sante Fe Trail, beginning at Hasty and extending easterly toward Lamar, Federal Aid Project 218-A, Bent Co., 18 ft.; concrete paving (3) 0.433 mi. road beginning at Arkansas River Bridge north of Las Animas and extending south to Las Animas city limits, State Project 630, Bent Co., 18 ft., (4) 4.049 mi. Ft. Collins-Denver Rd., Federal Aid Project 221, Larimer Co., clearing and grading (5) 7.53 mi. Berthoud Pass Forest Rd. Project, Clear Creek Co., 18 ft., from Hinman Bros., Craig, (1) $37,822, (5) $125,383; F. L. Hoffman, 527 Mining Exch. Bldg., Denver, (1) $38,535; W. B. Cheek, 213 Plum St., Ft. Collins, (1) $41,213; Monaghan & Cunningham, 1710 Market St., Denver, (2) $47,499; W. A. Colt & Son, Las Animas, (2) $47,834, (3) $12,389; Pickering Bros., 460-7 East St., Salt Lake City, Utah, (2) $48,825; Pueblo Bridge & Constr. Co., Pueblo, (3) $12,795; Standard Eng. & Constr. Co., 518 E & C Bldg., Denver, (3) $14,252; F. C. Dreher Constr. Co., Cooper Bldg., Denver, (4) $124,842; Engineers Constr. Corp., 807 7th St., Greeley, (4) $126,660; Mutual Constr. Co., 419 Quincy Bldg., Denver, (4) $133,651; Dooling Bros. & Hoffman, 305 Bank Blk., Denver, (5) $110,650; White & Johnson, 521 Chamber Commerce Bldg., Denver, (5) $116,708. Noted Aug. 3.

Calif., Berkeley—Opened bids paving, etc. Grove St., Berkeley Way to Hopkins St., (1) 93,000 ft. grading, (2) 9,000 ft. concrete curb and gutter, (3) 75,000 sq.ft. 6 in. concrete base with 2 in. asphaltic concrete surface, from Warren Constr. Co., Bacon Bldg., Oakland, (1) $0.066, (2) $0.85, (3) $0.319; Bates & Borland, Oakland Bank of Savings Bldg., Oakland, (1) $0.065, (2) $1.60, (3) $0.31; Hutchinson Co., 1706 Bway., Oakland, (1) $0.06, (2) $1.70, (3) $0.31.

CONTRACTS AWARDED

Connecticut—State Hy. Dept., Hartford, paving 2,650 lin. ft. Fox Hill Rd., 20 ft., in Norwich, concrete and vitr. Hillside brick on 6 in. concrete, to A. G. Bianchi, Norwich, $28,288; 20,125 lin.ft. Willimantic Rd., 18 ft., in Coventry, bituminous macadam, to L. Suzio Constr. Co., State and Brooks Sts., Meriden, $96,918. Noted Aug. 10.

Conn., Meriden—For 17,962 sq.yd. 3 in. sheet asphalt pavement on 6 in. concrete, and 5,108 sq.yd. Hillside brick on 6 in. concrete, to Hudson Paving Co., 2875 Bway., New York City. Engrs. est. $85,000.

N. Y., Brooklyn—E. Riegelmann, pres. Brooklyn Boro, Boro Hall, repaving Church Ave., to Borough Asphalt Co., 407 Hamilton Ave., $27,013; Porter Ave., etc., and Ralph Ave. from Macon St. to Atlantic Ave., to Sicilian Asphalt Paving Co., 41 Park Row, New York, $3,215 and $56,340 respectively; 17th Ave., etc., to Cranford Co., 52 9th St., $25,646; Ralph Ave. from Atlantic Ave. to Bergen St., to J. Meehan & Son, Cortland St., New York, $22,347. Noted Aug. 10.

N. Y., Buffalo—To Rock Asphalt & Constr. Co., Morgan Bldg., repaving Delevan Ave., 40 ft., $3,553; paving Tacoma St., 28 ft., $32,697, Ludington St., 26 ft., $27,827, Freund St., 22 ft., $27,230, Queen St., 26 ft., $7,567, Newman Pl., 26 ft., $6,699, LaForce St., 26 ft., $12,071, Montclair Ave., 26 ft., $19,583, Roseville St., 26 ft., $11,653, Mendola St., 26 ft., $16,056, Parkside Ave., 30 ft., $14,469, Floss Ave., 24 ft., $19,306, Kingsley St., 26 ft., $16,522, Florida St., 26 ft., $10,850; to B. F. Spire, 24 Colonial Circle, Columbus Ave., 22 ft., $10,150, Kirkpatrick St., 26 ft., $8,496, Laux St., 26 ft., $13,200; to H. P. Burgard Co., 1968 Fillmore Ave., Riley St., 28 ft., $81,068, Columbus Ave., 28 ft., $24,495, River St., 42 ft., $33,460, all foregoing specification B asphalt on concrete; to J. M. Fahning, 460 LeRoy Ave., 10 in. tile sewer in Gratiot Ave., $4,941, 18 in. tile sewer in Heminway St., $1,555; to L. DiPasquale, Buffalo, 10 in. tile sewer in Elgas St., $1,355.

N. Y., East Rochester—Paving Lincoln Rd., East Elm St. and East Ave., asphalt, to J. Frederich Co., Rochester (street address not available), $90,000. Noted June 8.

N. Y., Eastwood—Bd. Village Trustees, Village Hall, concrete paving and concrete curbing various streets, 8 in. vitr. sewer in Lawson St., Homecraft and Glencove Rds., to J. C. Dempsey, 308 East Kennedy St., Syracuse, $19,408. Noted July 27.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing and laying sidewalks on Buckley St., recurbing John St., and paving and laying sidewalks on Park Lane, to Welsh Bros. Contg. Co., 32 Queens St., $3,488, $4,560 and $38,571 respectively; paving Newtown Rd., 13th and Kingsland Aves., etc., to Cleveland Trinidad Paving Co., Flushing, $11,799, $14,304 and $36,334 respectively; 7th Ave., etc., to W. J. Fitzgerald, 547 West 45th St., New York, $12,566; repairing sheet asphalt pavements in 1st and 2nd Wards, to Brusstar Constr. Co., Inc., Harlem River and 150th St., New York, $17,744. Noted Aug. 3.

Streets and Roads (Continued)

N. Y., Rochester—To T. Holohan Co., Rochester (street address not available), paving Ernst St., asphalt, $12,069, Arnett Blvd., asphalt $17,651, resurfacing Sumner Park, asphalt $10,938, Averill St., asphalt $23,781; to P. Alfonso Co., Rochester (street address not available), grading, laying sewers and walks on Inglewood Dr., $5,889.

N. Y., White Plains—Westchester Co., Court House, constructing North Bway., to Molloy & Murray Contg. Co., Inc., Saw Mill River Rd., Yonkers, $42,146. Noted July 27.

N. J., Bridgeton—Cumberland Co., paving 1 mi. Bridgeton Turnpike, concrete, to Tri-State Constr. Co., Bridgeton, $55,766.

N. J., Millville—Cumberland Co., Court House, Bridgeton, constructing State Highway Route 15, Sect. 4, West Main St., here, to Tri-State Constr. Co., Bridgeton, $55,797 or 106.9% of engineers estimate. Noted July 27.

N. J., Mt. Holly—Burlington Co., reconstructing road between Mt. Holly and Medford, concrete, to Union Paving Co., 30th and Locust Sts., Phila., $149,000. Noted July 27.

N. J., Woodbury—Gloucester Co., constructing Route 6, Sect. 14, in city of Woodbury, to Pub. Service Production Co., 80 Park Pl., Newark, $169,776. Noted July 20.

Pa., Catasauqua—For 40,000 sq.yd. concrete pavements, etc., to G. H. Hardner, Allentown, excav. $1 per cu.yd., concrete paving $2.18 per sq.yd., re-straightening stone curb $0.60 per lin.ft., etc. Noted July 27.

Pa., Erie—Asphalt pavements on Chestnut St., to Mayer Bros. Constr. Co., Erie, $22,541; Cranberry St. and Brown Ave., to M. A. McCormick Co., Erie, $21,380 and $6,289 respectively; sanitary sewer in Elmwood Ave. to V. Calabrese Co., Erie, $4,755; sanitary sewer in Front and Myrtle Sts., to F. G. Diefendorf, Erie, $479. Noted Aug. 10.

Pa., Pittsburgh—Paving and repaving Larimer Ave., Mt. Oliver and Plainfield Sts., to Booth & Flinn, Ltd., Forbes St., $26,796.

Pa., Washington — Repaving Jefferson Ave., Chestnut, Main and East Maiden Sts., brick on concrete, to J. Herd, Washington, $70,000. Contractor receiving bids on brick.

D. C., Wash.—Dist. Comrs., 509 Dist. Bldg., street paving to Cranford Paving Co., 2620 E St., N. W., $75,000. Noted Aug. 3.

Alabama—W. S. Keller, state highway engr., Montgomery, grading and gravel surfacing 18.754 mi. Guin-Winfield Rd., to Smith Co., 30 3rd Ave., Birmingham, $148,651. Noted Aug. 17.

Louisiana—State Hy. Comn., Redmond Bldg., Baton Rouge, and Police Jury of East Baton Rouge Parish, paving Bayou Sara Rd., Warrenite bitulithic to Southern Roads Co., Amer. Trust Bldg., Birmingham, Ala., $76,093.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 0.371 mi. Sect. "R" Cleveland-Buffalo Rd., Ashtabula Co., brick, to Pitt Constr. Co., Fulton Blk., Pittsburgh, $31,508. Noted Aug. 17.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties:

Allen Co., Sect. "A" Delphos-Kalida Rd., .066 mi., bituminous macadam, tar, to G. B. Walthers, Lima, $12,247.

Ashland Co., Sect. "Loudonville" Columbus-Wooster Rd., 0.208 mi., brick, to G. B. Herring & Son, Mansfield, $16,100.

Franklin Co., Sect. "B" Columbus-Wooster Rd., 4.113 mi., waterbound macadam, to R. H. Shafer, Chamber of Commerce Bldg., Columbus, $69,587.

Franklin Co., Sect. "B" Columbus-Wooster Rd., 4.113 mi., brick, to R. H. Shafer, Chamber of Commerce Bldg., Columbus, $102,654.

Gallia Co., Sect. "A-1" Gallipolis-Crown City Rd., 0.86 mi., plain concrete, to Miller Bros., Gallipolis, $31,909.

Guernsey Co., Sect. "G-1" Cambridge-Newcomerstown Rd., 2.036 mi., rein.-con., to Bird, Springfield, $64,281.

Guernsey Co., Sect. "F-Liberty" Cambridge-Newcomerstown Rd., 1.672 mi., rein.-con., to C. Bird, Springfield, $51,406.

Jefferson Co., Sect. "K-1" Ohio River Rd., 2.157 mi., brick, to Brown & Allen, Ellsworth, $109,090.

Meigs Co., Sect. "L" Pomeroy-Athens Rd., 2.845 mi., rein.-con., to S. A. Palmer, Marietta, $75,495.

Morrow Co., Sect. "J" Marion-Galion Rd., 2.233 mi., bituminous macadam, asphalt, oil, to Marifield & Uncapher, Marion, $67,066.

Scioto Co., Sect. "R-2-a" Ohio River Rd., 3.139 mi., monolithic brick, to H. N. Snyder, Columbus (street address not available), $129,018.

Washington Co., Sect. "K-2" Marietta-Caldwell Rd., 4.88 mi., rein.-con., to Gaty Constr. Co., Central Natl. Bank Bldg., Columbus, $148,432.

Wayne Co., Sect. "P" Akron-Wooster Rd., 2.002 mi., monolithic brick, to Kavanaugh-DeNiro Co., Youngstown (street address not available), $58,307.

Seneca Co., Sect. "A-1" Columbus-Sandusky Rd., 0.69 mi., constructing concrete curb, to C. M. Gray, Waterville, $2,625.

Medina Co., Sect. "P" Ashland-Medina Rd., drainage structures, to Lodi Concrete Co., Lodi, $6,836. Noted Aug. 17.

O., Cleveland—Cuyahoga Co. paving Riverside Rd., brick, to Fisher & Williams, Lorain Rd., West Park, $125,843; Lorain Rd., brick, to Roehl Bros. Paving & Constr. Co., West 25th St. and Clark Ave., $405,023. Noted July 27.

O., Columbus—W. H. Duffy, dir. Pub. Serv., grading, curbing, laying water and sewer connections and paving 1,185 ft. Brunson Ave., and 1,487 ft. 4th Ave., both 26 ft., asphalt, to Pub. Wks. Constr. Co., 57 Wiggins Blk., Cincinnati, $12,946 and $21,699 respectively; 1,585 ft. Mill St., 26 ft., Mexican asphalt, to Franklin Asphalt Paving Co., 209 South High St., $16,217; 1,913 ft. 16th Ave., 26 ft., asphalt, to Knight & Wells, Columbus, $27,825; 299 ft. alley north of 9th Ave., 20 ft., and 884 ft. alley north of Maynard Ave., 15 ft., both concrete, to Federal Paving Co., Columbus, $1,915 and $4,690 respectively. Noted Aug. 10.

O., Upper Arlington (Columbus P. O.)—Grading, curbing and paving 1,700 ft. Andover Rd., 20 ft., 800 ft. Fairfax Rd., 20 ft. 2,100 ft. Yorkshire Rd., 20 ft., 3,000 ft. Tremont Rd., 26 ft. and 36 ft., all asphalt, to B. F. Patterson, 1214 Neil Ave., Columbus, $13,544, $5,323, $27,700 and $48,086 respectively. Noted Aug. 3.

O., Upper Arlington (Columbus P. O.)—To Cleveland Trinidad Paving Co., 510 Grand Theatre Bldg., Columbus, grading, curbing and paving with asphaltic concrete Oakland Ave. S., 680 ft. long, 50 ft. wide, 1,563 cu.yd. excav., 1,660 sq.yd. paving, 725 sq.yd. sidewalk and 1,304 lin.ft. curbs and gutters, $7,887. Merrick Rd., 1,050 ft. long, 60 ft. wide, 965 cu.yd. excav., 2,824 sq.yd. paving, 1,096 sq.yd. sidewalk and 2,110 lin.ft. curbs and gutters, $12,284; Broadview Ave., 1,018 ft. long, 60 ft. wide, 1,920 cu.yd. excav., 2,400 sq.yd. paving, 1,100 sq.yd. sidewalk, 1,964 lin.ft. curbs and gutters, $12,525. Ashland Ave., 1,018 ft. long, 50 ft. wide, 3,258 cu.yd. excav., 2,415 sq.yd. paving, 1,100 sq.yd. sidewalk, 1,970 lin.ft. curbs and gutters, $12,465. Oakland Ave. N., 1,175 ft. long, 50 ft. wide, 2,753 cu. yd. excav., 2,775 sq.yd. paving, 1,263 sq.yd. sidewalk and 2,264 lin.ft. curbs and gutters, $13,479. Elmer Ave., 952 ft. long, 50 ft. wide, 1,422 cu.yd. excav., 2,415 sq.yd. paving, 1,100 sq.yd. sidewalk, 1,970 lin.ft. curb and gutters, $11,087. Elmwood Ave., 1,018 ft. long, 50 ft. wide, 2,105 cu.yd. excav., 2,415 sq.yd. paving, 1,100 sq.yd. sidewalk, 1,970 lin.ft. curb and gutters, $11,600. 2nd Ave., 864 ft. long, 60 ft. wide, 4,148 cu.yd. excav., 2,262 sq.yd. paving, 925 sq.yd. sidewalk and 1,900 lin.ft. curbs and gutters, $12,400. Eastwood Ave., 570 ft. long, 50 ft. wide, 2,917 cu.yd. excav., 934 sq.yd. paving, 220 sq.yd. sidewalk and 785 lin.ft. curbs and gutters, $5,810. Virginia Ave., 500 ft. long, 50 ft. wide, 1,604 cu.yd. excav., 833 sq.yd. paving, 350 sq.yd. sidewalk and 650 lin.ft. curbs and gutters, $4,669. Oxley Rd., 3,612 ft. long, 50 ft. wide, 10,888 cu.yd. excav., 9,059 sq.yd. paving, 3,783 sq.yd. sidewalk and 6,660 lin.ft. curbs and gutters, $43,976.

Ind., Crown Point—Lake Co., gravel surfacing 18,400 ft. George Melcher Rd., and 6 mi. A. F. Brown Rd., both 16 ft., to Courtwright, Hiney & Wheeler, Crown Point, $35,888 and $48,000 respectively, engrs. est. $34,493 and $52,000; 3.8 mi. E. O. Sutton Rd., 18 ft., to H. Hathaway, West Creek Twp., Lowell, $34,900, engrs. est. $40,463; 3.9 mi. Lottes Rd., 18 ft., to H. P. Downey, 828 Calumet St., Hammond, $39,585, engrs. est. $40,460. Noted July 27.

Michigan — State Hy. Dept., Lansing, grading and surfacing 2.324 mi. State Trunk Line Rd. 14-23, Sect. B, Gratiot Co., to O. C. Raymont, Mt. Pleasant. $27,481; 3.73 mi. State Trunk Line Rd. 13-11, Sect. A, Charlevoix Co., to Regan-Baker Co., Kewadin, $26,217; 0.915 mi. State Trunk Line Rd. 87-2, Genesee Co., to Michigan Asphalt Paving Co., Flint, $19,914, plus cement, $5,409; State Trunk Line Rd. 65-1, Genesee Co., 1.042 mi. Sect. A, to L. A. and P .E. Moran, Howell, $19,618, plus cement, $9,711, 0.737 mi. Sect. B, to Michigan Asphalt Paving Co., Flint, $16,122, plus cement, $4,634; 3½ mi. Lambertville Rd., Monroe Co., to Thomas & O'Rourke, Toledo, O., (street address not available), $28,555; 5.3 mi. Assessment Dist. Rd. 27, Monroe Co., to Skeldon Eng. Co., 242 Water St., Toledo, O., $48,556; 13.267 mi. State Trunk Line Rd. 25-15, Sects. B and C, Chippewa Co., to S. J. Groves & Sons Co., 120 Manhattan Bldg., Duluth, Minn., 124,012 cu.yd. excav., $0.35, 89.2 cu.yd. 1:2:4 concrete $24, 46.6 cu.yd. 1:3:6 concrete $22, etc., total $68,623; State Trunk Line Rd. 48-7, 2 mi. Sect. A, 2.156 mi. Sect. B, Chippewa Co., Sect. A, to Fogelsonger & Madison, St. Ignace, 3,837 cu.yd. excav. $0.53, 3.7 cu.yd. 1:2:4 concrete $21. 18,774 sq.yd. waetrbound macadam $1, etc., total $20,984, Sect. B to J. Cottle, Rudyard. 17,347 cu.yd. excav. $0.40, 9.8 cu.yd. 1:2:4 concrete $20, 20,211 sq.yd. waterbound macadam $1.15, etc., total $32,179.

Michigan — State Hy. Dept., Lansing, grading and surfacing 8.283 mi. State Trunk Line Rd. 89-4, Allegan Co., to Gabel & Gabel, South Haven, incl. 50,576 cu.yd. excav. $0.38, 157.4 cu.yd. 1:2:4 concrete $13, 79.8 cu.yd. 1:2½:5 concrete $12, 160 cu.yd. 1:3:6 concrete $11. $77,597 sq.yd. gravel $0.61, total $73,650, Noted Aug. 3.

Michigan — State Hy. Dept., Lansing, grading and surfacing 5.383 mi. Federal Aid Project 84, Monroe Co., to Bartling & Dull, Pontiac, incl. 22,608 cu.yd. excav. $0.75, 167.7 cu.yd. 1:2:4 concrete $15, 262.8 cu.yd. 1:3:6 concrete $17, 56,093 sq.yd. rein.-con. pavement $1.78, total $125,999 plus state cement, $59,142.

Michigan—State Highway Dept., Lansing, grading and surfacing 2.564 mi. State Trunk Line Rd. 13-16, Kent Co., to Whiting Constr. Co., Grand Rapids, incl. 15,491 cu. yd. excav. $0.64, 47.4 cu.yd. 1:2:4 and 87 cu.yd. 1:3:6 concrete $13, 27,072 sq.yd. concrete pavement $1.26, total $49.137 plus state cement $23,425. Noted Aug. 10.

Wis., Milwaukee—Paving Dakota St. from Pine to Lenox Sts., asphalt, to White Constr. Co., 68 Wisconsin St., $3,464; Orchard Pl. from 28th to 31st Aves., concrete curb and gutter only, to Dean Constr. Co., 382 East North Ave., $1,876; Wells St. from 28th to 33rd Sts., asphalt, to Badger Constr. Co., 97 Wisconsin St., $22,541; concrete paving 11 alleys, to A. E. Retzlaff, 949 4th St., $24,122; 3 alleys, to S. W. Tallmadge, 445 Milwaukee St., $3,374; 3 alleys to J. Schweitzer, 699 5th St., $6,269; 2 alleys to Bodeman Constr. Co., 691 48th St., $5,358; 6 alleys, to Czerwinski Constr. Co., 376 16th Ave., $22,540; 7 alleys, to F. Banaszak, 1335 4th Ave., $13,484; 10 alleys to Ryback & Sadowski, 1092 2nd Ave., $28,318; 1 alley to J. Bluhm, 164 Burliegh St., $3,665.

Wis., Milwaukee—Milwaukee Co. paving, etc., Oklahoma Ave. from Howell Ave. to Old Chicago Rd., 6,800 sq.yd. asphalt, to White Constr. Co., 68 Wisconsin St., $34,200. Noted Aug. 3.

Minnesota—State Hy. Dept., St. Paul, 11.5 mi. State Project 9-29, Federal Aid Project 289, Houston and Fillmore Counties, grading to J. J. and M. S. Mergens, 403 Kasota Bldg., Minneapolis, $76,014. spillway and culverts to Lyle Culvert and Road Equipment Co., 171 27th Ave. S. E., 5 bridges to Funk & Rasmussen, LaCrosse, Wis., $15,280, 3 bridges to C. H. Vickerman, Caledonia, $6,892.

State Project 11-21, 10 mi., Roseau Co., 4 bridges to Valley Constr. Co., Stephen, $12,730, pipe material to Fay Sand & Gravel Co., Duluth, $1,710, (grading and culvert contracts pending).

State Project 7-28, Federal Aid Project 233, 2 mi., Brown and Nicollet Counties, grading to Winston Bros. Co., 801 Globe Bldg., Minneapolis, $37,573, culverts to Sanitor Constr. Co., 3050 4th Ave. S., Minneapolis, $5,251. Pipe bids rejected.

State Project 3-30, Federal Aid Project 280, 17 mi., Itasca Co., grading to E . F. Remer, 315 Sellers St., Hibbing, $117,835. Culvert and pipe bids rejected.

State Project 12-21, Federal Aid Project 256, 8 mi., Carver Co., grading to J. Leach, Lakeville, $31,643, culverts to Wessel Bros., Guardian Life Bldg., St. Paul, $9,228, pipe to Elk River Concrete Products Co., Elk River, $1,346.

State Project 42-21, Olmsted Co., 6 mi., grading to Cameron, Joyce & Co., Keokuk, Ia., $38,278, culverts to A. Beckman Co., Lake City, $13,023, pipe to Klauer Mfg. Co., 9th and Washington Sts., Dubuque, Ia., $755.

State Project 53-23, Dakota Co., to Campbell Constr. Co., 3050 Hennepin Ave., Minneapolis, $29,520, culverts to Lyle Culvert & Road Equipment Co., 171 27th Ave. S. E., Minneapolis, $573.

State Project 7-30, Federal Aid Project 269, 5 mi., Waseca Co., grading to J.

Streets and Roads (Continued)

Brown Constr. Co., Madison Lake, $14,622, culverts to Wessel Bros., Guardian Life Bldg., St. Paul, $3,516, bridge to Sullivan & Schaub, Madison Lake, $3,575.

State Project 15-29, Watonwan Co., 10 mi., grading to Nelson, Fulton & Nelson, 1st Natl.-Soo Line Bldg., Minneapolis, $9,260, graveling to Minnesota Rural Express Co., Montevideo, $14,973, bridge to Iowa Bridge Co., 317 McKnight Bldg., Minneapolis, $5,740.

State Project 4-25, Beltrami Co., 1.5 mi., grading to C. W. Clark, Puposky, $11,078, graveling to M. Barrett, St. Cloud, $4,282, bridge to H. F. Garbisch, Austin, $7,138, culverts to P. Halupzoh, Tenstrike, $1,940. Noted Aug. 10.

Minnesota — State Hy. Dept., St. Paul, gravel surfacing 24,000 cu.yd. State Project 9-23, Jackson and Nobles Counties, Div. A, to H. Einung, Jasper, $11,494, Div. C, to Merrick & Ackmann, Sleepy Eye, $12,339; 15,600 cu.yd. State Project 3-32, Wilkin Co. to Clements, Schottenbauer & Marvin, Clements, $27,713; 10,426 cu.yd. State Project 9-30, Mower Co., to Northwestern Constr. Co., 2214 Sheridan Ave. N., Minneapolis, $14,627; 8,300 cu.yd. State Project 8-37, Federal Aid Project 94, and 4,000 cu.yd. State Project 8-36, Polk Co., to Cramer Constr. Co., Pioneer Bldg., St. Paul, $14,207 and $7,652 respectively; 10,300 cu.yd. State Aid Project 8-38, Federal Aid Project 204, Itasca Co., to Cuyuna Range Constr. Co., Ironton, $17,716. Noted July 13.

Kan., Iola—Allen Co. paving 0.992 mi. road from here to Ft. Scott, Sect. A, Project 128, 18 ft., concrete, to Fry Bros., Iola, $31,730.

N. D., Mott—Grading and building culverts on 11 mi. State Highway 37, north and west of Regent; grading to Lindsay & Gillen, Mott, $20,055, culverts to Western Steel Products Co., New Duluth, Minn., $6,338.

Missouri—State Hy. Dept. at div. office Bloomfield, 4.256 mi. road from Cairo to Poplar Bluff, 24 ft., Federal Aid Project 179, Stoddard Co., to Novaculite Constr. Co., Marion, Ill., $17,780; 14.841 mi. road from Advance northeast and south, 24 ft., Federal Aid Project 187, Stoddard Co., to Service Constr. Co., Poplar Bluff, $91,059. Noted Aug. 10 and 17.

Missouri—State Hy. Dept. at div. office Bowling Green, 0.25 mi. road from Peno north, 24 ft., Federal Aid Project 188, Pike Co., to Riley & Bailey Constr. Co., International Life Bldg., St. Louis, $20,499. Noted Aug. 10.

Missouri—State Hy. Dept. at div. office Carthage, 1.393 mi. road from Carthage to Springfield, 24 ft., Federal Aid Project 168 A, Jasper Co., to Carterville Constr. Co., Cartherville, $36,679. Noted Aug. 17.

Missouri—State Hy. Dept. at div. office Lebanon, 5.075 mi. road from Springfield to St. Louis, 24 ft., Federal Aid Project 89 B, Laclede Co., to Case & Killian, Marshfield, $31,259; 4.788 mi. road from Lebanon eastward and westward, 24 ft., State Aid Project 20.179, Laclede Co., to Davis Constr. Co., Imboden, Ark., $19,778. Noted Aug. 17.

Missouri—State Hy. Dept. at div. office Lexington, 4.694 mi. road east and west from Higginsville, 24 ft., State Aid Project 20.164, Lafayette Co., to E. Jucksch, Oswego, Kan., $21,898. Noted Aug. 17.

Missouri—State Hy. Dept. at div. office Moberly, 0.678 mi. road from Moberly to Huntsville, 24 ft., Federal Aid Project 186, Randolph Co., to Lynch McDonald Constr. Co., Moberly, $24,628. Noted Aug. 10.

Missouri—State Hy. Dept. at div. office Poplar Bluff, 8.435 mi. road from Poplar Bluff southwestwardly, 24 ft., Federal Aid Project 58 C, Butler Co., 11,685 cu.yd. earth excav., 49,460 cu.yd. borrow, 98.9 cu.yd. concrete masonry, 59,618 sq.yd. specification C gravel pavement, 12 ft., etc. also 7.366 mi. road from Poplar Bluff southwestwardly, 24 ft., Federal Aid Project 58 A, 32,170 cu.yd. earth excav., 83.1 cu.yd. concrete masonry, 52,727 sq.yd. specification C gravel pavement, 12 ft., etc., to Little & Dean, Paris, Tenn., $60,665 and $31,922 respectively.

Missouri—State Hy. Dept. at div. office Shelbyville, 4.529 mi. road from Shelbyville northward and southward, 24 ft., State Aid Propect 20.129, Shelby Co., to H. J. Dungan, Shelbina, $17,183. Noted Aug. 10.

Mo., Kansas City—Paving 29th St., plain concrete, to Halpin & Boyle Constr. Co., 709 Ry. Exch., $2.71 per sq.yd., total $25,724; resurfacing 15th St. from Euclid Ave. to Bates St., to W. H. Knight Constr. Co., Kansas City (street address not available) $1.49 per sq.yd., total $43,389.

Tex., Austin—Travis Co. surfacing and topping 9.15 mi. Highway 20, from Manor to Bastrop Co. line, 16 ft., to Haden & Austin, Hill and Marsh Sts., Houston, $40,150. Engrs. est. $45,000 incl. 10% for engineering and contingencies. Noted July 20.

Tex., Cameron—Milam Co. grading, gravel surfacing, etc., 17.94 mi. State Highway 36, Federal Aid Project 252, to Thomas & Ratcliff, Rogers, $80,743. Noted Aug. 10.

Tex., Eldorado—Schleicher Co. topping 11.43 mi. Highway 4, Federal Aid Project 135, 16 ft., to A. E. Morgan, Dallas, (street address not available), $26,360; crushed stone to Schleicher Co., c/o C. A. Womack, co. judge, Eldorado, $7,297. Noted July 20.

Tex., Farmersville—Collin Co. paving various streets, 19,841 sq.yd. vertical fibre brick on concrete, 1,193 lin.ft. combined curb and gutter, to Plains Paving Co., 920 Amer. Natl. Bank Bldg., Wichita Falls, $35,610. Noted July 13.

Tex., Georgetown—Williamson Co. grading, gravel surfacing, etc., 11.35 mi. Highway 43-A, to H. Kyle, Hutto, $76,596, engrs. est. $84,256, incl. 10% for engineering and contingencies; grading shale and gravel surfacing 15.57 mi. State Highway 2 from Georgetown to north line of Precinct 1, to McDonald & Evans, Austin, (street address not available), $51,434, engrs. est. $63,750 incl. incl. 10% for engineering and contingencies.

Tex., Lufkin—Angeline Co. to Womack Constr. Co., Sherman, grading, gravel surfacing, and bituminous topping 4.19 mi. Highway 35 from Polk Co. north, 16 ft., $49,864; 5.47 mi. Highway 35 from point 5.1 mi. south of here toward Polk Co. line, 16 ft., $75,020; 5.09 mi. State Highway 35 from here south, Federal Aid Project 271, $48,348. All gravel furnished by county. Noted July 20.

Tex., San Antonio—Bexar Co. grading, surfacing, etc., 2.23 mi. Highway 9, Pearsall Rd., (a) grading roadway surfacing with gravel, hauling, spreading and rolling, (b) 1 in. bituminous topping, (c) rein.-con. drainage structures, to C. M. Kelly, 503 Barrett Pl., (a) $16,645; Uvalde Rock Asphalt Co., 1111-14 Natl. Bank Bldg., (b) $13,604; W. W. Lehr, San Antonio, (c) $14,026. Noted July 27.

Tex., Waco—McLennan Co. grading, surfacing and topping 11.32 mi. Highway 2-B through Mart to county line, State Aid Project 310, 16 ft., 840 cu.yd. concrete, 106,474 cu.yd. earth excav., 16,150 gal. asphalt, 2,074 sq.yd. reinforcing, 840 cu.yd. concrete, 23,028 cu.yd. crushed rock, 57,991 lb. reinforcing steel, also 589 mi. Highway 6 from Elm Mott north 16 ft., 10,192 cu.yd. borrow, 23,538 cu.yd. roadway, 370 cu.yd. concrete, 25,928 ga. bituminous material, 25,468 lb. reinforcing, 1,368 cu.yd. cover material, 2,162 cu.yd. crushed rock, 11,628, cu.yd. gravel, to Wear & Thomas, Rogers, $164,763 and $58,834 respectively. Engrs. est. $220,000 and $63,700 respectively, incl. 10% for engineering and contingencies.

Colorado—State Hy. Dept., Denver, gravel surfacing road beginning at eastern city limits of Canon City and extending easterly through Florence State Aid Project 165, to G. A. Allen, Morrison, $63,343, engrs. est. $78,892; gravel surfacing 5.686 mi. road beginning ½ mi. west of Granada and extending westerly, State Aid Project 168 A, to Standard Eng. Co., E & C Bldg., Denver, $36,573, engrs. est. $47,620; gravel surfacing 3.144 mi. road beginning 4 mi. east of Grand Junction and extending easterly towards Palisades, State Aid Project 208 A, to F. L. Hoffman, Mining Exch. Bldg., Denver, $30,587, engrs. est. $33,340; concrete paving 8.228 mi. road beginning north of Brighton and extending northward through Ft. Lupton toward Platteville, State Aid Project 226 A, to White & Johnson, 521 Chamber Commerce Bldg., Denver, $219,212, engrs. est. $249,987; sand clay surfacing 3.995 mi. road beginning east of Peyton and extending easterly through Callien, State Project 532, also concrete paving 2.938 mi. road beginning 1½ mi. east of Pueblo and extending east on Sante Fe Trail, State Aid Project 217, to E. Lindsey, 521 Chamber Commerce Bldg., Denver, $15,739 and $85,605 respectively, engrs. est. $20,174 and $85,223; rubble cement flume and culverts on State Highway 54 near Nighthawk, Gilpin Co., to Acme Bridge Co., 1319 Champa St., Denver, $8,255, engrs. est. $11,088.

Ariz., Florence—Bd. Supervs. Pinal Co., grading, gravel surfacing and building structures on 5.1929 mi. Florence-Superior Highway, Sect. F, Federal Aid Project 23, to Goodman & Merrill, St. David, $28,965. Noted Aug. 3.

Ariz., Phoenix—Maricopa Co. Highway Comn., paving 8 mi. Glendale-Marinette Rd., 81,193 sq.yd. concrete, 18,800 cu.yd. excav., 1,245 cu.yd. structural concrete and 22,300 lb. reinforcing, to Twohy Bros. Co., 318 North Central Ave., $211,510.

California—State Hy. Comn., Sacramento, 10.43 mi. highway between Quail Lake and northerly boundary, Los Angeles Co., to Southwest Paving Co., Washington Bldg., Los Angeles, $173,048, engrs. est. $234,614, plus materials furnished by State, $75,596, total $248,643; grading [illegible] mi. highway between Hopland and El Robles, Mendocino Co., to Murdock Bros., Oakland and Ukiah, $62,284, engrs. est. $66,325, plus materials furnished by State, $1,398, total $63,682; surfacing with ashaltic concrete, 0.83 mi. between Arcola School and Borden Station, Madera Co., to Federal Constr. Co., Call Bldg., San Francisco, $13,860, engrs. est. $15,400; grading 11.66 mi. highway between Fish Springs School and southeast corner, Sect. 33 T. 8 S., R. 33 W., M. D. B. & M., Inyo Co., to Redmond, Page & Pond, Alameda, $67,334, engrs. est. $64,036, plus materials furnished by State $4,833, total $72,166; 2.02 mi. highway through Banning, Riverside Co., to F. W. Teschke, Los Angeles, (street addres not available), $25,052, engrs. est. $30,167, plus materials furnished by State $15,042, total $40,095. Noted July 20, Aug. 10 and 17.

Calif., Bakersfield—For 5,028 lin.ft. Road 419, 94,600 sq.ft. of 8 in. concrete, to Kaufield & Tompkins, 2225 Fresno St., Fresno, $0.445.

Calif., Modesto — Improving portions of Morris, Castle and Auburn Sts., to Standard Paving Co., 1411 9th St., 168,200 sq.ft. grading $0.05, 154,809 sq.ft. paving 2½ in. asphaltic concrete base with 1½ in. warrenite-bitulithic surface $0.17, 13,390 sq.ft. concrete gutter $0.20, 8,325 sq.ft. concrete curb $0.70. Noted July 6.

Calif., Sacramento—Sacramento Co. will pave 1 mi. Antelope Rd., and 5,936 lin.ft. San Juan lateral, asphaltic macadam, by day labor. No bids received on Aug. 7. D. Butler, co. engr. Noted July 27.

Calif., San Luis Obispo—Improving portion Aliva Rd., to J. L. Conner, Nipomo, 5,500 cu.yd. excav., incl. borrow $0.75 per yd., 8,296 ft. shaping and rolling road bed $0.15, 2,049 yd. Class A concrete pavement $5.15 per yd. 7,500 lb. reinforcing $0.01 per lb., total $29,135. Noted July 27.

Calif., San Rafael—Marin Co., paving San Rafael and Olema Rd. through Fairfax, and portion of Fairfax and Bolinas Rd., to S. P. Brownlee, San Rafael, $27,400. Noted July 29.

Calif., Woodland—Yolo Co. will extend Main St., eastward, by day labor under supervision of A. Proctor, co. engr. Work involves 1,650 cu.yd. unclassified earthwork, 84,900 sq.ft. 6 in. cement concrete pavement, etc.

Que., Montreal—Paving St. Joseph Blvd. from Henri Julien to Papineau Aves., 4,312 ft. asphalt, 50 ft., to Sicily Asphaltum Paving Co., 60 St. Viateur St., $120,271.

Ont., Hensall — Concrete pavements on Main St., to Hamilton Constr. Co., Hamilton, (street address not available). Engrs. est. $38,000. Noted May 25.

Ont., Oakville—P. A. Bath, council clk., concrete pavements, curbs and gutters, to King Eng. Co., Oakville. Engrs. est. $35,000. Noted July 13.

Ont., Thorold—Concrete pavement and curbs on Chapel St., to Somerville & Dillworth, 22 Cross St., Welland. Engrs. est. $28,000.

British Columbia — Dept., Pub. Wks. Victoria, paving 2 mi. Yale Rd. from McLellan Rd. to Murrayville, to E. J. Palmer & Co., 1108 Vancouver Blk., Vancouver, $60,000. Government will supply cement.

Industrial Works

PROPOSED WORK

R. I., Providence—United Electric Railways Co., Union Station, plans 1 and 2 story, 88 x 250 ft. brick and concrete garage and service plant, Melrose St. $100,000. Private plans.

Conn., South Norwalk—J. and J. Cash. Ltd., Chestnut St., soon lets contract 1½ story, 60 x 132 ft., brick and steel addition to weave shed. $40,000. Private plans.

N. Y., Brooklyn—Brooklyn Edison Co., 560 Pearl St., having plans prepared by T. E. Murray, Inc., archts., 55 Duane St., New York, new power plant, 400,000 kw. capacity, Marshall St. and Hudson Ave.

N. Y., Buffalo—Jewett & Co., Military Rd., plans to rebuild factory, Military Rd. $150,000. S. S. Jewett, 563 West Ferry St., pres. Architect not announced.

N. Y., Chautauqua—Chautauqua Institution, The Colonnade, plans rebuilding garage destroyed by fire. $50,000. A. E. Bestor, pres. Architect not announced. S. C. Arnold, Colonnade Bldg., lessee.

N. Y., Dunkirk—Skelton Shovel Co., c/o Chamber of Commerce plans factory. $125,000. Architect not announced.

Industrial Works (Continued)

N. Y., Fredonia—Red Wing Co., Inc., 27 Glisan St., plans rebuilding concrete warehouse, recently destroyed by fire. $130,000.

N. Y., Jamestown—S. B. Robbins, 303 Lafayette St., plans modern garage and service station, North Main St. $45,000 or over. Architect not selected.

N. Y., Long Island City—Natl. Liquid Bleach Co., 18 Purvis St., plans brick, steel and rein.-con. factory, plain foundation, Foster Ave. between Honeywell and Buckley Sts. $500,000.

N. Y., Rochester—Haverstick & Co., 66 Exchange St., plan concrete warehouse, Ford St. $40,000. Architect not announced.

Pa., Ambridge—Standard Seamless Tube Co., plans 1 story, 80 x 480 ft. steel plant. Private plans.

Pa., Castanea—Lock Haven Electric Light & Power Co., Lock Haven, plans new power house, here. $200,000.

Pa., Columbia—Peerless Folding Box & Crate Co., c/o F. S. Sheeman, Swank Annex, Johnstown, plans 1 story, 50 x 200 ft. concrete, brick and steel factory. Architect not selected.

Pa., Glenshaw—Ball Chemical Co., Fulton Blk., Pittsburgh, having plans prepared by L. B. Duff, engr., 712 Magee Bldg., Pittsburgh, 2 story, 64 x 113 ft. rein.-con. and tile factory and storage building, Butler Plank Rd. $50,000.

Pa., Greenville—H. E. McConnell, representing others, in connection with local Chamber of Commerce purchased 35 acre site and plans to build steel plant incl. one 500 ton blast furnace, four 60 ton open hearths, one 10 ton open hearth, steel foundry, four rolling mills, cold drawing mill. $2,500,000. Architect not announced.

Pa., Johnstown—J. Walling & Co., 518 Washington St., having plans prepared by S. E. Dickey & Co., archts., Johnstown, 3 story, 74 x 132 ft. concrete and steel garage, Railroad St. $150,000.

Pa., Koppel—Koppel Car Repair Co. plans large dry house with storage tracks (capacity 200 cars), Hoytdale Rd. Engineer not announced.

Pa., New Kensington—Natl. Auto Service Co. plans 1 story, 60 x 70 ft. and 25 x 80 ft. garage and service station, 5th St. $50,000.

Pa., Oil City—Natl. Transit Pump & Machine Co., Oil City, plans 80 x 200 ft. brick and steel foundry. Private plans.

Pa., Pittsburgh—Air Reduction Co., 342 Madison Ave., New York, plans plant on Neville Island, here. $100,000. Private plans.

Pa., Pittsburgh—J. R. McNary, 435 6th Ave., is organizing the Neville Twp. Light Co. and the Kennedy Twp. Light Co. and plans to install and operate electric light and power plants in these townships.

Pa., Scranton—Bd. Control plans power house in connection with institution buildings, Gibson St. and Adams Ave. $61,000. J. H. Williams, 425 Washington Ave., pres. Engineer not announced.

Pa., Starbreck (Warren P. O.)—Warren Steel Car Co. plans 1 story, 90 x 260 ft. brick and steel factory. $75,000. Private plans.

La., New Orleans — Bd. Port Comrs., Canal St., plans 3 story, 140 x 325 ft. grain sacking plant adjoining warehouse, steel and corrugated iron. $180,000.

Tenn., Knoxville—Mahan-Kerr Motor Co., 719-921 South Gay St., plans 3 story, 133 x 159 ft., garage and salesroom, Cumberland and Market Sts. $150,000. Architect not selected.

Tenn., Memphis—Memphis Sash & Door Co., 673 South Dudley St., plans 3 story, 200 x 300 ft., brick factory, Railroad St. and Roland Ave. Architect not announced.

O., Cleveland—Lincoln Heights Dairy Co., c/o J. Terencz, 755 Starkweather Ave., had plans prepared by W. Markowitz, archt., 1836 Euclid Ave., 2 story, 35 x 78 ft., brick and concrete factory, 2594 Professor Ave. $40,000.

O., Cleveland—Pollock-Davis Co., 11628 Euclid Ave., had plans prepared by H. P. Whitworth, archt., 526 Hickox Bldg., 1 story, 72 x 74 ft., brick and steel garage. $540,000.

O., Cleveland—G. Rackle & Sons Co., Stop 5-A.B.C. Line, had plans prepared 1 story, 50 x 120 ft. factory, concrete blocks and timber, McCracken Rd. $40,000. Private plans.

O., Cleveland—See "Buildings."

O., Cleveland—Woodworth Road Land Co., c/o W. S. Ferguson, archt., 1900 Euclid Ave., plans 6 story, brick, steel and concrete warehouse, East 152nd St., along tracks of New York, Chicago and St. Louis Ry. $150,000.

Mich., Battle Creek—Rich Steel Products Co., Springfield Pl., plans 3 or 4 story, brick and steel factory, Springfield Pl. $500,000. Architect not selected.

Ill., Chicago—A. Epstein, archt., 2007 West Pershing Rd., preparing plans 2 story, 100 x 107 ft. canning plant, rein.-con., brick and steel, 47th St. near Kedzie Ave. $110,000. Owner's name withheld.

Ill., Chicago—P. Gerhardt, archt., 64 West Randolph St., soon receives bids 3 story, 100 x 125 ft. printing plant, rein.-con., brick and steel, 210-14 South Peoria St., for Chicago Evening American, 325 West Madison St. $175,000.

Ill., Hyde Park (Chicago P. O.)—J. L. McConnell, archt., 111 West Jackson Blvd., preparing plans 2 story, 100 x 140 ft., rein.-con., brick and steel garage. $80,000. Owner's name withheld.

Wis., Fond du Lac—B. E. Mehner, archt., Main St., preparing plans 3 story, 42 x 180 ft., brick, tile and timber factory, plain foundation. $60,000. Owner's name withheld.

Wis., Milwaukee — Milwaukee Woven Wire Wks., 3014 Clarke St., having plans prepared 3 story, 130 x 140 ft., brick and timber warehouse, plain foundation, 30th and Clarke Sts. $80,000. Private plans.

Wis., Neenah — Jaeger-Wheeler Co., 417 2nd St., Menasha, having plans prepared by E. A. Wettengel, archt., 578 Pierce Ave., Appleton, 2 story, 60 x 120 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation. $50,000.

Wis., Platteville—E. H. Johnson plans 1 and 2 story, 60 x 150 ft., brick, rein.-con. and steel factory, plain foundation. $60,000 Architect not selected.

Wis., Racine—Horlick Malted Milk Co., Horlicksville, had plans prepared by L. Lehle, archt., 3810 Bway., Chicago, 5 story, 123 x 123 ft., rein.-con. and brick factory, plain foundation. $200,000.

Wis., Waukesha — Waukesha Fdry. Co., Lincoln Ave., plans 2 and 3 story, 50 x 195 ft., brick and steel factory, plain foundation, Lincoln Ave. $50,000. Architect not selected.

Minn., Albert Lee — Central Clay Wks., plans concrete and brick factory to replace plant recently destroyed by fire. $40,000. A. L. Severin, mgr. Architect not selected.

Neb., McCook — Chicago, Burlington & Quincy R. R., 547 West Jackson Blvd., Chicago, soon takes bids 2 story, 40 x 65 ft. rein.-con., stone and steel power plant incl. 7 x 185 ft. concrete stack, here. $85,000. Private plans. Noted May 18.

Mo., Kennett — Caruthersville Light & Power Co. plans additions and improvements to power plant. $40,000. Engineer not announced.

Ark., Hot Sprigs—Missouri Lumber Co., Gaines Ave., plans to rebuild lumber plant recently destroyed by fire. $75,000. Engineer not announced.

Tex., Sabine — Magnolia Petroleum Co. plans to rebuild that portion of distributing plant destroyed by fire. $170,000. Architect not announced.

Okla., Duncan—Pauline Oil and Gas Co., Duncan, plans modern refinery, 700 bbl. daily capacity, about 6 mi. from here. $65,000. Architect not announced.

Okla., Madill—Woody Motor Co., Madill, plans to rebuild garage and service station, recently destroyed by fire. $60,000. Architect not announced.

Calif., Oakland—Hebern Electric Code, Inc., Bank of Italy Bldg., had plans prepared by Reed & Corlett, archts., Oakland Bank of Savings Bldg., Oakland, 3 story, steel frame, rein.-con. factory, Harrison St. between 8th and 9th Sts. $200,000.

Que., Montreal—Burton Brewery Co. of Canada, Ltd., Montreal, plans 3 story, 100 x 300 ft. brewery, St. Denis and De Valier Sts. $400,000.

Que., Montreal—H. Morgan & Co., Beaver Hall Hill, plans 4 story., 50 x 150 ft. brick and steel factory, St. Catherine St. W. $150,000. Munn & Shea, Cote St., engrs.

Ont., Brantford—See "Miscellaneous."

Ont., Hamilton—Libbey Owens Sheet Glass Co. plans plant. $250,000. Private plans.

Ont., Windsor—Gray Dort Motors, Ltd., 1 William St. N., Chatham, plans new factory here. $100,000. Private plans.

BIDS DESIRED

Pa., Phila.—Sept. 1, by Standard Provision Co., 212 North Front St., 3 story, 60 x 170 ft. and 60 x 90 ft. rein.-con. packing plant, plain foundation, Callowhill and Willow Aves. $150,000. Private plans.

O., Cleveland—Christian, Schwarzenberg & Gaede, archts., 1900 Euclid Ave., taking bids 1 story, brick, steel and concrete factory addition, 1749 East 22nd St., for Wolf Envelope Co. N. J. Dreyfoos, pres. Noted Aug. 17.

O., Cleveland—D. D. Wessels & Son, 1785 East 17th St., taking bids and opens same about Aug. 30, 2 story, 100 x 102 ft., brick and steel factory, plain foundation, 2009 Oregon Ave. $60,000. Private plans.

O., Cleveland—A. Sogg, archt., 319 Hippodrome Annex, taking bids 2 story, 35 x 50 ft., brick and steel factory and store, East 105th St.and Super ioArve. .3. HRDL 9A 105th St. and Superior Ave., for J. O. Stein, (real estate), 822 Leader-News Bldg., Hoffman Candy Co., c/o architect, lessee $40,000.

O., Middletown—Gardner Harvey Paper Co., West 3rd St., taking bids 1 story, 200 x 396 ft. plant, brick and steel, sawtooth construction. T. H. Scott & Son, Middletown, archts.

Mich., Saginaw—D. H. Burnham & Co., archts., 209 South La Salle St., Chicago, taking bids, 5 story, 50 x 120 ft. warehouse, mill construction, for Morley Bros., 115-119 North Washington St. $250,000

Wis., Madison—J. R. and E. J. Law, archts., Strand Bldg., receiving bids 1 story, 60 x 182 ft., factory, rein.-con., brick and steel, Charter St., for J. Feldman Paper Box Co., 515 Regent St. $60,000. Noted Aug. 10.

Wis., Milwaukee—Seaman Body Corp., 1732 Richards St., taking bids 5 story, 123 x 420 ft. and 100 x 225 ft. plant, brick and timber, plain foundation, Richards St. Private plans.

Wis., Oshkosh—Winnebago Co. Road & Bridge Comn., c/o O. Laabs, chn., 535 7th St., taking bids 1 story, 58 x 120 ft., brick and concrete, garage, plain foundation, Wisconsin Ave. $40,000. Private plans.

Calif., Santa Rosa — B. Hildebrand archt., Santa Rosa, receiving bids 2 story 75 x 150 ft. rein.-con. garage, for Tilden & Tilden. $40,000.

CONTRACTS AWARDED

Me., Sanford—Sanford Mills, 4 story, 85 x 155 ft. rein.-con. finishing building, and 6 story addition to mill, to Turner Constr Co., 178 Tremont St., Boston, Mass. Archts est. $175,000.

Mass., Boston—Fisher Hill Co., 18 Tremont St., will build 3 story, 80 x 170 ft. brick and rein.-con. garage and service station, plain foundation, Commonwealth Ave., by day labor. $100,000. H. F. Bryant, 334 Washington St., Brookline, archt.

Mass., Holyoke—Holyoke Supply Co., 210 Race St., 5 story, brick and steel addition to plant, to P. J. Kennedy & Co., Inc., 464 Maple St. Archts. est. $50,000.

Mass., Southbridge—Hamilton Woolen Co., Mill St., 1 story, 100 x 120 ft. steel and concrete addition to plant, West St., to A. O. Boyer, 108 Hamilton St. Archts. est. $40,000. Noted June 22.

R. I., Pawtucket—Solway Dyeing & Textile Co., Ingrahamville, 1 story, 70 x 140 ft. brick and steel addition to plant, to F. G. Rowley Co., 260 Central St. Archts. est. $40,000.

R. I., Woonsocket—French Worsted Co., Mill St., 1 story, brick and timber addition, also rein.-con. coal pocket and trestle, to J. W. Bishop Co., 109 Foster St., Worcester, Mass. Archts. est. $40,000.

Conn., East Hartford—Colonial Auto Co., 1279 Main St., Hartford, 1 and 2 story, brick and steel garage, service station, and showrooms, Connecticut Blvd., to Austin Co., 217 Bway., New York City. Archts. est. $40,000.

Conn., Hamden—Safety Car Heating & Lighting Co., Dixwell Ave., 1 story, 106 x 115 ft. and 100 x 195 ft., brick and steel additions to plant; also large rein.-con. tank, to Stovel & Brinkerhoff, 136 Liberty St., New York, $100,000. Noted July 20.

N. Y., Buffalo—Lautz Marble Co., 861 Main St., 1 story, 90 x 475 ft. factory, brick, steel and concrete, to Turner Constr. Co., 11 Goodell St. Archts. est. $150,000.

N. Y., New York—Republic Storage Co., Inc., 45th St. and 12th Ave., brick, steel and concrete warehouse, plain foundation, 57th St. and 12th Ave., to Industrial Eng. Co., 30 Church St. Archts. est. $250,000. Noted Aug. 10.

N. Y., New York—Street & Smith, 79 7th Ave., brick, steel and concrete printing plant, plain foundation, 147 West 15th St., to Fountain & Choate, 110 East 23rd St. Archts. est. $150,000. Noted July 6.

Industrial Works (Continued)

N. Y., Wende—See "Buildings."

N. J., Jersey City—Standard Milling Co., 49 Wall St., New York, 6 story, rein.-con. and steel warehouse, concrete pile foundation, Pavonia Ave., here, to Lynch Constr. Co., 52 Vanderbilt Ave., New York. Archts. est. $2,000,000.

Pa., Arnold—Amer. Window Glass Co., Farmers Bank Bldg., Pittsburgh, 1 story, 120 x 142 ft. steel and brick factory, to Hughes-Foulkrod Co., Oliver Bldg., Pittsburgh.

Pa., Osgood (Greenville P. O.)—Du Roth Steel Truck & Car Wheel Co., 611 Keystone Bldg., Pittsburgh, 1 story, 100 x 200 ft. steel factory, to Pittsburgh Bridge & Iron Co., Rochester. Noted Aug. 3.

Pa., Phila.—Lutheran Publishing Co., 9th and Sansom Sts., 8 story, 74 x 117 ft. rein.-con. and brick plant, 13th and Spruce Sts., to Wark & Co., 231 South Broad St. Engrs. est. $500,000.

Pa., Phila.—Phila. Electric Co., 10th and Chestnut Sts., 1 story, 59 x 121 ft. rein.-con., brick and steel substation, American and Susquehanna Aves., to F. L. Hoover & Sons, 1023 Cherry St. Engrs. est. $80,000.

O., Columbus—Columbus Show Case Co., Grant Ave. and Buckingham St., 3 story, 82 x 382 ft., rein.-con. and brick factory, concrete pile foundation, to Frank-Hill Smith, Inc., Winters Bldg., Dayton, $100,000.

O., Dayton—Delco Light Co., 6 story, 190 x 350 ft., rein.-con. and brick factory, concrete pile foundation, East 1st St., to H. K. Ferguson Co., 6523 Euclid Ave., Cleveland, $600,000.

Ill., Chicago—J. T. Igoe Co., 117 West Harrison St., 10 story, 100 x 150 ft. printing plant, rein.-con., brick and steel, Van Buren and Jefferson Sts., to E. P. Strandberg Co., 236 East Erie St. Archts. est. $750,000. Noted March 16.

Wis., Green Bay—Standard Oil Co., 68 Wisconsin St., Milwaukee, 1 story, 52 x 100 ft. garage and warehouse, brick and concrete, plain foundation, to B. Herman & Son, 1412 Hamilton St., Manitowoc. Engrs. est. $40,000.

Wis., Madison—A. Maisano, 821 Regent St., 2 story, 50 x 90 ft., garage and repair shop, rein.-con., steel and brick, plain foundation, to B. Wrend, 1009 Milton St. Engrs. est. $40,000.

Wis., Milwaukee—L. Leidersdorf Co., 417 Sycamore St., 1 story, 50 x 150 ft., brick and concrete, plain foundation, Clybourn St., to E. Steigerwald & Son, 3603 Vliet St. Engrs. est. $45,000.

Wis., Milwaukee—Rockwell Mfg. Co., 572 Park St., 1 story, 60 x 200 ft., brick and timber warehouse, plain foundation, Park St., to C. Behnke, 827 34th St. Engrs. est. $40,000.

Wis., Oshkosh—Kaewer Auto Co., Main and Irving Sts., 1 story, 64 x 130 ft., garage addition, brick and concrete, plain foundation, Main St., to Fluor Bros. Constr. Co., 52 State St. Archts. est. $40,000.

Wis., Racine—H. & M. Body Corp., 608 Center St., 1 story, 100 x 240 ft., brick and timber, dry kilns, plain foundation, to Everett Winters Co., 725 Detroit Savings Bank Bldg., Detroit, Mich. Engrs. est. $125,000.

Ia., Davenport—N. O. Nelson Mfg. Co., 103 Brady St., general contract, 2 story, 60 x 100 ft. factory, brick and concrete, to Priester Constr. Co., 1006 Kahl Bldg. Archts. est. $40,000.

Calif., Dinuba—Sun Maid Raisin Growers, Holland Bldg., Fresno, 80 x 140 ft. packing plant, here, to Trewhitt Shields Co., Rowell Bldg., Fresno. Noted June 8.

Calif., San Francisco—R. McLeran & Co., Hearst Bldg., will build 2 story, 124 x 200 ft. brick and concrete warehouse, Mariposa and Alabama Sts., by day labor. $130,000. Illinois-Pacific Glass Co., 14th and Folsom Sts., lessee.

Que., Lachine—Linde Canadian Refrigeration Co., St. Peters St., Montreal, factory, to A. Leduc, 351 Chrithopher Colomb St., Montreal. Engrs. est. $40,000.

Ont., Walkerville—Gotfredson-Joyce Co., Walker Rd., 70 x 100 ft. brick addition to factory, Walker Rd., to Muxlow & Gale, Quellette Ave., Windsor. Engrs. est. $50,000.

B. C., Marpole—Pacific Meat Co., 268 Columbia St., Vancouver, will build 2 story, 65 x 100 ft. abattoir and cold storage packing plant, cattle sheds, etc., mill construction, ground floor concrete, along Fraser River, by day labor. $80,000. H. Idsardi, c/o owners, engr.

Buildings

PROPOSED WORK

N. Y., New York—Apartment—P. S. Murray, c/o J. E. R. Carpenter, archt. and engr., 598 Madison Ave., had plans prepared 14 story, brick, steel and stone, plain foundation, 98th St. and 5th Ave. $750,000.

N. Y., Rochester—School—St. Boniface Church plans 135 x 154 ft. brick school, 40 ft. high, Whalen St. $200,000. Architect not announced.

Pa., Altoona—Cathedral—Diocese of Altoona, c/o J. J. McCort, soon takes bids 7 story, stone, 13th St. $500,000. G. I. Lovatt, 416 Walnut St., Phila., archt.

Pa., Chester—Bank and Office—Cambridge Trust Co., 5th and Market Sts., plans new bank and office, incl. demolishing present 5 story brick building, 5th and Market Sts. To exceed $500,000.

Pa., Corry—Hotel—Bd. Commerce negotiating with parties for erection of modern hotel. To exceed $200,000.

Pa., Hazelton—Hotel—C. D. Markle, Jr., Hazelton, plans 10 story, hotel. To exceed $500,000.

Pa., Phila.—Recreation—J. B. Sinkler, archt., 1225 Chestnut St., soon takes bids 1 and 2 story, 48 x 275 ft. rein.-con., brick and steel, plain foundation, 22nd and Sedgley Sts., for Bureau Recreation, City Hall. $200,000.

Tenn., Nashville — Fraternal — Scottish Rite Consistory, 7th Ave., having plans prepared by Asmus & Clark, archts., Stahlman Bldg., concrete, steel and stone, 7th Ave. and Broad St. $500,000.

O., Akron—Memorial—City plans war memorial building in Glendale Park. $250,000. Architect not announced.

O., Canton—Temple—Osgood & Osgood, archts., Fine Arts Bldg., Grand Rapids, Mich., preparing plans and takes bids in spring, 5 story, brick, concrete and stone, here, for Masonic Assn., c/o W. R. Zollinger, 205 Market Ave. $650,000. W. H. Adams, Campau Bldg., Detroit, Mich., engr.

O., Cleveland—Apartment—R. Grimm, 1973 West 89th St., had plans prepared 3 story, 85 x 106 ft., brick and timber, Madison Ave. near Wyandotte Ave. $150,000. Private plans.

O., Cleveland—Commercial, Office, etc.—W. B. Gongwer, Federal Bldg., is interested in syndicate which plans 3 and 6 story, commercial and office building and garage, brick, steel and concrete, 3328 Euclid Ave. $400,000. W. S. Lougee, 500 Marshall Bldg., archt.

O., East Cleveland (Cleveland P. O.)—Apartment—F. and S. Realty Co., 810 Ulmer Bldg., Cleveland, had plans prepared by A. Sogg, archt., 319 Hippodrome Bldg., Cleveland, 3 story, 82 x 115 ft., brick and timber, 1757 Page Ave., here. $150,000.

O., Groveport—High and Grade School—Voted $210,000 bonds for 2 story, high and grade school. D. Reibel & Son, 1st Natl. Bank Bldg., Columbus, archts. Noted June 15.

O., Lakewood (Cleveland P. O.)—School—Bd. Educ., Warren Rd., having plans prepared by C. W. Hopkinson, archt., Rose Bldg., Cleveland, 2 story, brick, steel and concrete, Clifton Blvd. near Giel Ave. $300,000.

O., Logan—Court House—Hocking Co. voted $250,000 bonds for new courthouse. Noted May 25.

O., London—Prison—Ohio Dept. Pub. Welfare, Columbus, called upon F. L. Packard, archt., Hayden Bldg., Columbus, and others, to submit plans and drawings for prison, here. Original estimate of $3,000,000 was rejected.

Ill., Chicago — Apartment-Hotel — E. Doerr, c/o W. P. Doerr, archt., 28 East Jackson Blvd., plans 7 story, 120 x 227 ft., rein.-con., brick and steel, South Shore Dr. between 53rd and 54th St. $500,000.

Ill., Chicago—Hotel—Ludgin & Leviton, archts., 53 West Jackson Blvd., preparing plans 4 story, 40 x 180 ft., rein.-con., brick and steel, near Loop, $200,000. Owners name withheld.

Wis., Milwaukee—Church—F. Howend, archt., 69 Wisconsin St., soon receives bids 1 story, 72 x 160 ft., rein.-con., brick and steel, Sherman Blvd., for Third Church of Christ Scientist, c/o W. B. Drescher, 1179 16th St., chn. building comn. $160,000. Klug & Smith, 69 Wisconsin St., engrs. Noted June 22.

Ia., Dubuque—Convent—St. Marys Convent, 69 Emmett St., having plans prepared by Damon, O'Meara & Hills, archts., 1123 Merchants Bank Bldg., St. Paul, Minn., 4 story, 225 x 300 ft., rein.-con., brick, tile and stone, $350,000.

Mo., Kansas City—Hotel—G. L. Woodward, c/o Southern Oil Co., 37 West Jackson Blvd., Chicago, soon takes bids 8 story, 150 x 300 ft., rein.-con., brick, stone and terra cotta, Linwood Ave., here. Schumacher & Greenbaum, archts.

Okla., Tulsa—School—Bd. Educ. having plans prepared by G. Winkler, archt., 414 Palace Bldg., 4 story, 125 x 160 ft., rein.-con., brick, stone and terra cotta, incl. refrigerating plant, and swimming pool, 6th and Cincinnati Sts. $1,000,000. W. E. Gillham, 30 Mutual Bldg., Kansas City, Mo., engrs.

Nev., Reno—Hotel—G. Wingfield, Reno Natl. Bank Bldg., had plans prepared by F. J. De Longchamps, archt., Gazette Bldg., 4 story, brick and steel, $200,000.

BIDS DESIRED

Mass., Boston — Office — Aug. 25, by Chamber of Commerce 177 Milk St., 12 story, 113 x 183 ft. brick and stone, Federal and Franklin Sts. $3,000,000. Parker, Thomas & Rice, 110 State St., archts., French & Hubbard, 88 Pearl St., engrs.

N. Y., Syracuse—Clubhouse—Sept. 1, by J. D. Meehan, archt., Everson Bldg., 5 story, 83 x 132 ft. and 33 x 80 ft., brick and steel, West Genesee St., for Fraternal Order Eagles. $250,000. J. J. Menter, secy. Noted May 11.

N. J., Asbury Park—Hotel—Aug. 28, by Warren & Wetmore, archts., 16 East 47th St., New York City, 6 story, brick, steel and stone, plain foundation, here, for Asbury Park Hotel, c/o architects.

N. J., Teaneck (Englewood P. O)—Schhool—Sept. 5, by Bd. Educ. of Teaneck Twp. for School 4, West Englewood Ave. and Essex Lane. C. V. R. Bogert, 167 Main St., Hackensack, archt.; adv. this issue.

Pa., Lykens—Lodge—Aug. 29, by C. P. Berger, archt., 1422 South Penn Sq., Phila., 3 story, 48 x 140 ft., brick, steel and stone, plain foundation, for L. O. O. M. 1176. $200,000.

Pa., Phila.—School—C. J. Cumminsky, archt., 118 West Sharpnack St., taking bids 3 story, 100 x 184 ft. brick, steel and stone, plain foundation, 24th and Wallace Sts., for St. Francis Roman Catholic Church, 24th and Green Sts. $250,000.

Va., Richmond—College—William and Mary College taking bids 4 story, 64 x 80 ft. brick and concrete, Williamsburg Ave. C. M. Robinson, Times Dispatch Bldg., archt.

Ga., Atlanta—Hotel—Aug. 30 at office of C. Dinkler, Ansley Hotel, for 125 room addition. G. L. Preacher & Co., Healey Bldg., archts.

O., Cleveland—Commercial and Apartment—Blatt Court Properties Co., c/o J. C. Reeves, 1655 East 75th St., taking bids and opens same about Sept. 1, 3 story, 68 x 102 ft., brick and timber, West 25th St. and Blatt Court. $150,000. A. F. Janowitz, Permanent Bldg., archt.

O., Cleveland—Commercial and Office—J. Babin, 827 Superior Ave., taking bids 2 story, 60 x 234 ft., brick and steel, 9701 Euclid Ave. $175,000. N. Petti, Williamson Bldg., archt.

O., Greenville—High School—Aug. 28, by E. L. McClain, pres. Bd. Educ., 2 story high school. $200,000. W. B. Ittner, 911 Locust St., St. Louis, Mo., archt.

O., Maple Heights (Bedford P. O.) — School—Aug. 28, by St. Venceslas Catholic Church, 2666 East 35th Pl., Cleveland, 3 story, 103 x 150 ft., brick, steel and stone, Libby Rd., here. $150,000. W. C. Jansen, Electric Bldg., Cleveland, archt. Noted Aug. 17.

Ind., Michigan City—Lodge—Sept. 1, by Masonic Temple Assn., 3 story, 82 x 82 ft. brick, steel and terra cotta, 6th St. $150,000. Nicol, Scholer & Hoffman, Lafayette, archts. Noted Aug. 17.

Ill., Chicago—Hotel—V. C. Carlson, 701 Church St., receiving bids 7 story, 140 x 270 ft., rein.-con., brick and steel, Orrington Ave. and Church St. $1,500,000. J. A. Scanlan, c/o owner, archt.

Ill., Chicago—Apartment—A. E. Marks, 30 North La Salle St, receiving bids 3 story, 100 x 125 ft., rein.-con., brick and steel, 2500-08 Pensacola Ave. $160,000. A. B. Maiwurm, 516 South Euclid Ave., Oak Park, archt.

Ill., Chicago—Bank, Store and Office—Michaelson & Rognstad, archts., 3813 West Congress St., receiving bids 5 story, 240 x 240 ft., rein.-con., brick and steel, Milwaukee Ave. and Irving Park Blvd., for E. H. Bengson, 2919 Milwaukee Ave., $500,000.

Ill., Chicago — Fraternity House — H. Shaw, archt., 39 South State St., receiving bids 3 story, 90 x 175 ft., rein.-con., brick and steel, Woodlawn Ave. and 56th St., for Phi Kappa Psi Chapter of University of Chicago, University Ave. and 60th St. $150,000. Noted Feb. 9.

Ill., Crystal Lake—High School—J. C. Llewellyn, archt., 38 South Dearborn St., Chicago, receiving bids 2 story, 60 x 150 x 260 ft., rein.-con., brick and steel, here, for Bd. Educ. $200,000.

Buildings (Continued)

Ill., Rogers Park (Chicago P. O.)—Apartment—O. Van Gunten, archt., 26 East Huron St., Chicago, receiving bids 3 story, rein.-con., brick and steel, here. $250,000. Owner's name withheld.

Colo., Denver—Restaurant—T. R. Wieger, archt., Chamber Commerce Bldg., takes bids about Sept. 1, 2 story, 50 x 125 ft., rein.-con., steel, brick and terra cotta, plain foundation. Glenarm St. between 16th and 17th Sts., for A. Trachsel and O. Hebestreit, 430 Emerson St. $150,000.

Ariz., Flagstaff—High School—Bd. Trustees, general contract 3 story, 130 x 180 ft., rein.-con., brick and steel, plain foundation, to N. P. Agren, Phoenix, $124,000. Noted June 22.

Calif., San Francisco — Church — C. Werner, archt., Humboldt Bank Bldg., taking bids 1 story, rein.-con., Funston Ave. and Clement St., for Fourth Church of Christ Scientist. $150,000. Noted June 8.

Calif., San Francisco—Office—A. I. Coffey, archt., Humboldt Bank Bldg., taking bids 5 story, brick or concrete, steel frame, Sutter and Leavenworth Sts., for Incorporation of Doctors.

Calif., San Luis Obispo—Hotel and Store—C. A. Meussdorffer, archt., Humboldt Bank Bldg., San Francisco, taking bids 5 story, rein.-con., Montgomery and Morro Sts., here, for J. L. Anderson, c/o architect. $150,000. Noted June 8.

Calif., Visalia—Bank and Office—A. Cuneo, Bank of Italy, Powell and Market Sts., San Francisco, taking bids 5 story, rein.-con., here. $250,000. R. F. Felchlin & Co., Bank of Italy Bldg., Fresno, archts.

Ont., Owen Sound—School—Aug. 31, by Foster & Clark, associated archts., 887 Second Ave. E., 3 story, 80 x 300 ft., rein.-con., brick and steel for Bd. Educ. $185,000. Watts & Blackwell, St. James Chambers, Toronto, archts.

Ont., St. Thomas—School—Sept. 16, by R. Kilmer, chn. Bd. Educ. 2 story, 6 room and auditorium, brick, Myrtle and Balaclava Sts. $150,000. N. R. Darrach, 430 Talbot St., archt.

Ont., Toronto—Dormitory—Aug. 29, by J. P. Hynes, archt., 73 King St., W., 3 story, 114 x 128 ft. rein.-con., brick and steel, St. Albans St., for St. Josephs Convent, St. Albans St. $200,000.

Que., Montreal—School—Aug. 28, by Catholic School Comn., 87 St. Catherine St. W., school and residence, St. James Ward. I. Vautree, 30 St. James St., archt.

BIDS RECEIVED

O., Akron—Court House—Summit Co., Court House, opened bids Aug. 12, 3 story, 72 x 176 ft. sandstone annex, plain foundation, South Bway., from Carmichael Constr. Co., 524 Hamilton Bldg., $354,150; Clemmer & Johnson Co., 406-7 Hamilton Bldg., $383,649; Akron Storage & Contg. Co., Cole Ave. and Sherman St., $398,000. Contract awarded to lowest bidder. Noted July 27.

O., Elyria—School—Bd. Educ. opened bids July 28, 2 story, brick, steel and concrete addition to Roosevelt School, from J. Kaiser & Bros., Elyria, $130,000; J. Halpin, Elyria, $130,475. (Street addresses not available.) Noted June 22.

Calif., Gilroy—Schools—Gilroy School Dist. opened bids, (a) one 6 room junior high school, (b) one 14 room elementary school, both frame and stucco, general contract from E. Nommensen, 19 South 5th St., San Jose, (a) $80,624, (b) $40,779; Sample & Cody, 180 Jessie St., San Francisco, (a) $81,000; C. Stockholm & Son, Monadnock Bldg., San Francisco, (a) $86,650; W. Radke, Gilroy, (b) $42,783; Ward & Jones, 180 Jessie St., San Francisco, (b) $44,555. Noted June 29.

CONTRACTS AWARDED

Mass., Amherst — Laboratory — Massachusetts Agricultural College, 2 story, 75 x 195 ft., brick and steel, on Campus, to Allen Bros., Amherst. Archts. est. $250,000. Noted June 22.

Mass., Revere — High School — School Dept., 4 story, 75 x 132 ft. brick, concrete and steel, plain foundation, Beach St., to A. B. Carter & Sons Co., 73 Tremont St., Boston. Archts. est. $250,000. Noted June 15.

R. I., Pawtucket—Church—Church of Our Lady of Consolation, 1 story, brick and stone, Sabin and Webster Sts., to C. B. Maguire Co., 1205 Turks Head Bldg., Providence. Archt. est. $150,000. Noted May 25.

Mass., Salem—Church, etc.—Tabernacle Congregational Church, Washington St., 1 story, brick, stone and steel church, and 2 story, brick and steel parish house, Washington and Federal Sts., to E. A. Abbott Co., 3 Park St., Boston. Archts. est. $160,000.

N. Y., New York — Apartment — A. Bricken Constr. Co., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., brick, steel and stone, plain foundation, Lexington Ave., by day labor. $750,000.

N. Y., New York—Drill Shed—Armory Bd., Municipal Bldg., drill shed for 15th Infantry, 142nd St. between Lenox and 5th Aves., to Post & McCord, 101 Park Ave., $471,000. Noted Aug. 10.

N. Y., Wende—Penitentiary—Bd. Supervs. Erie Co., Buffalo, general contract for administration building, bakery, laundry and other buildings, here, to Morris & Allan, Inc., Prudential Bldg., Buffalo, $682,031; heating and ventilating work, to Power Efficiency Corp., White Bldg., Buffalo, $47,700. Noted Aug. 3.

N. J., Camden—Store—H. Pinsky Sons Co., Bway. and Spruce St., 5 story, 56 x 92 ft., rein.-con., brick and steel, Bway., to Potts Bros. & Cooperson, 129 North 11th St., Phila., $175,000.

N. J., Pittman—School—Bd. Educ. 2 story, 112 x 116 ft. school, to Chester Constr. Co., Crozer Bldg., Chester, Pa., $155,917.

N. J., Somerville—School—Bd. Educ., general contract 3 story, rein.-con. and brick, to Carroll & Pullen, Branch Ave., Princeton, $179,000.

Pa., Johnstown—Auditorium and Gymnasium— Bd. Educ., 1 story, 110 x 115 ft. auditorium and 80 x 242 ft. gymnasium, Central Ave., to Thiel Constr. Co., Johnstown. Archts. est. $650,000. Noted Aug. 10.

Pa., Phila.—Church and Rectory—Church of Incarnation, c/o R. J. Brady, 52nd and Lindley Aves., 2 story, 79 x 159 ft. and 47 x 359 ft., brick, steel and stone, plain foundation, to D. W. O'Dea, 5227 North 5th St. Archts. est. $500,000.

Pa., Scranton—School—Marywood College, three 2 story brick, steel and stone buildings, at Marywood near Scranton, general contract and excav., to P. Boland of Boland Bros., 427 Spruce St. Archts. est. $200,000.

O., Cleveland—Church—St. Clements Catholic Church, c/o W. Koehl, archt., Park Bldg., 1 story, 61 x 106 ft., brick, steel and concrete, Madison and Lincoln Aves., to Schrader Constr. Co., 1643 East 40th St. Archts. est. $150,000.

O., Grandview Heights (Columbus P. O.)—High School—Bd. Educ., general contract 2 story, 145 x 173 ft., brick and concrete, 3rd Ave., to L. L. LeVegue Co., 1518 Clifton Ave., Columbus, $160,985; plumbing and heating work, to Fitpatrick & Hoepfner, 63 East Gay St., Columbus, $44,978. Noted July 20.

O., Louisville—High School—Thayer & Johnson, archts., 5716 Euclid Ave., Cleveland, general contract 2 story, brick, steel and concrete, here, to R. G. Witters, 1539 Harvard Court, N. W., Canton, for Bd. Educ. $150,959. Noted July 27.

O., Mt. Sterling—School—Bd. Educ., 2 story, 120 x 133 ft., brick and concrete, to L. G. Foltz & Sons, 448 Nelson Rd., Columbus, $82,200. Noted Aug. 17.

Mich., Detroit—Office—J. B. Book, Book Bldg., steel work for 21 story, 60 x 100 ft. office building, Washington Blvd., to Russel Wheel Fdry. Co., Chene St. and Belt Line Ry. Noted July 27.

Mich., Grand Rapids—Bank and Hotel—Kent State Bank, 98 Ottawa St., N. W., 13 story, 67 x 154 ft., Monroe and Ionia Aves., to Owen, Ames & Kimball, Michigan Trust Bldg. Archts. est. $1,000,000.

Ill., Chicago—Administration—Immanuel Baptist Church, c/o N. M. Dunning, archt., 304 South Wabash St., 4 story, 54 x 123 ft., rein.-con., brick and steel, 2316-26 Michigan Blvd., to Wells Bros. Constr. Co., 53 West Jackson Blvd. Archts. est. $225,000.

Ill., Chicago—Apartment—Kahn & Jonas, c/o A. S. Alschuler, archt., 58 East Jackson Blvd., three 3 story, 158 x 250 ft. (over all), rein.-con., brick and steel, Ingelside and 54th St., to Johnson-Anderson Co., 7120 Evans Ave. Archts. est. $450,000.

Ill., Chicago—Apartment—J. Kulp & Co., Standard Trust Bldg., 3 story, 120 x 165 ft., rein.-con., brick and steel, 6748-58 Crandon Ave., to Anderson & Winblad, 6235 South Michigan Ave. Archts. est. $200,000.

Ill., Chicago—Apartment—M. Zwen, 1303 North Western Ave., 3 story, 100 x 125 ft., rein.-con., brick and steel, Rockwell and Schubert Sts., to E. Fridstrom, 4364 Montrose Ave. Archts. est. $150,000.

Wyo., Cheyenne—Temple—Scottish Rite Masons, 4 story, 120 x 132 ft., granite and stone superstructure, 20th and Capitol Sts., to E. J. Keefe, Laramie, $296,582. Foundation and steel work completed. Noted June 7, 1921.

Calif., Palo Alto—Dining Hall—L. Stanford, Jr., University of California, 1 story, rein.-con., to G. Wagner, 251 Kearny St., San Francisco, percentage basis, about $200,000.

Calif., San Francisco—Hotel and Store—G. D. Smith, 735 Taylor St., 10 story, rein.-con. hotel, and 1 story store building, Sutter St. near Taylor St., to Clinton Constr. Co., 140 Townsend St., $450,000

Calif., Stockton—School—Bd. Educ., constructing Roosevelt School on Burkett Acres, 13 rooms and assembly hall, general contract to Shepherd & Riley, Yosemite Bldg., $119,207. Noted Aug. 17.

Ont., Ottawa—Store—J. A. Laroque, 270 Dalhousie St., 3 story, 40 x 200 ft. Rideau St., to I. A. Garvock, Sparks St. Noted June 22.

Que., Westmount—City Hall—To Nicholson Constr. Co., St. Catherine St. W., Montreal, grey stone and limestone, Sherbrooke St., $140,000. Noted May 18.

Federal Government Work

PROPOSED WORK

Conn., New Haven—Dredging—U. S. Engineer, Providence, R. I., soon takes bids dredging in harbor, here.

Pa., Phila.—Embankment and Riprap—U. S. Engineer, 815 Witherspoon Bldg., soon takes bids embankment and riprap in Delaware River at Artificial Island.

Del., Wilmington—Jetties—U. S. Engineer, Wilmington, soon takes bids for jetties at mouth of Smyrna River.

Minn., Duluth—Stone Riprap—U. S. Engineer, Duluth, soon takes bids for stone riprap on breakwater, upper end of Keweenaw Waterway, Michigan.

Tex., Galveston—Repairs to Dam—U. S. Engineer, Galveston, soon takes bids for repairs to Caddo Lake Dam.

Calif., Los Angeles—Dredging—U. S. Engineer, Los Angeles, soon receives bids dredging in harbor, here.

BIDS DESIRED

Mass., Northampton—Hospital—Sept. 12, at office Quartermaster General, 2306 Munitions Bldg., Wash., D. C., construction of group of hospital buildings, here; adv. this issue. Noted Aug. 17.

R. I., Providence—Repairing Jetty—Sept. 15, at U. S. Engineer Office, repairing east jetty at entrance to Nantucket Harbor, Mass.; adv. this issue.

D. C., Wash.—Tunnel, Conduit, etc.—Aug. 26 at office Public Printer, Government Printing Office, for tunnel, electric conduit, steam piping, pipe covering and electric wiring between Capitol power plant and Government Printing Office. Col. Metz, engr. in charge.

Va., Hampton Roads—Riprap Protection—Spec. 4699—Sept. 6, by Bureau Yards & Docks, Navy Dept., Wash., D. C., riprap protection for north breakwater at submarine base, here. Noted Aug. 17.

Fla., Jacksonville—Jetty Repairs—Sept. 21, at office U. S. Engineer, jetty repairs at entrance to St. Johns River; adv. this issue.

Ala., Florence—Barges—Sept. 18, at office U. S. Engineer, for 2 steel barges; adv. this issue.

Ala., Florence—Turbine—Sept. 18, at office U. S. Engineer, 1 hydraulic turbine; adv. this issue.

La., New Orleans—Barges—Sept. 15, at office U. S. Engineer, 329 Customhouse, for 2 steel oil barges in Mississippi River, here; adv. this issue.

Mo., St. Louis—Mezzanine—Sept. 8, by Treas. Dept., Wash., D. C., mezzanine for U. S. Post Office, here. J. A Wetmore, acting superv. archt.

Calif., San Diego—Guard House, etc.—Spec. 4582—Sept 13, by Bureau Yards & Docks, Navy Dept., Wash., D. C., guard house and shops at Marine Barracks, Naval Base, here. Noted Feb. 23.

BIDS RECEIVED

Del., Wilmington—Excavation—U. S. Engineer, Wilmington, excavating Inland Waterway from Delaware River to Chesapeake Bay, Del. and Md. (Chesapeake and Delaware Canal). 5,600,000 cu.yd. excav., from W. H. Gahagan, Inc., 147 Remsen St., Brooklyn, N. Y., $0.2452 per cu.yd.; Atlantic Gulf & Pacific Co., Atlantic City, N. J. (street address not available), $0.264; Dawes & Bernard, Rochester, N. Y. (street address not available), $0.284. Noted July 20.

D. C., Wash.—Remodeling—Spec. 4694—Bureau Yards & Docks, Navy Dept., Wash., D. C., remodeling subsistence building at Naval Hospital Reservation, here, from Schneider & Splietd Co., 402 Kellogg Bldg., $14,878 (45 days); W. E. Mooney, 505 Evans Bldg., $15,512 (45 days); H. B. Davis, 1311 G St., $17,000 (75 days). Noted Aug. 10.

Fla., Key West—Distilling Plant—Spec. 4546—Bureau Yards & Docks, Navy Dept., Wash., D. C., distilling plant, here, from A. Pope, 4722 15th St., N.W., Wash., D. C., $63,250 (150 days); J. R. Proctor, Inc., 16 West 9th St., Bayonne, N. J., $66,990; F. J. Eisinger, 310 St. Johns Pl., Brooklyn, N. Y. $73,341 (180 days). Noted July 13.

Calif., Palo Alto—Rehabilitating Water Supply—Treas. Dept., Wash., D. C., moving

Federal Government Work (Continued)

and resetting certain pumping equipment, pipe lines and other machinery, here, from Turner Co., 273 Natoma St., San Francisco, $34,595; M. Murphy, 1321 Milvia St., Berkeley, $37,700.

Calif., San Diego—Wire Partitions—Spec. 4696—Bureau Yards & Docks, Navy Dept., Wash., D. C., wire partitions at Naval Base, here, from Standard Fence Co., 245 Market St., San Francisco, $3,999; City Wire & Iron Works, 333 North San Pedro St., Los Angeles $4,735; Berger-Rothgeb Co., Los Angeles, $5,326. Noted July 27.

CONTRACTS AWARDED

N. Y., Buffalo—Riprap Stone—U. S. Engineer, Federal Bldg., riprap stone on neck of Presque Isle Peninsula, Erie Harbor, Pa., to W. H. Ellery, 3629 West Lafayette St., Detroit, Mich., $27,312.

N. Y., Tupper Lake—Foundations—Spec. 4698—Bureau Yards & Docks, Navy Dept., Wash., D. C., foundations for 5 buildings for U. S. Veterans Hospital, here, to W. M. Sutherland Building and Contg. Co., 408 Compton Bldg., St. Louis, Mo., $42,000 (60 days). Noted Aug. 17.

Md., Annapolis—Refrigerating Plant—Spec. 4689—Bureau Yards & Docks, Navy Dept., Wash., D. C., refrigerating plant at U. S. Naval Academy, here, to Clothel Refrigerating Co., 61 Bway., New York City, $1,950 (30 days). Noted Aug. 17.

D. C., Wash.—Air Compressor—U. S. Engineer Office, 250 Old Land Office Bldg., motor driven air compressor to Norwalk Iron Wks., Water St., N., Norwalk, Conn., $14,370.

D. C., Wash.—Diesel Engine, etc.—Chief of Engineers, 2802 Munitions Bldg., for Diesel engine, generating sets and switchboards, to Winton Engine Wks., 2116 West 106th St., Cleveland, O., $121,498. Noted June 15.

Ala., Montgomery—Steel Hull—U. S. Engineer, Montgomery, steel hull for dipper dredge Upatoi, to Johnson Iron Wks., Drydock and Shipbuilding Corp., Morgan and Seguin Sts., $25,850. Noted July 6.

La., New Orleans—Dikes, etc.—U. S. Engineer, 329 Custom House, dikes and mattresses, to L. F. Alexander & Co., Audubon Bldg., $311,075.

La., New Orleans—Willows and Poles—U. S. Engineer, 329 Custom House, willows and poles at Passes of Mississippi River, to R. S. Levy & Co., Venice, $45,000.

Tenn., Memphis—Bank Revetment and Mattress—Mississippi River Comn., 1st and 2nd Dists., Custom House, bank revetment and mattress for White River at Narrows, to W. P. McGeorge, 1719 Cherry St., Pine Bluff, Ark., $16,880.

Tenn., Memphis—Levee Work—Mississippi River Comn., 1st and 2nd Dists., Custom House, earthwork in Upper and Lower St. Francis and White River Dists., Stations 13/4 and 14/0, to Harris & Day, Bridge Junction, Ark., $70,200; Stations 20/31 and 21/28 to Roach, Stansell, Lawrence Bros., North Memphis Savings Bank Bldg., $95,160. Noted Aug. 3.

Miscellaneous

PROPOSED WORK

Transmission Lines—Bolivar, N. Y.—Bolivar-Richburg Electric Co. plans transmission lines in Bolivar, Richburg, Wirt and Genesee. To exceed $30,000.

Gold Course—Chautauqua, N. Y.—Chautauqua Golf Club, The Colonnade, purchased 32 acres and having plans prepared extending golf course. $32,000. G. W. Rowland, comr. D. J. Ross, Pinehurst, N. C., engr.

Street Sweeper and Cleaner — Farrell, Pa.—Boro plans to purchase motor driven street sweeper and cleaner machine.

Coal Tipple—Richmond, Va.—Richmond, Fredericksburg & Potomac, Broad St., having plans prepared and takes bids about Sept. 1, for coal tipple. $300,000.

Freight Sheds—New Orleans, La.—Bd. Port Comrs., Canal St., plans 203 x 530 ft. freight shed and wharf, 7th St., $225,000, also 150 x 220 ft. steel and corrugated iron freight shed and warehouse, Market St., $150,000. A. Young, 1 Canal St., ch. engr.

Levee Improvements—New Orleans, La.—G. C. Schoenberger, asst. engr., submitted report to Bd. State Engrs., New Court Bldg., on condition of levees in 5th Louisiana Levee Dist. Summary of work to be undertaken as follows: East Carrol Parish, $317,550, Madison Parish $235,000, Tensas Parish $531,000, Concordia Parish $343,000, also other miscellaneous work in same parishes totaling $242,600.

Electric Light System, etc.—Pelahatchee, Miss.—Making plans electric light and waterworks system. $40,000. Swanson-McGraw, Inc., 705 United Fruit Bldg., New Orleans, La., consult. engrs.

Playgrounds, etc. — Dayton, O. — Will vote on $300,000 bonds in November for opening 3 new playgrounds and adding equipment to existing community centers. I. E. Houk, city engr.

Grain Elevator and Cleaner House—Salina, Kansas—H. D. Lee Flour Mills Co. soon takes bids rein.-con., grain elevator, 8 bins, 22 ft. diam., 95 ft. high, with head house, and 23 x 63 ft. cleaner house, 95 ft. high, Santa Fe Ave. $150,000. I. L. Zerbe, Salina, archt. and engr.

Gas Line—Okesa, Okla.—Smelters Gas Co., Bartlesville, plans 6 mi. of 6 in. gas line from here to Bartlesville. $50,000. Engineer not announced.

Playgrounds, etc.—Redwood City, Calif.—Plans election to vote on $35,000 bonds to purchase site, equip playground, build well and pump engine $3,500, swimming tank $4,000, board walk, concrete tennis courts, etc. C. L. Dimmitt, city engr.

Arena—Brantford, Ont.—A. Ballantyne is head of syndicate which plans to build arena. Prices wanted on artificial ice plant. $100,000.

Drilling Wells—Chatham, Ont.—Union Natural Gas Co., Chatham, plans to drill wells in Dover and Dawn Twps., for oil and gas. $35,000. Prices wanted on pipe and equipment.

Underground Conduits—London, Ont.—Bell Telephone Co., 435 Clarence St., plans to put telephone wires in underground conduits. $40,000. Prices wanted on all materials. Private plans.

Ornamental Lighting System—Riverside (via Windsor), Ont.—Plans 4½ mi. ornamental electric lighting system along Riverside Dr. $50,000. W. Code, City Hall, Riverside (via Windsor), engr.

BIDS DESIRED

Refrigeration Work—Marcy, N. Y.—Sept. 6, by State Hospital Comn., Albany, refrigeration work-kitchen for acute patients building, at Utica State Hospital, Marcy Div., here. L. M. Farrington, secy.; adv. this issue.

Dumping Platform and Ramp, etc.—New York, N. Y.—Sept. 1, by J. H. Delaney, comr. Docks & Ferries, Pier "A" foot of Battery Pl., superstructure on pier at East 35th St. consisting of rein.-con. dumping platform and ramp, Contr. 1773. Noted Aug. 17.

Ornamental Lights—Long Branch, N. J.—Aug. 29, by Bd. City Comrs., Council Chambers, installing ornamental lights on Ocean Ave. from Sea View to Brighton Aves. F. C. Quinn, city clk.; adv. this issue.

Hoists—Pittsburgh, Pa. — J. P. Moore, controller Allegheny Co., taking bids one Brownhoist No. 2 type, mounted on railroad trucks, 4 wheels complete, 30 ft. boom, one yd. clam shell type grab bucket, f.o.b. Bakerstown; also one No. 3 type mounted on railroad trucks, 4 wheels complete, 45 ft. boom, 1½ yd. clam shell type grab bucket, f.o.b. Woodville.

Mechanical Equipment — Wilmington, Del.—Sept. 8, by Harbor Comrs., Municipal Bldg., mechanical equipment for Wilmington Marine Terminals; adv. this issue.

Creosoted Block—Knoxville, Tenn.—See "Bridges" under "Proposed Work."

Power Piping and Steam Heating System—Hammond, Ind.—Sept. 15, at office Bd. Pub. Wks., power piping and steam heating system in connection with new pumping station. A. J. Swanson, chn.; adv. this issue.

Road Roller, etc.—West Allis, Wis.—Aug. 28, by Bd. Pub. Wks., one 10 ton motor driven road roller with scarifier attachment and 1 motor driven grading machine. A. L. Wichner, supt.

Ornamental Lighting System—St. Paul, Minn.—Aug. 28, by city, ornamental lighting system in Crocus Hill Dist., 1,042 posts, single lights, in 30 streets, street length 127,000 lin.ft. $111,344. H. W. Austin, city purch. agt. O. Claussen, city engr. Noted May 11.

Heating Mains—San Antonio, Tex.—Sept. 2, by State Bd. Control, Austin, complete heating mains for Southwestern Insane Asylum, here.

Hydraulic Turbines — Toronto, Ont. — Hydro Electric Power Com., University Ave., taking bids three 86,000 hp. hydraulic turbines 320 ft. head, for Queenston Ont. plant. $1,000,000. F. A. Gaby, ch. engr.

BIDS RECEIVED

Refined Asphalt, etc.—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, opened bids Aug. 16, furnishing and delivering (1) 130,000 gal. refined asphalt in liquid form, (2) 1,500 cu.yd. binder stone, (3) 5,200 cu.yd. asphalt sand, (4) 750 net ton limestone or other suitable inorganic dust, (5) 28,900 ft. B.M. lumber, (6) 8,000 gal. tar road binder, (7) 2,200 cu.yd. paving sand, (8a) 3,000 cu.yd. 1½ in. gravel or (8b) 3,000 cu.yd. 1½ in. broken stone, (9) 5,300 bbl. Portland cement (10) 30,000 asphalt paving blocks, (11) 20,000 wood paving blocks, from Standard Oil Co., 26 Bway., New York (1) $0.0521 per gal.; Warner Quinlan Co., 79 Wall St., New York (1) $0.0523; Calvin Tomkins, 30 Church St., New York (2) $2.03; Hygrade Builders Supply Co., 6th St. and 2nd Ave. (2) $2.09; (3) $1.19 (8b) $7,170 (9) $2.89; New York Trap Rock Corp., 101 Park Ave., New York (2) $2.29 (4) $7.88; Z. Mahoney (3) $1.24; Prever Lumber Co., 250 West 23rd St., New York (5) $976; East River Mill & Lumber Co., 92nd St. and East River, New York, (5) $1,821; J. A. Maloney & Co., 1182 Bway., New York (5) $1,973; F. J. Lewis Mfg. Co., 177th St. and Ferris St., New York (6) $0.1672; Barrett Co., 40 Rector St., New York (6) $0.205; J. F. Meehan, 103 Park Ave., New York (7) $0.97; T. E. McCormack, 810 Lincoln Rd., Flatbush (7) $1.10; T. Bernhardt (7) $1.17; Rosoff Sand & Gravel Co., 152 West 42nd St., New York (8a) $7,124; F. Starr Contg. Co., 220 West 42nd St., New York (8a) $8,610; B. Turecamo Contg. Co., 8706 Bay 12th St. (8b) $7,193; Washington Buckley, Inc., 666 Kent Ave. (8b) $7,500; Burroughs Building Material Co., Johnson Ave. and Newtown Creek (9) $2.88; M. M. Canda, 184 3rd St. (9) $3.18; Hastings Pavement Co., 25 Broad St., New York (10) $89; Amer. Creosoting Co., 17 Battery Pl., New York (11) $54.10; Southern Wood Pres. Co. (11) $56.60. Noted Aug. 10.

CONTRACTS AWARDED

Coal Pocket, etc.—Woonsocket, R. I.—See "Industrial Works."

Foundation—Brooklyn, N. Y.—Brooklyn Edison Co., 560 Pearl St., 40 ft. pile foundation for power plant, Marshall St. and Hudson Ave., to Frederick Snare, Inc., 8 West 40th St., New York, $1,000,000.

Broken Stone, etc.—St. George, N. Y.—J. A. Lynch, pres. Richmond Boro, furnishing and delivering 1,000 cu.yd. 1½ in. broken stone and 400 cu.yd. grits, to J. J. Johnson Sons, 455 Bway., West New Brighton, $3.48 and $3 per cu.yd. respectively; 100 cu.yd. screenings, to J. E. Donovan, 2205 Richmond Terrace, Port Richmond, $3.60. Noted Aug. 17.

Seawall—Port Tampa, Fla.—To Carman Co., Tampa (street address not available), 290 ft. concrete seawall, 60 ft., 80,800 cu.yd. excav., etc., $18,500. Noted July 27.

Athletic Field — Youngstown, O. — Bd. Educ., reducing level of entire athletic field 3½ ft., providing drainage and constructing track, finishing grading and jumping pits, to Youngstown Constr. Co., 9 Realty Trust Bldg., $37,823.

Coal Handling and Conveying Machinery—St. Paul, Minn.—Coal handling and conveying machinery for Water Dept., to F. J. Rose Co., 718 Metropolitan Life Bldg., Minneapolis, $9,400. Noted Aug. 10.

Wood Blocks and Cast Iron Specials—St. Paul, Minn.—For 496 sq.yd. 3½ in. creosoted wood block to Walsh Tie Co., 914 Security Bldg., Minneapolis, $2.20 per sq.yd.; 11.55 ton c.i. water pipe specials, to St. Paul Fdry. Co., Como Ave. and Mackubin St., St. Paul, $110 per ton. Noted Aug. 10.

Granite Facing Stone—Lincoln, Neb.—State Capitol Comn., 335,280 cu.ft. granite facing stone in rough blocks, to H. Struebel, Bedford, Ind., $53,000. Noted July 27.

Cement—Napa, Calif.—Furnishing and delivering 10,000 bbl. cement, to F. G. Noyes, Napa, $3.15 per bbl. Noted July 27.

Transmission Lines—Turlock, Calif.—Turlock Irrigation Dist., 200 steel towers to Pacific Coast Steel Co., Rialto Bldg., San Francisco, $110 each; 470 mi. wire, to Aluminum Co. of America, Rialto Bldg., San Francisco, $0.1904 per lb.; 6,000 insulators, to Westinghouse Electric and Mfg. Co., 1st Natl. Bank Bldg., San Francisco, $2.47 each; bushings to Ohio Brass Co., Hobart Bldg., San Francisco; switchboard to General Electric Co., Rialto Bldg., San Francisco, $18,250. Noted Aug. 17.

Gas Mains—Montreal, Que.—Montreal Light, Heat & Power Co., Craig St., will lay 3,240 ft. 6 and 12 in. c.i. gas main in Delormier Ave. from Sherbrooke St. to Mt. Royal Ave., by day labor. $16,116. Noted Aug. 17.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Aug. 29.

State Road Work

Hartford, Conn.

SEALED PROPOSALS will be received by the State Highway Commissioner, 12 Washington Street, Hartford, Connecticut, until 2 P.M., daylight saving time, on Tuesday, August 29th, for the following sections of State work, in accordance with plans and specifications on file in the office of the State Highway Commissioner and at the following places:

TOWN OF COLCHESTER: About 5,83[illegible] lin.ft. of 7 in. trap rock macadam on the North Westchseter Road. Plans and specifications at the Town Clerk's office and at the office of A. W. Bushell, Division Engineer, Thayer Building, Norwich, Conn.

TOWN OF DERBY: About 1,700 lin.ft. of Plain Cement Concrete pavement on Water St. NOTE: Portland cement for the above work will be furnished by the State. Plans and specifications at the City Clerk's office and at the office of E. C. Welden, Division Engineer, Chamber of Commerce Bldg., New Haven, Conn.

TOWN OF NAUGATUCK: About 1,600 lin.ft. of 3 in. Sheet Asphalt over 6 in. Concrete Base on Main Street. NOTE: Portland Cement for the above work will be furnished by the State. Plans and specifications at the office of E. C. Welden, Division Engineer, Chamber of Commerce Bldg., New Haven, Conn.

TOWN OF SPRAGUE: About 7,552 lin.ft. of 7 in. Waterbound macadam (alternate bids on either local stone or trap rock) on the Hanover and Baltic-No. Franklin Road. Plans and specifications with R. J. Jodoin, First Selectman, and at the office of A. W. Bushell, Division Engineer, Thayer Building, Norwich, Conn.

TOWN OF SEYMOUR: About 1,600 lin.ft. of Vitrified Brick over 6 in. Concrete Base and Plain Cement Concrete pavement on South Main Street. NOTE: Vitrified brick and Portland cement for the above work will be furnished by the State. Plans and specifications at the Selectmen's office and at the office of E. C. Welden, Division Engineer, Chamber of Commerce Bldg., New Haven, Conn.

All bids must be accompanied by a surety company bond or certified check not less than one-third of the cost of the work. The State Highway Commissioner reserves the right to reject any and all bids.

Dated at Hartford, Connecticut, Aug. 15th, 1922.

C. J. BENNETT,
State Highway Commissioner,
12 Washington St., Hartford, Conn.

Bids: Sept. 18.

Road Work

Charleston, Miss.

Bids will be opened at one o'clock P.M. September 18, 1922, at the Court House, Charleston, Miss., for grading and graveling about 18½ miles of road between Philipp and Cowart, Road Districts, Nos. 4 and 5, Tallahatchie County, Miss. Bids must be accompanied by check or Bidder's Bond for $10,000.00.

Approximating Quantities—

Grading	115,000 Cu.Yds.
Gravel Surfacing	33,000 Cu.Yds.
Bituminous Material	130,000 Sq.Yds.

Information, Plans and Specifications may be secured from
ELLIOTT & HARMAN ENGINEERING CO., Bank of Commerce and Trust Co. Bldg., Memphis, Tenn.

OFFICIAL PROPOSALS

Bids: Sept. 6.

Cast Iron Main Sewer

Rye, N. Y.

Sealed proposals will be publicly opened by the Trustees of the Village of Rye, N. Y., at the Village Municipal Hall, at 8.15 p.m., September 6, 1922.

Said proposals to cover the construction (both materials and labor) of a cast-iron main sewer according to plans and specifications filed with the Village Clerk.

Copies of the plans and specifications may be obtained from him, or from the engineer, G. Everett Hill, 45 Seventh Avenue, New York City, upon payment of $15, of which amount $10 will be refunded upon return of all papers, in good condition, on or before September 10th, 1922.

Approximately the work consists of:

About 2,000 feet of 16-inch and about 1,540 feet of 18-inch cast-iron pipe (with manholes and fittings) laid partly on piles and partly on concrete piers.

Each bid must be accompanied by a certified check for $5,000, as a guarantee that the bidder, if his bid be accepted, will enter into contract and execute the required bond.

Each bid must be made on blank forms to be obtained from the Village Clerk or the Engineer.

The Village reserves the right to reject any or all bids.

The Board of Village Trustees.
WILLIAM H. SELZER,
Village Clerk.
G. EVERETT HILL, Engineer,
45 Seventh Ave., New York.

Bids: Aug. 29.

Street Improvement

South Bend, Ind.

Notice is hereby given that sealed proposals will be received by the Department of Public Works of the City of South Bend, Ind., up to 10:00 o'clock A.M., of the 29th day of August, 1922, for the execution of the following work:

River Park Trunk sewer District No. 1. Estimated cost $70,000.00.

Complete drawings and specifications of said work are now on file in the office of the Department of Public Works in the City Hall, of South Bend, Indiana. The board reserves the right to reject any or all bids.

BOARD OF PUBLIC WORKS.
L. B. SLAUGHTER,
L. P. HARDY,
ALBERT F. HONER.
VERONICA C. SWEENEY,
Clerk Board.

Bids: Sept. 7.

Sewerage Pumping Station

Philadelphia, Pa.

Sealed proposals will be received at Room 216, City Hall, until 12 o'clock noon on Thursday, September 7, 1922 and opened at that time in Room 216, City Hall, for Southwest Sewage Pumping Station—40th Ward Lowland Drainage:

Contract No. 1—Sub-Structure and Superstructure.
Contract No. 2—Mechanical Equipment.
Contract No. 3—Electrical Equipment.
Contract No. 4—Plumbing System.
Contract No. 5—Heating and Ventilating Systems.

Inquire at Room 416, City Hall.

FRANK H. CAVEN,
Director.

OFFICIAL PROPOSALS

Bids: Sept. 9.

Storm Relief Trunk Sewers and Lateral Relief Sewers

Lima, Ohio.

Sealed proposals for the construction of Relief Trunk Sewers, Contracts No. 9 and 11, will be received at the office of the City Manager, Lima, Ohio, until 12 o'clock noon, Central Standard Time, Sept. 9th, 1922, and then will be publicly opened and read. The City reserves fifteen (15) days thereafter in which to act on the bids.

The work included under these contracts consists of construction, with all appurtenances, of Relief Trunk Sewers as mentioned above, a general summary of quantities follows:

Contract No. 9.

Total length of Sewer about 12,500 lineal feet, varying in size from 15 to 78 inches, all of Circular Section.

Contract No. 11.

Total length of Sewer about 27,000 lineal feet, varying in size from 12 to 78 inches, for Circular Sections, also two rectangular Sections 6 by 8 feet, and 8 by 9 feet, and a total length of 2,750 lineal feet, with all necessary appurtenances, special structures and manholes.

Copy of Plans, form of proposal, contract, bond and specifications, may be inspected at any of the following offices: Fuller & McClintock, 319 Summit Cherry Building, Toledo, Ohio, Fuller & McClintock, 170 Broadway, New York City; and B. F. Darling, Supervising Engineer, City Hall, Lima, Ohio.

Copies of plans and specifications with form of proposal, contract and bonds, may be obtained at the office of the Supervising Engineer, City Hall, Lima, Ohio. The following charge will be made for each set of plans and specifications:

Contract No. 9—Six Dollars ($6.00).
Contract No. 11—Seven Dollars ($7.00).

No charge will be made for proposal blanks, the above mentioned charge for Plans and Specifications, is a sale and not a deposit, no refund will be made, nor will plans and specifications be delivered unless the order is accompanied by a remittance.

The City Manager reserves the right to reject any or all bids, to waive any informalities in the bids and to accept any bid which is deemed most favorable to the interest of the City of Lima, Ohio.

C. A. BINGHAM,
City Manager.
B. F. DARLING,
Supervising Engineer.
Dated: August 19th, 1922.

Bids: Oct. 10.

Steam Turbine and Accessories

New Orleans, La.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans up to 12 o'clock, noon, Tuesday, October 10th, 1922, for furnishing one 6,000 kw. STEAM turbine and accessories.

Specifications and blank forms of proposals may be obtained at Room 303, No. 526 Carondelet Street, New Orleans.

The right is reserved to reject any or all bids.

A. G. MOFFAT,
Secretary.
GEO. G. EARL,
General Superintendent.
Aug. 10th, 1922.

Bids: Aug. 28.

Paving

Waterloo, N. Y.

For paving Stark Street from William Street north to North Street, North Street from Stark Street east to Taylor Street, Center Street from North Street south to the south line of the Catholic Church property, Swift Street from Main Street north to North Street, Church Street from Main Street north to Mechanic Street, William Street from the east line of the Episcopal Church property west to the west side of the entrance to Waterloo Hospital and also from Park Street to Stark Street, Race Street from Huff Street west to west side of lane at Traphagen's Coal Yard, Fayette Street from South Street north to Race Street, Huff Street from Race Street south to South Street, Park Street from Main Street north to William Street in the Village of Waterloo, N. Y., with bituminous macadam, penetration method.

Sealed proposals for the above mentioned work, endorsed "Proposals for Paving" will be received at the office of the Board of Trustees, Waterloo, N. Y., until 12 o'clock M. of August 28th, 1922.

The following estimate of quantities is to be considered only as approximate and bidders are required to form their own judgment of the quantities and character of the work by personal examination of the specifications and drawings relating to it, or such other means as they may prefer. Bidders must not assert any misunderstanding in regard to anything relating to the work.

The Contractors shall have no claim against the Village by reason of any variation between the quantities of the approximate estimate and the quantities of the work as done, nor on account of any misunderstanding or misconception of the nature and character of the work.

The several bids will be computed, tested and canvassed by the quantities and qualities mentioned in the following estimate:

21,700 square yards Bituminous Macadam Pavement (Penetration Method).

Each bid must be made out on the forms of proposals furnished by the Board of Trustees, and must be enclosed in a sealed envelope, addressed to the Board of Trustees, Waterloo, N. Y.

The price for which bidders will agree to execute and perform each class of work to be written in ink in both words and figures in the forms of bid, and all bids will be considered informal which do not contain prices set opposite each and all of the items which are called for in printed forms for bids, or which are otherwise not in conformity with this notice. Bids that contain any omissions, erasures, alterations, additions or items not called for in the itemized "Notice to Contractors," or that contain irregularities of any kind, will be rejected as informal. No bid will be allowed to be withdrawn for any reason whatever, after it has been deposited with the Board of Trustees.

Bidders are requested to state in their bids, under oath, their names and places of residence, the names of all persons interested with them in said bids, also that the bid is made without any connection with any person making another bid for the same contract, and that the bid is in all respects fair and without collusion or fraud.

Contractors will be paid monthly, approximate estimates, 90 per cent, of the amount due for work at that time done.

The person or persons whose bid shall be accepted, will be required to attend at the office of the Board of Trustees with the sureties offered by him or them, and execute the contract and bond within ten days from the date of the service of a notice to that effect, delivered to him in person or mailed to the address given in the bid. In case of failure or neglect to do so he or they will be deemed to have abandoned the contract.

A certified check payable to the order of the Village Treasurer of the Village of Waterloo, N. Y., will be required in the amount of $1,500.00 (Fifteen Hundred Dollars) to accompany each bid.

All deposits except that of the bidder whose bid shall have been accepted, will be returned to the person or persons making the same, within three days after the contract is awarded. If the successful bidder whose bid shall have been accepted, shall refuse or neglect to execute the contract within ten days after the notice that it has been awarded to him or them the amount of the deposit by him or them will be forfeited to and be retained by the Village of Waterloo, N. Y., as liquidated damages for such neglect or refusal; but if he or they shall execute the contract and bond within the time aforesaid, the amount of his or their deposit will be returned to him or them.

A bond in the sum of at least 50 per cent. of the contract price conditioned for the faithful performance of all parts of the contract with sureties to be approved by the Board of Trustees will be required.

The Board of Trustees reserves the right to reject all bids not deemed for the best interest of the Village and adjacent and contiguous property owners.

Plans may be seen at the office of the Board of Trustees, and specifications, forms of proposal, contract, etc., obtained from the Village Clerk.

The Contractor is required to furnish the Engineer, previous to the time fixed for receiving bids, samples of the bituminous material proposed to be used.

By order of the Board of Trustees of the Village of Waterloo, N. Y.

ADELBERT R. MOORE,
Village Clerk.

THIS ADVERTISING COSTS LITTLE

The cost of giving contracts NATIONAL publicity through the Official Proposal Columns of *Engineering News-Record* is only 40 cents a line an insertion. Figured on a circulation basis, the cost per line per thousand readers (1 1/3 cents) is extremely small, compared with the cost of other forms of publicity and the possibility of large waste distribution through publications of limited or general circulations. A single lower bid may save the cost of the advertising many times over.

Bids: Aug. 30.

Highway and Street Paving

Little Rock, Ark.

Sealed bids will be received until ten a.m. of Wednesday August 30th, 1922 at the auditorium of the Board of Commerce, Little Rock, Arkansas, by the Board of Commissioners of Pulaski Road Improvement District Number Ten, for the construction of approximately forty miles of streets and roads. The principal items of construction are as follows:

422,000	sq.yd. Asphalt Surface.
244,000	sq.yd. Five inch Concrete Base.
38,000	tons Broken Stone, additional macadam foundation.
3,100	cu.yd. Concrete in culverts and bridges.
202,000	cu.yd. Excavation.
34,000	lin.ft. Concrete Curb.
185,000	lin.ft. Concrete Road Header.
79,000	Roadway ft. Concrete Road Header.

All proposals or bids must be accompanied by either a certified check drawn on a responsible bank or trust company, or, by a bidders bond made by a surety company authorized to do business in the State of Arkansas. The certified check or bidders bond must be payable to H. S. Turner, Secretary of the Board of Commissioners of Pulaski Road Improvement District Number Ten, for a sum not less than five per cent of the aggregate of the proposals made.

Plans and specifications, as well as additional information, may be secured from the Engineer.

The successful bidder will be required to furnish satisfactory surety construction bond in a sum equaling the amount of the contracts awarded him.

The right is reserved to accept or reject any and all proposals, and to waive informalities.

ROY L. THOMPSON,
Chairman.

H. S .TURNER,
Secretary,
216 Gazette Bldg.,
Little Rock, Ark.

D. A. MACCREA,
Chief Engineer,
215 Gazette Bldg.,
Little Rock, Ark.

Bids: Aug. 29.

State Road Work

Baltimore, Md.

Sealed proposals for building eight sections of State Highway, as follows:

ALLEGHENY COUNTY—Cont. A-21—One section of state highway from Cumberland toward Old Town for a distance of 3.0 miles—(concrete).

FREDERICK COUNTY—Cont. F-57—One section of state highway from Middletown toward Burkittsville, a distance of 4.0 miles—(concrete).

HOWARD COUNTY——Cont. HO-27—One section of state highway from Laurel toward Scaggsville for a distance of 2.0 miles—(Gravel).

HOWARD COUNTY—Cont. HO-30—One section of state highway from Wash. Blvd near Savage toward Simpsonville, a distance of 2.0 miles—(Gravel).

ANNE ARUNDEL COUNTY—Cont. AA-25—One section of state highway from Eastport toward Bay Ridge for a distance of 1.0 miles—(Concrete).

CALVERT COUNTY—Cont. C-13—One section of state highway from Yoes Corner toward Broomes Island, a distance of 2.5 miles—(Gravel).

CHARLES COUNTY—Cont. CH-21—One section of state highway from Nanjemoy to Riverside, a distance of 3.9 miles—(Gravel).

ST. MARYS COUNTY—Cont. SM-20—One section of state highway from Chingville to Valley Lee, a distance of 4.0 miles—(Gravel).

Will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 m. on the 29th day of August, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 10th day of August, 1922.

JOHN N. MACKALL, Chairman.
L. H. STEUART, Secretary.

Bids: Aug. 29.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., advanced standard time, which is twelve o'clock noon eastern standard time on TUESDAY, the 29th day of AUGUST 1922, for the improvement of highways in the following counties:

ERIE	(one highway:2.56)
FRANKLIN	(one highway:6.45)
HAMILTON	(one highway:3.57)
LEWIS	(one highway:6.47)
ORANGE	(one highway:4.06)
SARATOGA	(one highway:5.27)
WASHINGTON	(one highway:6.48)
WYOMING	(one highway:0.59)

ALSO FOR THE REPAIR OF THE FOLLOWING:
(COMPLETION)

(LIVINGSTON)	(one contract:2.91)
MADISON	(one contract:2.36)
OSWEGO	(one contract:2.00)
RENSSELAER	(one contract:1.14)
STUBEN	(one contract:2.50)

Maps, plans, specifications and estimates may be seen and proposals forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or repaired. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "GENERAL INFORMATION FOR BIDDERS" in the itemized proposal specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.

J. C. FINCH,
Secretary.

Bids: Sept. 9.

Concrete Reservoir and Laying of Pipe

Voorheesville, N. Y.

Notice is hereby given that sealed proposals will be received by the Board of Trustees of the Village of Voorheesville, N. Y., at their office in the "Hose House," in the village of Voorheesville, N. Y., until three (3:00) o'clock P.M. (daylight saving time), on the ninth (9th) day of September, 1922, for the construction of a concrete reservoir and hauling and laying of about three and one-half (3½) miles of eight (8 in.) inch Class "B" cast iron water pipe and appurtenances.

All proposals must be made upon printed forms, to be obtained from the engineer; and the unit prices written in words and figures, and accompanied by cash or a certified check, made payable to the Village of Voorheesville, N. Y., for one thousand ($1,000.00), Dollars.

All proposals must be enclosed in a sealed envelope, directed to the Board of Trustees, Village of Voorheesville, N. Y., and endorsed upon the outside of the envelope "Proposal for Water System."

The Board of Trustees reserves the right to reject any or all proposals.

By order of the Board of Trustees of the Village of Voorheesville, New York.

GILBERT H. DARING,
Village Clerk,
Voorheesville, N. Y.

W. W. CHADSEY,
Civil and Sanitary Engineer,
434 State Street,
Schenectady, N. Y.

Bids: Sept. 5.

High School

Smyrna, Del.

Public notice is hereby given that the Board of Education, of the Smyrna Special School District and Delaware School Auxiliary Assocaition will meet at the office of the Delaware School Auxiliary Association, duPont Building, Wilmington, Delaware, on Sept. 5th, 1922, at the hour of 11 o'clock, Daylight Saving Time, and then and there will receive and open sealed proposals for furnishing labor and material to erect and complete a new High School Building for the Town of Smyrna, Kent County, State of Delaware.

The work for which bids or proposals are hereby invited will consist of semi-fireproof building constructed of brick and concrete walls, with timber and reinforced concrete floor and roof construction. The size of building is approximately 150 ft. x 80 ft. The building will be one and two stories high and contain about 14 Instruction Rooms and Auditorium.

Bids will be received for the erection complete of the entire building under one contract, or for the following divisions separately:

1—For the General Construction, which includes all masonry, carpentry, steel and iron, roofing, painting, and all work kindred thereto.

2—For Plumbing and Gas Fitting, and all work kindred thereto.

3—For Heating and Ventilating and all work kindred thereto.

4—For Electrical Work and all work kindred thereto.

The Board of Education and Delaware School Auxiliary Association reserve the right to accept or reject any or all proposals and to waive informalities at their discretion.

All bids must be in sealed envelopes addressed to the Board of Education of the Smyrna Special School District, care of Delaware School Auxiliary Association, du Pont Building, Wilmington, Delaware, endorsed "Proposals for (Naming the branch of work covered by bid)," with the name of the bidder.

No bid will be considered unless accompanied by a certified check to the order of the Board of Education of the Smyrna Special School District to the amount of 2% of the amount of the bid or a bid bond of like amount, binding the bidder to execute the contract if awarded him. The terms of the proposal with surety required are fixed by the specifications.

Copies of the plans, specifications will be on file in the office of the Delaware School Auxiliary Association, du Pont Building, Wilmington, Delaware, and at the Smyrna High School, Smyrna, Delaware, for the purpose of examination and estimating.

There will be a limited number of copies of the plans and specifications which will be loaned to the prospective bidders on deposit of a certified check to the order of Delaware School Auxiliary Association in the sum of $25.00. If plans and specifications are returned on or before the submission of estimates, the check will be returned, but should the plans and specifications be not returned, the deposit may become forfeited. Applications for the plans and specifications should be made to the Delaware School of Auxiliary Association, Room 8124 duPont Building, Wilmington, Delaware.

THE BOARD OF EDUCATION OF THE SMYRNA SPECIAL SCHOOL DISTRICT, SMYRNA, DEL.
W. O. HOFFECKER, President.
DELAWARE SCHOOL AUXILIARY ASSOCIATION.
DR. JOS. H. ODELL, President.

Make Plans Accessible to Distant Bidders

Plans and specifications for inspection by distant bidders may be filed at any of *Engineering News-Record* offices (without charge). Or a sufficient supply may be deposited at such of our offices as seem desirable, subject to your usual requirements in the matter of deposits, etc. (We assume full responsibility for return of plans or deposits). Therefore, Contractors in all parts of the country can bid with equal convenience on contracts advertised in *Engineering News-Record*.

Bids: Sept. 6.

Canal Water Power Development

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Wednesday, September 6th, 1922, at which place and hour they will be publicly opened and read, for the development of canal water power, pursuant to the provisions of Chapter 532 of the Laws of 1922, as follows:

A-3
CRESCENT POWER HOUSE,
COHOES, N. Y.

For constructing a power house and work incidental thereto, at Crescent Dam, Cohoes, N. Y.

Sheets 1 to 10 inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantity, proposal blanks forms of contract and bonds required, and other information for proposers, may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Eastern Division, Wedgeway building, Schenectady, N. Y.; at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division, at Rochester, N. Y.; at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposit of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provde suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE,
Superintendent of Public Works.

Bids: Sept. 5.

School Building

Teaneck, N. J.

SEALED PROPOSALS will be received by the Board of Education of the Township of Teaneck in Bergen County, N. J. on September 5th, 1922, at 8 P. M. at School No. 3, for (a) General Construction, (b) Heating and Ventilating, (c) Plumbing and (d) Electrical Work for the new school building to be known as School No. 4 on West Englewood Avenue and Essex Lane, Teaneck, N. J.

All to be in strict accordance with the plans and specifications prepared for same by C. V. R. Bogert, architect, 167 Main Street, Hackensack, N. J., to whom all applications for plans and specifications and other information must be made. No proposal will be considered that is not submitted upon the blank forms as prepared by and to be obtained from the Architect with the proper envelope in which same is to be inclosed. All bids must adhere strictly to the plans and specifications and no alternate bid will be received or considered except as called for on the authorized form.

Each proposal must be accompanied by a certified check in the amount of Two Thousand ($2,000) Dollars for General Construction, Five Hundred ($500) Dollars for Heating and Ventilating, Two Hundred ($200) Dollars for Plumbing and Two Hundred ($200) Dollars for Electrical Work, drawn to the order of the Board of Education as a guarantee that the bidder whose proposal is accepted will enter into a contract with the Board of Education and furnish a satisfactory bond for the faithful performance of the work.

Copies of the plans and specifications may be seen at the office of the Architect, or a set may be borrowed from the Architect for the personal use of the contractor for estimating by depositing with the Architect the sum of Twenty-five Dollars, which will be refunded upon the return of said plans and specifications.

The Board of Education of the Township of Teaneck reserves the right to accept or reject any or all proposals submitted, if deemed for the best interests of the Board to do so.

Dated Teaneck, N. J. August 1st, 1922.

P. A. SPENCER,
President.

J. H. RANGES, District Clerk,
West Englewood, N. J.

OFFICIAL PROPOSALS

Bids: Sept. 5.

Repairs to Dam No. 537

Beacon, N. Y.

Sealed proposals will be received by the City Council at its office No. 525 Main Street, Beacon, N. Y., on or before eight (8) o'clock P. M., Daylight Saving Time, Tuesday, September Fifth (5th), 1922, for repairs to Dam No. 537, South Mountain, Mt. Beacon Reservoir, Beacon, N. Y., which proposals will be opened by the Mayor or presiding officer on that day and time or on such subsequent day as the council may adjourn for that purpose.

No proposal shall be considered unless accompanied by the written consent of two sureties, conditioned that if the proposal be accepted, they will execute and deliver a bond with the bidder in a penalty to be fixed by the council conditioned for the construction of the work at the price and upon the terms proposed, according to the plans and specifications therefor, within such reasonable time as the council may limit, and subject to the supervision and approval of the commissioner of public works as the specifications shall provide.

Prospective bidders are requested to visit the site of the proposed work in order to satisfy themselves as to the scope and hazards of the work.

Plans and specifications, form of proposal, bond and contract may be obtained at the office of the city, No. 525 Main Street, Beacon, New York, or at the office of George W. Krieger, Jr., Consulting Engineer, Poughkeepsie, N. Y. upon the deposit of $15.00, which amount will be refunded upon the return of the plans and specifications in good condition.

Quantities of work to be done are approximately as follows:

PROPOSAL TO THE
CITY COUNCIL OF THE CITY OF
BEACON, DUTCHESS COUNTY, N. Y.

Quantity	Unit of Measure	Item
900	Cubic Yds.	Concrete 1:2:4
3,400	Pounds	Reinforcing bars 1½ in.
3,700	Pounds	Reinforcing bars 1 in.
5,200	Pounds	Reinforcing bars ½ in.
1,100	Lin. Ft.	Drains, Wrought Iron Pipe, 4 in. or smaller
250	Lin. Ft.	2 in. holes drilled in rock
80	Lin. Ft.	1½ in. holes drilled in rock
1,000	Lin. Ft.	1½ in. holes in old masonry
350	Cubic Yds.	Rock Excavation

SEPARATE BID FOR UPSTREAM WORK
(This work may or may not be required)

6,000	Gunite
3,900	Triangular wire mesh 0.65 lb. sq.ft.

The proposal shall be accompanied by a certified check drawn upon an incorporated State or National Bank or Trust Company in good credit, within this State, payable to the order of the City of Beacon for five per cent of the amount of the bid. The successful bidder will be required to give a satisfactory bond for the faithful performance of the agreement in amount equal to fifty per cent of the value of the contract.

The City Council of the City of Beacon reserves the right to reject any or all bids.

By order of the City Council of the City of Beacon.

MARCUS G. MAC LAUGHLIN,
Commissioner of Public Works.

Bids: Sept. 5.

Storm Sewer

Plainfield, N. J.

Bids will be received by the Common Council of the City of Plainfield, N. J., at the City Hall on Tuesday, September 5, 1922, at 8:30 p.m. (daylight saving time) for constructing about 1,000 lin.ft. of 7 ft. — 0 in. x 2 ft. — 5 in. reinforced concrete storm sewer and appurtenances.

Amount of certified check, $1,000.00.

Amount of surety company bond, 100% of contract price.

Common Council reserves the right to reject any or all bids or to waive defects in bids.

Plans and specifications may be obtained from City Engineer.

ALEXANDER W. VARS,
City Engineer.

Dated August 17, 1922.

OFFICIAL PROPOSALS

Bids: Aug. 30.

Concrete Arch and Girder Bridge

Richland (Pulaski), N. Y.

Sealed proposals will be received at the office of the Town Clerk of the Town of Richland, in the Village of Pulaski, Oswego County, New York, until Wednesday, the 30th day of August, 1922, at 1:00 P.M., for the building of a reinforced concrete arch and girder bridge across the Salmon River in the said Town.

Plans and specifications may be seen at the office of

1. Mr. C. A. Jewell, Town Clerk, Pulaski, N. Y.
2. Concrete-Steel Engineering Co., Park Row Bldg., New York.

Copies of the plans and specifications, including form of proposal, may be obtained from the Concrete-Steel Engineering Co. upon making a deposit of $20.00, which will be refunded upon the return of the plans and specifications in good order.

Each proposal must be accompanied by an unconditional certified check on a national bank for 5% of the contract price, made payable to the order of the "Supervisor of the Town of Richland" as evidence of good faith, and to be forfeited to the Town as liquidated damages in case of failure on the part of the bidder to enter into contract for the execution of the work and to furnish a satisfactory surety bond as hereinafter stipulated. Bidders' certified checks will be returned after consideration of the bids, and the check of the successful bidder will be returned as soon as the contract is signed.

The successful bidder will be required to furnish a bond acceptable to the Town of Richland in a sum equal to 50% of the amount of the contract.

The blank form of proposal attached to the specifications shall be used in making out the bid.

The party or parties to whom the contract may be awarded will be required to execute the contract with surety within ten days from the date of service of notice to that effect, and in case of failure or neglect to do so, he or they will be considered as having abandoned it.

Envelopes containing proposal must have endorsed thereon:

"Proposal for Pulaski Bridge."

The right is reserved by the Town to accept any proposal, or to reject any or all proposals.

TOWN OF RICHLAND.
By JOHN BUSH,
Town Superintendent.

Bids: Sept. 8.

Bridge

Vicksburg, Miss.

Sealed alternate bids will be received by the Board of Supervisors of Warren County, Miss., at the office of the Chancery Clerk, until 12 o'clock noon, Friday, September 8, 1922, and at that time publicly opened for a bridge over Big Black River at Baldwin's Ferry, 12 miles from Vicksburg, Miss., on the Baldwin's Ferry Highway, between Vicksburg and Raymond.

The principal items of work are as follows, approximately:

346.20	Cu.Yds.	Class "A" Concrete.
9,730.	Lbs.	Reinforcing Steel.
128,000	Lbs.	Structural Steel.
717.8	Sq.Yds.	Asphalt Paving.
307	Lin.Ft.	Gas Pipe Railing.
183,940	Ft. B.M.	Creosoted Lumber.
10,310	Ft. B.M.	Untreated Lumber
6,950	Lin.Ft.	Creosoted Piling.
1,200	Lin.Ft.	Untreated Piling.

and for all materials in connection with said work.

Plans and specifications are on file in the office of the Chancery Clerk, Vicksburg, Miss., and the office of Warren County Dept. of Highways. On receipt of check for $5.00, contractors will be furnished with a set of plans and Bidder's Blank.

Any additional information may be secured from H. R. Rhodes, Warren County Highway Engineer, Vicksburg, Miss. The right to reject any or all bids is reserved.

Cash or certified check for $2,500.00 made payable to the Board of Supervisors of Warren County, must accompany each bid as evidence of good faith and as a guarantee that if awarded the contract, the bidder will execute the contract and give bond as required.

By order of the Board of Supervisors.

J. G. SHERARD,
Chancery Clerk.

OFFICIAL PROPOSALS

Bids: Sept. 5.

Two Steel Swing Drawbridges

Fort Lauderdale, Fla.

Sealed proposals for the construction of two steel highway swing drawbridges will be received by the Board of County Commissioners of Broward County, Florida, until 11:00 A.M., September 5, A. D. 1922, and then publicly opened.

Bridge No. 1, is proposed across the Florida Intra-Coastal Canal on the line of the Pompano Beach Road, near Pompano, Florida.

Bridge No. 2 is proposed across the same waterway on the line of the Dania Beach Road, near Dania, Florida.

Specifications for materials and general requirements for superstructures, location and profile of the crossings, and detailed specifications for the abutments, are on file and may be examined at the office of the Clerk of the Board. A complete set of said specifications for both bridges will be furnished prospective bidders by the Engineer, for $5.00 to cover cost of preparation. This amount will not be returned.

Bidders shall submit with their proposal general plans, stress sheets and typical details of the superstructure, and details of the center piers of the bridges covered by their proposal, subject to the requirements of the specifications furnished by the Engineer.

All bids shall be submitted upon blank forms which may be obtained free of charge from the Engineer.

Each proposal shall be accompanied by a certified check for $500.00 on each bridge payable to the Chairman of the Board of County Commissioners, as evidence of good faith, and check of the successful bidder will be retained by the said Board as liquidated damages for the cost and expense incurred should the said bidder fail to enter into contract for the work with satisfactory bond as specified, within fifteen days after the acceptance of his proposal.

Any contract awarded under the terms of this advertisement will be subject to granting of permit by the War Department of the United States.

The right is reserved to separate or combine bids; to waive informalities in bids and to reject any and all bids.

BOARD OF COUNTY COMMISSIONERS OF BROWARD COUNTY, FLORIDA.
H. G. WHEELER, Chairman.
FRANK A. BRYAN, Clerk.

Dated at Fort Lauderdale, Florida, this tenth day of August, A. D. 1922.

H. C. DAVIS, Engineer.

Bids: Aug. 29.

Drainage and Ditch Improvement Re-Advertised

Wooster, Ohio.

Notice is hereby given that sealed proposals for the construction of the JOINT WAYNE-HOLMES COUNTY DITCH IMPROVEMENT will be received up until twelve o'clock noon, Eastern Standard Time, on Tuesday, Aug. 29, 1922, at the office of the Secretary of the Joint Board of County Commissioners of Wayne and Holmes Counties at the Court House at Wooster, Ohio.

The work to be done consists of the draining and dredging of Killbuck Creek in Wayne and Holmes Counties, in all, the distance of One Hundred and Fifty-Six Thousand (156,000) feet.

The yardage of earth to be moved is estimated at about 1,780,000 cubic yards, consisting principally of dipper dredge work. The date of completion will be eighteen months from the date of awarding of contract.

A certified check in the amount of $10,000.00 payable to the Joint Board of County Commissioners of Wayne and Holmes Counties, Ohio, must accompany each proposal. Checks of unsuccessful bidders will be returned within ten days of the awarding of the contract.

The said board reserves the right to reject any or all bids. Plans, specifications and proposals are on file at the Secretary's office at the Court House, Wooster, Ohio, or same will be mailed upon application when same is accompanied by a deposit of $20.00, which will be refunded if plans are returned in good condition.

By order of the Joint Board of County Commissioners of Wayne and Holmes Counties.

CHAS. F. SCHOPF,
Secretary.

OFFICIAL PROPOSALS

Bids: Sept. 5.

State Highway Work

Trenton, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commission of New Jersey for the construction of the following:

Route No. 7, Section No. 1, Corlies Avenue, Neptune Township, Monmouth County, estimated amount of Warrenite Bitulithic surface on a Portland cement concrete foundation is 18,765 square yards.

Bids will be received at the office of the State Highway Commission at the Broad Street Bank Building, Trenton, New Jersey, on Tuesday, September 5th, 1922, at 11 A. M. STANDARD TIME, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars ($10.00) upon application to the State Highway Department, 9th floor, Broad Street Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated therein and as required by the 1922 specifications, same to be inclosed in sealed special addressed envelopes bearing the name and address of bidder and the name and section of the route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that said certified check shall not be less than $500,00 or more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelope will be furnished on application. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this state, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: Sept. 7.

Concrete Bridge Construction

New Braunfels, Texas.

Sealed proposals for constructing a reinforced concrete highway bridge across the Comal River on San Antonio Street in the City of New Braunfels, Texas, and addressed to the Hon. F. G. Blumberg, Mayor, will be received at the office of the City Clerk, until 3 p.m., Thursday, September 7th, 1922.

The structure consists of a 20 ft. wide roadway with two 5 ft. sidewalks 410 ft. long. The roadway is 43 ft. high above river level, and is carried by five arch spans of two ribs each and by two girder spans of 30 ft. each. The foundation conditions are unusually simple.

The Contractor is required to maintain traffic over existing bridge necessitating the moving of one timber approach trestle 142 ft. long. Five car siding space is available for use of Contractors within one block of west end of bridge. Water will be furnished free by the City.

Instructions, proposal blanks, specifications and detailed plans may be seen at the office of A. D. Nuhn, City Clerk, New Braunfels, Texas, and may be obtained from the Terrell Bartlett Engineers, Calcasieu Bldg., San Antonio, Texas, upon payment of $15.00, which will be refunded only to bona-fide bidders.

Proposals must be accompanied by a certified or cashier's check in the sum of not less than 5% of the amount bid. Bidders must fulfill conditions specified in the "Instruction to Bidders." The City reserves the right to reject any or all bids.

F. G. BLUMBERG, Mayor.

OFFICIAL PROPOSALS

Bids: Sept. 8.

Highway Route No. 16
Section No. 4

Somerville, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the County of Somerset for the following: The construction of State Highway Route No. 16, Section No. 4, from Pluckamin to Somerville, consisting of 67,749 Square Yards "Surface Type C," one course Reinforced Cement Concrete Pavement, with Drains and Appurtenances.

Work is to be performed under County Reimbursement Act, Chapter 183, laws of 1918, and amended by Chapter 317, laws of 1920.

Bids will be received at the Court House at Somerville, on

FRIDAY, SEPTEMBER 8th, 1922,

at 11:00 a.m., Daylight Saving Time (10 A.M. Eastern Standard Time).

Drawings, specifications and form of contract and bond for the proposed work are on file in the office of H. C. Van Emburgh, County Engineer, at the Court House, Somerville, and in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of ten dollars ($10.00) upon application to H. C. Van Emburgh, County Engineer. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, enclosed in sealed envelopes, addressed to the Board of Chosen Freeholders of the County of Somerset, and bearing the name and address of the bidder and the name and section of the route on the outside. Bids must be accompanied by a certified check drawn to the order of Edwin Garretson, County Treasurer, for not less than ten per cent (10 per cent) of amount of the bid, provided that said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form will be furnished on application to H. C. Van Emburgh, County Engineer.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a statement of equipment properly filled out.

By order of a resolution of the Board of Chosen Freeholders of the County of Somerset, passed at a meeting held on Friday, August 4, 1922.

WM. S. WOODRUFF,
Clerk.

Bids: Aug. 28.

Concrete Road Construction

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Council of the Borough of Freehold, N. J., for the reconstruction of Throckmorton Street and opened and read in public in the Municipal Building on Monday, August 28th, 1922, at eleven a.m. day light saving time.

The work consists of approximately 3,000 cu.yd. of excavation; 10,000 sq.yd. of reinforced concrete and 4,000 lin.ft. of concrete curb.

Drawings and specifications for the proposed work, prepared by Chas. A. Niles, Borough Engineer, are on file at the office of said Engineer at the Municipal Building, Freehold, N. J., and plans and proposal forms may be obtained upon the deposit of $5.00, which amount will be refunded upon return of the plans before the time specified for opening the bids.

All bids must be submitted on the forms furnished by the Borough, enclosed in a sealed envelope, bearing the name and address of the bidder, the name of the proposed work, and addressed to the Mayor and Council of the Borough of Freehold. All bids must be accompanied by a certified check for a sum not less than 10% of the amount bid and a surety company certificate stating that said surety company will provide the bidder with the required bond.

The Borough Council reserves the right to reject any or all bids if deemed to the best interests of the Borough to do so.

H. M. BURKE,
Borough Clerk.

OFFICIAL PROPOSALS

Bids: Aug. 30.

State Highway Construction

Raleigh, N. C.

Sealed bids for the construction of the following projects will be received by the North Carolina State Highway Commission at Raleigh, N. C., until 10 a.m., on the 30th day of August, 1922, when they will be opened and read:

Hard surface (Concrete or Asphaltic Paving projects), including grading, reinforced concrete or cast iron pipe, structures, etc.

Project No.	County	Length (Miles)
184	Pitt	7.14
328	Columbus	7.03
412	Durham	8.80
460	Orange	9.87
528	Davidson	10.24
589	Rockingham	9.81
590	Rockingham	2.10
608	Anson	7.88
615	Cabarrus	3.88
658	Mecklenburg	9.55
761	Surry	2.22
765	Surry	3.40
785	Wilkes	2.52
821	Cleveland	1.58
822	Cleveland	10.47
901A	Buncombe	7.57
876	Rutherford	4.83

Topsoil, Sand Clay, or Gravel projects, including grading, drainage pipe, structures, etc.

106	Bertie	7.12
157A	Martin	12.41
157B	Martin	12.36
712	Ashe	11.06
784	Wilkes	4.97
847	McDowell	3.84
882	Rutherford	15.80

MACADAM PROJECTS

Penetration or waterbound Macadam Projects, including drainage pipe, structures, etc.

380	Pender	8.98

BRIDGE PROJECTS

317	Brunswick	1-140 ft. steel through span.
589	Rockingham	15-40 ft. spans and 1-150 ft. arch.
673	Davidson	5-150 ft. R.C. Arch Spans.
848	McDowell	4-45 ft. R.C. Deck Girders.
858	Mitchell	1-125 ft. R.C. Arch and 2-45 ft. Deck Girders.

Specifications, proposal forms, etc., may be obtained from the State Highway Commission at Raleigh, N. C.

Plans may be seen in the Raleigh office, or in the offices of the District Engineer.

Bridge plans may be obtained from the State Highway Commission at Raleigh, N. C., upon Payment of Five ($5.00) dollars per set.

The right is reserved to reject any or all bids.

By order of the North Carolina State Highway Commission.

Bids: Aug. 25.

Memorial Hospital

Butler, Pa.

Contractors who expect to submit proposals for the construction of the Butler County Memorial Hospital to be erected at Butler, Pa., and for which requests for proposals will be advertised shortly, are requested to send their names and addresses on or before noon of Friday, August 25, 1922, to the Butler County Memorial Hospital Committee, c/o Community Building, Butler, Pa., with the following information:

a. A list of buildings of similar character they have constructed within the past ten years.

b. Testimonials from the owners, committees in charge, or architects of such building that the work was completed satisfactorily by the contractor, or if a firm or corporation, by the present officers of such firm or corporation.

c. Any further information that the contractor may desire to furnish.

The committee in charge of said project desires this information in advance of the time actual proposals or bids are requested or submitted for the purpose of investigation and to the end that when bids are received the contract may be let promptly.

BUTLER COUNTY MEMORIAL HOSPITAL BUILDING COMMITTEE.

Bids: Sept. 6.

State Highway Work

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the County of Monmouth for the following:

Construction of State Highway Route No. 4, Section No. 5A, Maple Avenue, Red Bank, estimated amount of sheet asphalt surface on a portland cement concrete foundation is 27,307 square yards.

Work is to be performed under County Reimbursement Act, Chapter 183, laws of 1918, and amended by Chapter 317, laws of 1920.

Bids will be received at the Court House at Freehold, N. J., on Wednesday, September 6th, 1922, at 11:00 M. Daylight Saving Time.

Drawings, specifications and form of contract and bond for the proposed work are on file in the office of George K. Allen, Jr., County Engineer, at Red Bank, N. J., and in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of ten dollars ($10.00) upon application to George K. Allen, Jr., County Engineer. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, enclosed in sealed envelopes, addressed to the Board Chosen Freeholders of the County of Monmouth and bearing the name and address of the bidder and the name and section of the route on the outside. Bid must be accompanied by a certified check drawn to the order of C. Asa Francis, County Treasurer, for not less than ten per cent (10 per cent) of amount of the bid, provided that said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form will be furnished on application to George K. Allen, County Engineer.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a statement of equipment properly filled out.

By order of a resolution of the Board of Chosen Freeholders of the County of Monmouth passed at a meeting held on Wednesday, May 24th, 1922.

WILLIAM A. STEVENS.
Clerk.

Bids: Sept. 9.

Cast Iron Water Pipe and Appurtenances

Voorheesville, N. Y.

Notice is hereby given that sealed proposals will be received by the Board of Trustees of the Village of Voorheesville, N. Y., at their office in the "Hose House" in the Village of Voorheesville, N. Y., until three (3:00) o'clock p.m. (daylight saving time), on the ninth (9th) day of September, 1922, for the furnishing of about four hundred and fifty (450) tons of eight (8") inch Class "B" cast iron water pipe and appurtenances.

All proposals must be made upon printed forms, to be obtained of the engineer; and the unit prices written in words and figures, and accompanied by cash or a certified check, made payable to the Village of Voorheesville, N. Y., for five (5%) per cent of the amount of the proposal.

All proposals must be enclosed in a sealed envelope, directed to the Board of Trustees, Village of Voorheesville, N. Y., and endorsed upon the outside of the envelope "Proposal for Water Pipe or Appurtenances."

The Board of Trustees reserves the right to reject any or all proposals.

By order of the Board of Trustees of the Village of Voorheesville, N. Y.

GILBERT H. DARING,
Village Clerk,
Voorheesville N. Y.

W. W. CHADSEY,
Civil and sanitary engineer,
434 State Street,
Schenectady, N. Y.

Bids: Sept. 14.

Paving, Curbing, Storm Sewers, etc.

Mobile, Ala.

Sealed bids will be received until noon Thursday, Sept. 14, 1922, by the City Commission of the City of Mobile, Alabama, for the following:

One course Concrete Paving six inches in thickness—29,756 square yards. Concrete Curbing eighteen inches deep by five inches wide—14,512 lin.ft. Double strength storm sewers 12 inch—1,334 ft. 15 inch—1,160 ft. 18 inch—2,405 ft. 21 inch—522 ft.

Standard Storm sewers, 6 inch—3,036 ft. 10 inch—1,872 ft. 12 inch—1,340 ft. 15 inch—315 ft. 24 Standard Manholes—83 Standard Inlets and 19 Standard Special Basins. A deposit of one thousand dollars will be required to accompany each bid. 1—For Paving and Curbing. 2—For Storm Sewers. Plans and specifications are on file in the City Engineer's office and can be seen on application. The right is reserved to reject any or all bids.

R. V. TAYLOR,
Commissioner of Streets.
WRIGHT SMITH,
City Engineer.

National Publicity Offers a Two-Fold Advantage

Giving calls for bids National publicity opens the way for additional and possibly lower offers from outside bidders to whom work can be let, if desired.
Then too, local contractors, seeing your contracts advertised Nationally will figure closer, realizing that the field of competitors for the work is greatly enlarged.
An advertisement printed in the Official Proposal Columns of *Engineering News-Record* brings the contract to the attention of not only local bidders but, in addition, any others who might be interested.

Bids: Aug. 31.

Sewage Treatment Works Contract A

Marion, Ohio

Sealed proposals will be received at the office of the Director of Public Service in the City Hall, Marion, Ohio, until 12 o'clock noon (Official Marion Time), August 31st, 1922, and then publicly opened and read, for the construction of Sewage Treatment Works, Contract A.

The work contemplated comprises the construction of grit chambers, two-story settling tanks, pumping station, dosing tanks, trickling filters, final settling tanks, sludge-drying beds, buildings and appurtenances. The following quantities give a general idea of the amount and character of the work to be done:

Excavation	46,000 cu.yd.
Concrete	8,750 cu.yd.
Steel Reinforcement	250 tons
C. I. Piping	225 tons
Stone for Trickling Filters	22,500 cu.yd.
Buildings	50,000 cu.ft.

Copies of plans and specifications and blank proposals may be obtained at the office of the Director of Public Service, City Hall, Marion, Ohio, or at the office of George B. Gascoigne, 648 Leader-News Building, Cleveland, Ohio, after August 16th, 1922. A deposit of Twenty Dollars ($20.00) will be required for each set of plans and specifications taken from the above offices. If a bid is submitted this deposit will be refunded upon the return of said plans and specifications in good condition. Similar deposits will be required for additional sets of plans and specifications taken from the above offices, there being no refund for their return. All checks for said plans and specifications shall be made payable to the City of Marion.

The proposals shall contain the full name and address of the party or parties making the same and all persons interested therein, and shall be accompanied by a proposal bond signed by a surety company authorized to do business in the State of Ohio or by a certified check on a solvent bank located in Marion for Ten Thousand Dollars ($10,000.00) made payable to the City of Marion, as surety that if the bid be accepted a contract will be entered into and the performance of it properly secured.

No proposal will be entertained unless made on the blanks furnished by the Director of Public Service and delivered at the office of the Director of Public Service in the City Hall, Marion, Ohio, previous to 12 o'clock noon (Official Marion Time) on the day specified.

The City, through its Director of Public Service, reserves the right to reject any or all bids, to waive any informalities in the bids received, and to accept any bid which is deemed most favorable to the City of Marion, Ohio.

THE CITY OF MARION, OHIO.
E. A. SCHULTZ,
Director of Public Service.

Bids: Sept. 7.

Sanitary Sewerage System and Sewage Disposal Plant

Spring Valley, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Spring Valley, Rockland County, New York, at the Village Offices, in the Village of Spring Valley, on the 7th day of September, 1922, at the hour of 8 P.M., Daylight Saving Time, for the construction of a sanitary sewerage system and sewage disposal plant. The work will in general consist of about

11.2 miles of 8-inch vitrified pipe sewers, 0 to 20 feet deep.
0.66 miles of 10-inch vitrified pipe sewers, 0 to 18 feet deep.
0.69 miles of 12-inch vitrified pipe sewers, 0 to 24 feet deep.
0.19 miles of 8-inch cast iron pipe sewers, 0 to 12 feet deep.
0.01 miles of 10-inch cast iron pipe sewers, 6 to 10 feet deep.
257 manholes, 0 to 22 feet deep.
Two small sewage lift stations.
One sewage disposal plant.
And various appurtenances of and extensions to the above-mentioned items.

Plans and specifications are on file and may be seen at the office of the Village Clerk, Spring Valley, N. Y., or at the office of the engineer, Waldo S. Coulter, 114 Liberty Street, New York, N. Y. Complete sets of information for bidders, form of contract, specifications and plans may be obtained from the engineer upon a deposit of $15, of which $7.50 will be refunded upon return of same in good condition by October 1, 1922.

Each bid must be accompanied by a certified check for Five Thousand Dollars ($5,000) payable unconditionally to the Treasurer of the Village of Spring Valley, which check must be presented with the bid as a guarantee that the bidder will within ten (10) days after receiving the award enter into and execute a contract for the performance of the work to be done under said contract. Said bid must be in a sealed envelope and marked "Proposal for a Sewerage System and Disposal Plant."

The successful bidder will also be required to furnish a Surety Company bond to the Village of Spring Valley in the amount of Twenty-five Thousand Dollars ($25,000) for the faithful performance of the work to be done under said contract, said bond to be approved by the Village Attorney.

In case of failure to execute the contract and furnish the required Surety Company bond within ten (10) days after due notice that the contract has been awarded to him, the successful bidder shall forfeit his deposit to the Village of Spring Valley as liquidated damages.

The right to reject any or all bids is reserved by the Board of Trustees. All of said work must be completed on or before December 7, 1923.

BOARD OF TRUSTEES OF THE VILLAGE OF SPRING VALLEY.
THEODORE B. BOHR,
President.

JOHN S. VAN ORDEN,
Village Clerk.

Bids: Aug. 31.

Main Sanitary Sewer Contract B

Marion, Ohio

Sealed proposals will be received at the office of the Director of Public Service in the City Hall, Marion, Ohio, until 12 o'clock noon (Official Marion Time), August 31, 1922, and then publicly opened and read, for the construction of Main Sanitary Sewer—Contract B.

The following quantities give a general idea of the amount and character of the work to be done:

8,400 lin.ft. of 42 in. circular sewer.
1,060 lin.ft. of 39 in. circular sewer.
20 manholes.
2 special concrete structures.

Copies of plans and specifications and blank proposals may be obtained at the office of the Director of Public Service, City Hall, Marion, Ohio, or at the office of George B. Gascoigne, 648 Leader-News Building, Cleveland, Ohio, after August 16, 1922. A deposit of Ten Dollars ($10.00) will be required for each set of plans and specifications taken from the above offices. If a bid is submitted this deposit will be refunded upon the return of said plans and specifications in good condition. Similar deposits will be required for additional sets of plans and specifications taken from the above offices, there being no refund for their return. All checks for said plans and specifications shall be made payable to the City of Marion.

The proposal shall contain the full name and address of the party or parties making the same and all persons interested therein, and shall be accompanied by a proposal bond signed by a surety company authorized to do business in the State of Ohio or by a certified check on a solvent bank located in Marion for Five Thousand Dollars ($5000.00) made payable to the City of Marion, as surety that if the bid be accepted a contract will be entered into and the performance of it properly secured.

No proposal will be entertained unless made on the blanks furnished by the Director of Public Service and delivered at the office of the Director of Public Service in the City Hall, Marion, Ohio, previous to 12 o'clock noon (Official Marion Time) on the day specified.

The City, through its Director of Public Service, reserves the right to reject any or all bids, to waive any informalities in the bids received, and to accept any bid which is deemed most favorable to the City of Marion, Ohio.

THE CITY OF MARION, OHIO.
E. A. SCHULTZ,
Director of Public Service.

Bids: Sept. 1.

Highway Work

Somerville, N. J.

Notice is hereby given that sealed bids will be received by the County of Somerset for the following: The construction of State Highway Route No. 9, Section 7A, from Grove Street, through East Main Street, North Gaston Avenue and Union Avenue to the easterly borough line of Somerville, consisting of 12,450 sq.yd. of "Surface Type C" one course reinforced cement concrete pavement with intersections, drains and appurtenances.

Work is to be performed under County Reimbursement Act, Chapter 183, Laws of 1918, and amended by Chapter 317, Laws of 1920.

Bids will be received at the Court House at Somerville on Friday, Sept. 1st, 1922, at 10.30 a.m., Daylight Saving Time, (Eastern Standard Time, 9.30 a.m.).

Drawings, specifications and form of contract and bond for the proposed work are on file in the office of H. C. Van Emburgh, County Engineer, at Court House, Somerville, and in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of ten dollars ($10.00) upon application to H. C. Van Emburgh, County Engineer. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, enclosed in sealed envelopes, addressed to the Board of Chosen Freeholders of the County of Somerset and bearing the name and address of the bidder and the name and section of the route on the outside. Bid must be accompanied by a certified check drawn to the order of Edwin Garretson, County Treasurer, for not less than ten per cent

(10 per cent) of amount of the bid, provided that said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form will be furnished on application to H. C. Van Emburgh, County Engineer.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a statement of equipment properly filled out.

By order of a resolution of the Board of Chosen Freeholders of the County of Somerset passed at a meeting held on Friday, August 4th, 1922.

WM. S. WOODRUFF, Clerk.

Largest Circulation of Any Technical Paper

Engineering News-Record's circulation—over 30,000 weekly—is the largest of any technical paper printed. It includes among its readers practically every contractor, dealer, and manufacturer in the country who is interested in bidding on public works contracts—either local or outside of his immediate vicinity.

Bids: Sept. 6.

Refrigeration Work

Marcy, N. Y.

Sealed proposals for Refrigeration Work—Kitchen for Acute Patients Building, at the Utica State Hospital, Marcy Division, Marcy, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 2 o'clock P.M. (Standard Time) on Wednesday, September 6, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of specification No. 3866, including Addenda No. 1. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Utica State Hospital, Utica, N. Y., at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.
Dated: August 16, 1922.

Bids: Sept. 14.

Steel Super-structure

Nashville, Tenn.

Sealed bids will be received by the Department of Highways State of Tennessee, at Nashville, Tennessee, until ten o'clock a.m., Thursday, September 14, 1922, and opened publicly at that place and hour for the construction of the steel super-structure of Federal Aid Project 16, being a bridge over Cumberland River near Clarkesville, having 3 steel spans aggregating approximately 640 feet of span.

Plans and specifications are on file in the office of the Chief Engineer, Department of Highways, Nashville, Tennessee, in the office of the Division Engineer, Department of Highways, Nashville, Tennessee, and in the office of the Resident Engineer, Department of Highways, Clarksville, Tennessee.

D. Q. McCOMB,
Chief Engineer.

Bids:: Sept. 25.

Spavinaw Water Supply Project

Tulsa, Okla.

Sealed proposals for the construction of the major portion of the Spavinaw Water Supply Project for the City of Tulsa, Oklahoma, will be received by the Water Commission of the City of Tulsa, and may be filed at the office of the City Auditor, City Hall, Tulsa, Oklahoma, until 3:00 p.m. Monday, September 25th, 1922, and will be opened and publicly read immediately thereafter at a regular meeting of the Water Commission of the City of Tulsa at 3:00 p.m., Monday, September 25, 1922. Proposals will be received on the following contracts:

Contract No. 1 Telephone Line.
Contract No. 2 Clearing Site of Spavinaw Lake.
Contract N. 3 Spavinaw Dam.
Contract No. 4 60 in. Reinforced Concrete Pipe.
Contract No. 5 Tunnel and Approaches.
Contract No. 6 54 in. Reinforced Concrete Pipe.
Contract No. 7 Mohawk Reservoir.
Contract No. 8 Furnishing Cast Iron or Steel Pipe and Specials.
Contract No. 9 Furnishing Gate Valves.
Contract No. 10 Laying Cast Iron or Steel Pipe.
Contract No. 11 High Pressure Reservoir.

After the reading of the bids on these contracts they will be immediately considered, but in no event will any contract or contracts be awarded earlier than forty-eight (48) hours thereafter.

The principal quantities are approximately as follows:

DAM: Concrete, 79,000 cubic yards.
Earth embankment, 182,000 cubic yards.
PIPE: 28 miles of 60 in. and 25 miles of 54 in. pre-cast reinforced concrete pipe.
Earth Excavation in trench, 310,000 cubic yards.
Rock Excavation in trench, 26,000 cubic yards.
TUNNEL: 7,000 ft. 84 in. Tunnel.
3,050 ft. 84 in. monolithic concrete conduit.
MOHAWK RESERVOIR: 300,000 cubic yards earth embankment.
REINFORCED CONCRETE HIGH PRESSURE RESERVOIR OR RESERVOIRS: 10,000,000 gal. aggregate capacity; 10,000 ft. 36 in. Cast Iron or Steel Pipe; 6,000 ft. 30 in. Cast Iron or Steel Pipe; 8,000 ft. 20 in. Cast Iron Pipe. Specials and Valves.

Each proposal must be accompanied by a certified check on any reputable bank or trust company, payable without reserve to the City of Tulsa, Oklahoma, for five per cent (5%) of the amount of the bid.

All proposals must be made on blank forms furnished by the City of Tulsa and in accordance with the "Requirements for Bidding and Instructions to Bidders."

Proposals may be tendered on one or more contracts or on all of the contracts, but any proposal must include all items under the contract or contracts for which bid is tendered.

Plans, Specifications and Requirements for Bidding and Instructions to Bidders are on file at the Office of the Water Commission at the City Hall and may be seen at the office of Trammell and Holway, Engineers on the Spavinaw Water Supply Project, 329 Kennedy Building, Tulsa, Oklahoma, or at the office of Dabney H. Maury, Consulting Engineer for the said Project, 1445 Monadnock Block, Chicago, Illinois. Complete plans and specifications will be furnished by the Engineers or by the Consulting Engineer, upon the deposit of $50.00 by check payable to Trammell and Holway. Upon return of the plans and specifications in good condition within a reasonable time after the awarding of the contracts, $30.00 will be refunded. Proportionate deposit and refund may be arranged for if bidder desires only parts of the plans.

The Water Commission reserves the right to reject any bid or bids, or all bids, and to waive any informalities.

WATER COMMISSION OF THE
CITY OF TULSA.
A. J. RUDD, Chairman,
G. R. McCULLOUGH,
C. S. AVERY,
H. L. STANDEVEN,
A. L. FARMER,
ROY GARBETT,
City Auditor.

TRAMMELL and HOLWAY, Engineers,
329 Kennedy Building,
Tulsa, Oklahoma.
DABNEY H. MAURY,
Consulting Engineer,
Chicago, Ill.

Bids: Sept. 5.

Street Paving and Storm Sewer

Highland Park, N. J.

Sealed proposals will be received by the Mayor and Borough Council of the Borough of Highland Park at the Borough Council Chambers, No. 10 North Second Avenue, Highland Park, New Jersey, on Tuesday, September 5, 1922, at 8 o'clock p.m., ordinance time (7 p.m. Eastern Standard Time) for the construction of pavements on the following streets, to wit: Montgomery Street, Johnson Street, Cedar Avenue, Adelaide Avenue, South Sixth Avenue. And for the construction of a storm sewer on Cedar Avenue.

The work will in general consist of about

5,890	Cu.Yds. of Excavation.
15,962	Sq.Yds. of One Course Reinforced Cement Concrete Pavement, 6″ in depth at the sides, and 8″ in depth at the center.
8,612	Lin.Ft. of Concrete Curbing, set integral with the pavement.
755	Lin.Ft. of 15″ Vitrified Pipe Storm Sewer.

All of said work to be done in accordance with the plans, profiles and specifications prepared by Raymond P. Wilson, Civil Engr., 46 Paterson Street, New Brunswick, N. J., which said plans, profiles and specifications have been adopted by the Borough Council of the Borough of Highland Park and are now on file at the office of the Borough Clerk, 10 North Second Avenue, Highland Park, N. J., where they may be seen by bidders or a set of the said plans, profiles and specifications can be secured from Raymond P. Wilson, Civil Engr., by depositing Five dollars ($5.00) which will be refunded upon the return of the plans, profiles and specifications in good condition within seven (7) days after the award of the contract. All bids must be on the form of proposal to be obtained from the said Raymond P. Wilson.

Each bidder must accompany his bid with a certified check for Four thousand dollars ($4,000.00) payable unconditionally to the Collector of the Borough of Highland Park, which said check must be presented with the bid as a guarantee that the bidder will within ten (10) days after receiving the award enter into and execute a contract for the faithful performance of the work to be done under said contract, and said bid must be in a sealed envelope and marked "Proposal for Concrete Pavement."

The successful bidder will also be required to furnish a Surety Company bond to the Borough of Highland Park in the full amount of the contract price for the faithful performance of the work to be done under said contract, said bond to be approved as to sufficiency and form by the Borough Attorney.

In case of failure to execute the contract and furnish the required bond within ten (10) days after due notice that the contract has been awarded to him, the successful bidder shall forfeit his deposit to the Borough of Highland Park as liquidated damages.

The right to reject any or all bids is reserved by the Mayor and Borough Council.

All of said work must be completed within sixty (60) working days.

Bids: October.

Sewer Tunnel

Tulsa, Okla.

The Board of Commissioners of the City of Tulsa, Oklahoma, contemplates receiving proposals about the middle of October for the construction of the Eleventh Street Relief Sewer, in tunnel cut.

This sewer to be 5,100 ft. long and 15¼ ft. x 14 ft. in size, Bond Issue $900,000.00.

Formal notice to contractors to appear later.

CHARLES SCHULTZ,
City Engineer.

W. W. HORNER,
Consulting Engineer,
St. Louis, Mo.

Bids: Sept. 11.

Reinforced Concrete Pavement

White Plains, N. Y.

Sealed bids or proposals for the improvement of Mamaroneck Avenue from Washington Square northerly to County Highway No. 1581 with reinforced concrete pavement, a distance of 1.24 miles in the Village of Mamaroneck, Westchester County, New York, will be received at the office of the Clerk of the Board of Supervisors, Court House, White Plains, N. Y., until 10 a.m., September 11, 1922 (Standard Time.)

Specifications, proposal sheets and all information relative to same may be procured at the office of the County Superintendent of Highways, Court House, White Plains, N. Y., upon making a deposit of Five Dollars ($5.00).

August 21, 1922.

BOARD OF SUPERVISORS.
FRED L. MERRITT, Clerk.

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Bids: Sept. 8.

Mechanical Equipment for Wilmington Marine Terminals

Wilmington, Del.

Proposals will be received until 11 o'clock a.m. Daylight Saving Time, on the eighth day of September, 1922, at the office of the Board of Harbor Commissioners, Wilmington, Delaware, and then and there publicly opened, for furnishing the following mechanical equipment, all quantities being approximate:

1—Railroad Track Scale; 200 tons capacity.

1—Steam Locomotive Crane; 20 tons capacity; 50 ft. boom.

1—Steam Locomotive Crane; 20 tons capacity; 60 ft. boom.

1—Steam Locomotive Crane; 20 tons capacity; 70 ft. boom.

1 and 2—Light Duty, Traveling, Electric Portal Cranes; 2½ tons capacity.

4—Portable Electric Dock Winches; 2 tons capacity.

1—Mechanical Cargo Ramp.

6—Electric Tractor Trucks, with two spare Battery Equipments.

3—Load Carrying Trucks.

50—Trailers for Electric Tractors.

50—Stevedore Hand Trucks.

Specifications covering this equipment may be obtained upon application to the undersigned and the payment of Five Dollars, which sum will be refunded, if the plans and specifications are returned within fifteen days after receipt of bids.

No proposal will be considered unless accompanied by a certified check to the order of the Board of Harbor Commissioners for 5 per cent of the amount of the bid, or a satisfactory guaranty bond equal in amount, which will later be returned.

The right is reserved to reject any or all bids.

BOARD OF HARBOR COMMISSIONERS,
Room 351, Municipal Building,
Wilmington, Delaware.

Bids: Sept. 12.

Road Work

Bridgeton, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of the County of Cumberland for the reconstruction of Section 1 of Landis Avenue in the County of Cumberland, with a warrenite-bitulithic surface pavement upon a concrete foundation, estimated amount of warrenite-bitulithic surface pavement required is 54,112 square yards, of concrete foundation 56,960 square yards, and opened and read in public at the Court House in the City of Bridgeton, on the 12th day of September, 1922, at one-thirty o'clock p.m., Standard Time.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Walter M. Sharp, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said Engineer at Bridgeton, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the Engineer on proper notice an payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to E. C. Ott, Chairman of the Public Road Committee, and must be accompanied by a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to Engineer.

By order of The Board of Chosen Freeholders of the County of Cumberland.

HOWARD L. TYLER,
Clerk.

Bids: Aug. 29.

Ornamental Lighting

Long Branch, N. J.

Public notice is hereby given that sealed proposals are invited and will be received for installing ornamental lights on Ocean Avenue from Sea View Avenue to Brighton Avenue by the Board of Commissioners of the City of Long Branch, N. J., August 29th, 1922, at 8 o'clock in the evening in the City Council Chambers, or as soon thereafter as same can be presented.

Plans and specifications as approved by the Board of Commissioners are on file in the office of the City Clerk and may be obtained any time during business hours upon a deposit of $10.00 which said amount will be returned at the time the bids are opened upon surrender of said plans and specifications in good condition.

All bids must be sealed and marked, "Bids for Ornamental Lighting," and addressed to Frank C. Quinn, City Clerk. No bid will be considered unless accompanied by a certified check for ten per cent of the amount bid on the proposed work, drawn to the order of Frank L. Howland, City Treasurer, or cash in equal amount.

The Board of Commissioners reserve the right to reject any or all bids if deemed to the best interest of the Board to do so.

Dated Long Branch, N. J., August 17, 1922.

FRANK C. QUINN,
City Clerk.

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Contract Bonds
Compensation Insurance
92 William St., New York

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Your signature on a personal surety bond appears as a liability in your own financial statement until the suretyship is discharged.

ÆTNA CASUALTY AND SURETY COMPANY
HARTFORD, CONN.
AGENTS EVERYWHERE

OFFICIAL PROPOSALS

Bids: Sept. 15.

Power Piping and Heating System

Hammond, Ind.

SEALED PROPOSALS will be received at the Office of the Board of Public Works of the City of Richmond, Indiana, until 2 o'clock p.m., Central Standard Time, on the FIFTEENTH day of SEPTEMBER, 1922, to furnish all labor, material, tools and appliances and to do all the work required for the construction and installation of a complete Power Piping and Steam Heating System in connection with a new Pumping Station, all in accordance with Drawings and Specifications on file at the Office of the Board of Public Works of the City of Hammond.

SPECIFICATIONS and DRAWINGS may be examined at the Office of the said Board and at the Office of John Ericson, Consulting Engineer, 30 North La Salle Street, Chicago, Illinois, or obtained at the latter office by making a deposit of Ten ($10.00) Dollars, Five ($5.00) Dollars of which will be refunded on return of Drawings and Specifications within fifteen days following the opening of bids.

A certified check or equivalent surety, payable to the City of Hammond, for a sum not less than Five (5%) per cent of the amount of the bid shall be deposited with each proposal as a guarantee that the bidder will execute contract for the construction at the prices bid.

A satisfactory bond will be required for the faithful performance of the specified work for an amount equal to the aggregate payments to be made under the contract.

A non-collusion affidavit is required with each proposal in accordance with the Laws of the State of Indiana.

Bids will be publicly opened, read and scheduled and the contract awarded as soon thereafter as practicable.

The Board of Public Works reserves the right to reject any or all bids, and to waive technical defects in a proposal advantageous to the City of Hammond.

A. J. SWANSON,
Chairman.
JACOB WIKER,
F. C. DIETRICH,
Board of Public Works.
E. W. MILES,
Clerk Water Department.

Bids: Sept. 12.

Road Improvement

Bridgeton, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of the County of Cumberland for the improvement of what is known as the Cohansey Road, situated in the County of Cumberland, with gravel surface, estimated amount of gravel surface pavement required is 73,439 square yards, and opened and read in public at the Court House in the City of Bridgeton, on the 12th day of September, 1922, at one-thirty o'clock p.m., Standard Time.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Walter M. Sharp, County Engineer, and approved by the State Highway Commission, have bbeen filed in the office of the said Engineer at Bridgeton, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to E. C. Ott, Chairman of the Public Road Committee, and must be accompanied by a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to Engineer.

By order of The Board of Chosen Freeholders of the County of Cumberland.

HOWARD L. TYLER,
Clerk.

OFFICIAL PROPOSALS

Bids: Aug. 30 .

Street Improvement

Newburgh, N. Y.

Sealed proposals will be received by the City Manager at his office in the City Hall, Newburgh, N. Y., until 12 o'clock noon, Friday, August 30, 1922, for the paving and otherwise improving Renwick Street between the West Shore R.R. and Liberty Street and South Street between Water and Liberty Streets with either granite block or vitrified hillside brick pavement.

The approximate quantities of pavement to be laid are as follows:

South Street, about 3,820 sq.yds.
Renwick Street, about 3,900 sq.yds.

Bids will be received on each street separately and cash or a certified check for $1,500.00 must accompany each bid.

Plans and specifications are on file in the office of the City Engineer.

The City reserves the right to reject any or all bids received.

W. J. McKAY,
City Manager.

U. S. GOVERNMENT

PROPOSALS FOR SPURDIKE CONSTRUCTION.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9:00 a.m., Sept. 5, 1922, and then opened, for construction of spurdikes at Southwest Pass, Mississippi River. Further information on application.

PROPOSALS FOR SPURDIKE CONSTRUCTION.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9:00 a.m., Sept. 5, 1922, and then opened, for construction of spurdikes at Head of Passes, Mississippi River. Further information on application.

PROPOSALS FOR BULKHEAD CONSTRUCTION.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9:00 a.m., Sept. 5, 1922, and then opened, for bulkhead construction at Southwest Pass, Mississippi River. Further infcrmation on application.

PROPOSALS FOR STONE.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9:00 a.m., Sept. 7, 1922, and then opened, for furnishing and delivering stone for Southwest Pass, Head of Passes, and South Pass, Mississippi River. Further information on application.

U. S. ENGINEER OFFICE, FLORENCE, ALA.—Sealed proposals will be received here until 11 a.m., September 18, 1922, and then opened, for the construction and delivery of two steel barges. Further information on application.

U. S. ENGINEER OFFICE, JACKSONVILLE, FLA.—Sealed proposals will be received here until 12 m., Sept. 21, 1922, and then opened, for jetty repairs at the entrance to St. Johns River, Fla. Further information on application.

U. S. ENGINEER OFFICE, FLORENCE, ALA.—Sealed proposals will be received here until 11 a.m., September 18, 1922, and then opened, for furnishing and delivering one hydraulic turbine of 1,000 horsepower capacity, with governor. Further information on application.

..U. S. ENGINEER OFFICE, Nashville, Tenn.—Sealed proposals will be received here until 11 a. m., Sept. 5, 1922, and then opened, for steel gates for Lock F, Cumberland River. Further information on application.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., August 21, 1922.—SEALED PROPOSALS will be opened in this office at 3 p.m., Sept. 5, 1922, for furnishing and delivering approximately five million brick at the site of the United States Veterans Hospital at Chelsea, N. Y. Specifications may be obtained from the Superintendent of Construction at Chelsea, N. Y., or at this office in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, BUFFALO, N. Y.—SEALED PROPOSALS will be received here until 11 a.m. (Eastern standard time) Aug. 25, 1922, and then opened, for constructing Office-Storehouse Building and six Operating Houses at Black Rock Lock and Storehouse at Ferry Street Bridge, Buffalo, N. Y. Further information on application.

SEALED PROPOSALS for constructing a concrete road at Picatinny Arsenal, Dover, N. J., will be received and publicly opened at 11 a.m. daylight saving time, Sept. 1, 1922 at Constructing Quartermaster's Office, Room 510, 39 Whitehall St., N. Y. C., N. Y. Information at above address.

U. S. ENGINEER OFFICE, Mobile, Ala.—Sealed proposals will be received here until 11 o'clock a.m., September 5, 1922, and then opened, for dredge pontoons and discharge pipe for the U. S. 20-inch hydraulic pipe-line dredge Wahalak. Further information on application.

PROPOSALS FOR SAND AND GRAVEL—U. S. Engineer Office, 329 Customhouse, New Orleans, La., Sealed proposals will be received here until 9:00 A.M., Sept. 1, 1922, and then opened, for furnishing sand and gravel for Southwest Pass, Mississippi River. Further information on application.

U. S. ENGINEER OFFICE, Providence, R. I. Sealed proposals will be received here until 11 o'clock A.M., Eastern Standard Time, Aug. 28, 1922, and then opened for dredging in Bridgeport Harbor, Conn. Further information on application.

U. S. ENGINEER OFFICE, Providence, R. I. Sealed proposals will be received here until 11 o'clock A.M., Eastern Standard Time, August 31, 1922, and then opened, for dredging in Pawtucket (Seekonk) River, R. I. Further information on application.

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in Hudson River, N. Y., will be received here until 12 M., September 5, 1922, (daylight saving time) and then opened. Further information on application.

PROPOSALS FOR STEEL OIL BARGES.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9:00 a.m., Sept. 15, 1922, and then opened, for construction and delivery of two 4,000-barrel steel oil barges in the Mississippi River, at New Orleans, La. Further information on application.

U. S. ENGINEER OFFICE, Providence, R. I. Sealed Proposals will be received here until 11 o'clock a.m., standard eastern time, September 15, 1922, and then opened, for repairing of east jetty at entrance to Nantucket Harbor, Mass. Further information on application.

SEALED PROPOSALS will be received and publicly opened in the office of the Quartermaster General, Room 2306, Munitions Building, Washington, D. C., at 11:00 A.M., September 12, 1922, for the construction of a group of hospital buildings to be built at Northampton, Massachusetts. Work includes construction of twenty-four (24) buildings, built of re-enforced concrete and brick, complete with sewer, water and lighting systems, roads and walks (footings for nine buildings now under contract). Plans and specifications may be obtained after August 15th, upon deposit of $100, from the office of the Quartermaster General, Room 2312 Munitions Building, Washington, D. C., or from the office of the Constructing Quartermaster, Chamber of Commerce Building, Northampton, Mass. One set of plans and specifications will be on exhibition at the following stations: Office Constructing Quartermaster, 39 Whitehall Bldg., New York City; Office Constructing Quartermaster, Army Supply Base, Boston, Mass.; Office Quartermaster Supply Officer, Chicago Intermediate Depot, 1819 West Pershing Road, Chicago, Ill.; and Office Constructing Quartermaster, Scott Field, Belleville, Ill.

SEARCHLIGHT SECTION

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E. N.-R.

POSITIONS VACANT

ASSISTANT in civil engineering, wanted for 10 months, for which the salary is $1,000, starting September 1st. This year's graduate preferred. Address, giving age and alma mater. Head, Department of Civil Engineering, Lafayette College, Easton, Pa.

CHECKERS and detailers on structural steel. Give age, experience and salary expected. P-852, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

CIVIL engineering graduate with one or more years' experience, preferably in highway work, for traveling position in sales promotion department of established corporation. Reply fully stating age; married or single; Alma Mater; experience; salary desired and references. Suggest enclose photograph which will later be returned. P-841, Eng. News-Record, Leader News Bldg., Cleveland, O.

DISTRICT manager wanted to take charge of promotional and educational work on the use of a basic product used in building, agriculture and very extensively in the industrial field. This work is being carried on by a national trade association which is extending its activities materially. District headquarters will be St. Louis; national headquarters, Washington, D. C. Man must be very high grade with business experience in organization, sales and executive capacities. Preferably technical college graduate, but essentially a sales type with initiative, adaptability, common sense and perseverance, good address and ability to co-operate. Services required October 1st. Write all you have to say in first letter. P-871, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

Several Experienced

Structural Steel Draftsmen

for detailing and checking. Give experience, salary expected and when you can report for work.

Lackawanna Bridge Works Corp.
Box 991, Buffalo, N. Y.

Construction Men

Learn "Line" and "Grade" by Actual Practice.

Level, Transit, and Plane Table Work.
"Running" of Farm, Stadia, Highway and Railroad Surveys.

Estimating

Day and evening courses. Booklet.

The Pan-American Engineering School
39 West 17th St., New York City

POSITIONS VACANT

DRAFTSMAN and designer, thoroughly experienced in the design of water works and power plants, and sewerage systems. Field experience desirable. Location, Consulting Engineer's office in North Carolina. Send sample drawings and references and state salary expected. P-576, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

FIRST class structural detailers and checkers wanted. Weatherly Steel Company, Markle Bank Building, Hazelton, Pa.

GRADUATE civil engineer, experienced in reinforced concrete and steel building design, wanted to take charge of drafting work in large industrial plant. Give full particulars, salary expected and when available. P-819, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

INSTRUMENTMAN for hydro-electric construction work located within 100 miles New York City. Position open about Sept. 15th. Give full statement of education, experience, qualifications and reference. P-850, Eng. News-Record.

SEVERAL structural checkers wanted. Must be first class men. Positions permanent if services are satisfactory. Give all information as to experience, salary desired and earliest date you can report. Location, Detroit. P-578, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

STRUCTURAL detailers and checkers on mill and office building and bridge work. Give record of experience and salary desired. Philadelphia district. P-829, Eng. News-Record, Leader-News Bldg., Cleveland, O.

STRUCTURAL steel and reinforced concrete draftsmen and checkers. Give experience in detail, age, nationality, married or single, lowest salary to start, and how soon can report. Apply Southern Engineering Company, Charlotte, North Carolina.

STRUCTURAL steel engineer and detailer, familiar with building construction. State experience and salary desired. Permanent position if satisfactory. Apply James McKinney & Son, 927 Broadway, Albany, N. Y.

POSITIONS VACANT

STRUCTURAL steel and railroad bridge draftsmen wanted, salary $158 and $168 per month. Please state age, nationality, education, experience in full and date you can report for work. Address P. G. Lang, Jr., Engineer of Bridges, Baltimore and Ohio Railroad Company, Baltimore, Md.

STRUCTURAL detailers and checkers wanted on shop drawings for industrial buildings. Applications from experienced men only will be considered. State experience, age, nationality, salary wanted and date available in first letter. The Bellefontaine Bridge and Steel Co., Bellefontaine, Ohio.

STRUCTURAL steel draftsman, three to five years' experience on building design, $50 weekly. P-851, Eng. News-Record.

SUPERINTENDENT of Construction—The construction department of a large public utility has an opening for a Superintendent capable of taking charge of field construction, on a modern Central Station Steam Plant, location Middle Atlantic States. Reply should give experience, education, age, references, photograph and salary required. P-832, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

SUPERINTENDENT and grade foreman wanted for Concrete gang. Must be familiar with State road work. Write fully stating experience and salary expected. Geo. J. Daniels, Gen'l Del'y, Hammond, Indiana.

TECHNICAL graduate with several years' experience wanted by Consulting Engineer, in North Carolina, to act as Resident Engineer in charge of construction of Water Works, Sewerage and Power Plants. In reply, state salary expected and inclose references. P-577, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

TWO sewerage designing engineers wanted for work on interceptor and pumping station scheme. State experience, age and salary required to E. R. Gray, City Engineer, Hamilton, Ont., Canada.

HOME Study

(BY MAIL)

A lecture for YOU, if you are not filling the position you think you should have. Do you believe that real ability can be submerged? Don't you realize that men are paid for what they KNOW, and not for taking orders and doing as others direct? It is the man who gives the directions to whom a large salary is being paid. Wilson courses are more than just ordinary courses. They are a system of training inaugurated by an expert to meet the needs of the man already in the field who lacks the essentials of a first class practical training. By this system any man who is equipped with the necessary mathematics, can reach the top in his profession. Thousands of Draftsmen, Junior Engineers, Architectural Draftsmen, technical graduates just through their school work and others who have studied less advanced courses, are finding in these studies the means of "finishing" their education, and reaching the highest places in the profession.

These are courses in *actual experience.*

Structural Steel Designing.
Reinforced Concrete Engineering.
Structural Drafting.
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Write for free literature, then decide. You owe it to yourself to learn what this work is.

WILSON ENGINEERING CORPORATION
10 Broadway, Hanover, Mass.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Sept. 5	St. Paul, Minn.	Aug. 31
Sept. 6	Waterville, N. Y. Adv. Aug. 31.	Aug. 31
Sept. 8	Port Dover, Ont.	Aug. 24
Sept. 9	Voorheesville, N. Y. Adv. Aug. 24 and 31.	Aug. 24
Sept. 11	Monroe, Mich. Adv. Aug. 31.	Aug. 31
Sept. 12	Thief River Falls, Minn.	Aug. 31
Sept. 14	Mineola, N. Y. Adv. Aug. 31.	Aug. 31
Sept. 15	Grants Pass, Ore.	July 27
Sept. 15	Plaquemine, La.	Aug. 3
Sept. 25	Tulsa, Okla. Adv. Aug. 24 and 31.	Aug. 24
Oct. 1	Ponchatoula, La.	Aug. 3

SEWERS

Bids Close		See Eng. News-Record
Sept. 2	Williamsport, Pa.	Aug. 31
Sept. 4	Redwood City, Calif.	Aug. 17
Sept. 5	Upper Darby (Phila. P. O.), Pa.	Aug. 31
Sept. 5	Springwells, Mich.	Aug. 31
Sept. 5	Plainfield, N. J.	Aug. 17
Sept. 6	Gardnerville, Nev.	Aug. 17
Sept. 6	Rye, N. Y. Adv. Aug. 24 and 31.	Aug. 24
Sept. 6	Little, Falls, N. J	Aug. 31
Sept. 7	Phila., Pa. Adv. Aug. 24 and 31.	Aug. 24
Sept. 7	Spring Valley, N. Y.	Aug. 17
Sept. 8	Port Dover, Ont.	Aug. 24
Sept. 8	Milwaukee, Wis.	Aug. 31
Sept. 9	Lima, O. Adv. Aug. 24 and 31.	Aug. 31
Sept. 11	Madisonville, Ky. Adv. Aug. 31.	Aug. 31
Sept. 12	Sebring, O. Adv. Aug. 31.	Aug. 31
Sept. 12	Wichita, Kan. Adv. Aug. 31.	Aug. 31
Sept. 14	Jacksonville, Fla.	Aug. 31
Sept. 15	Eveleth, Minn.	Aug. 17
Sept. 19	Newark, N. J.	Aug. 24
Sept. 21	Jacksonville, Fla.	Aug. 31
Sept. 23	Bloomington, Ill. Adv. Aug. 31.	Aug. 31
Sept. 25	Hackensack, N. J. Adv. Aug. 31.	Aug. 31
Sept. 28	Lake Forest, Ill. Adv. Aug. 31.	Aug. 31

BRIDGES

Bids Close		See Eng. News-Record
Sept. 5	Houston, Tex.	Aug. 10
Sept. 5	Ft. Lauderdale, Fla.	Aug. 17
Sept. 5	Augusta, Ga.	Aug. 17
Sept. 5	Greenfield, Ind.	Aug. 17
Sept. 5	Williamsport, Pa.	Aug. 31
Sept. 5	Montezuma, Ia.	Aug. 31
Sept. 5	Stockton, Calif.	Aug. 24
Sept. 6	Wawatosa, Wis.	Aug. 31
Sept. 6	Warren, Pa.	Aug. 31
Sept. 7	Duluth, Minn.	Aug. 31
Sept. 7	New Braunfels, Tex.	Aug. 17
Sept. 7	Savannah, Ga.	Aug. 17
Sept. 7	Nashville, Tenn.	Aug. 3
Sept. 8	Phila., Pa.	Aug. 31
Sept. 8	Vicksburg, Miss.	Aug. 24
Sept. 11	California	Aug. 24
Sept. 14	Tennessee Adv. Aug. 24 and 31.	Aug. 24
Sept. 26	Alabama	Aug. 31
Oct. 1	Siam	July 13
Oct. 31	Sydney, Australia	Jan. 12
Sept. 1, 1923	Sydney, New South Wales, Australia	Aug. 3

DAM

Bids Close		See Eng. News-Record
Sept. 5	Beacon, N. Y. Adv. Aug. 24 and 31.	Aug. 24

EXCAVATION, DRAINAGE, IRRIGATION

Bids Close		See Eng. News-Record
Sept. 4	Jeanerette, La.	Aug. 24
Sept. 7	Aberdeen, S. D,	Aug. 24

STREETS AND ROADS

Bids Close		See Eng. News-Record
Sept. 1	Manchester, Ia.	Aug. 31
Sept. 2	Angola, Ind.	Aug. 31
Sept. 2	Greencastle, Ind.	Aug. 31
Sept. 2	Lincoln, Neb.	Aug. 24
Sept. 4	Cannelton, Ind.	Aug. 31
Sept. 4	Lawrenceburg, Ind.	Aug. 31
Sept. 4	Nashville, N. C.	Aug. 31
Sept. 5	San Jose, Calif.	Aug. 31
Sept. 5	Stockton, Calif.	Aug. 31
Sept. 5	Highland Park, N. J. Adv. Aug. 24 and 31.	Aug. 31
Sept. 5	Montezuma, Ia.	Aug. 31
Sept. 5	Marion, Ind.	Aug. 31
Sept. 5	Utah	Aug. 31
Sept. 5	Winamac, Ind.	Aug. 31
Sept. 5	Monticello, Ind.	Aug. 31
Sept. 5	Spencer, Ind.	Aug. 31
Sept. 5	Burlington, N. J.	Aug. 31
Sept. 5	Buffalo, N. Y.	Aug. 31
Sept. 5	Washington	Aug. 10
Sept. 5	Spencer, Ind.	Aug. 24
Sept. 5	New Jersey Adv. Aug. 24 and 31.	Aug. 24
Sept. 5	Oskaloosa, Ia.	Aug. 24
Sept. 5	Quebec	Aug. 24
Sept. 5	Marshall, Minn.	Aug. 24
Sept. 5	Fresno, Calif.	Aug. 24
Sept. 5	Yuba City, Calif.	Aug. 24
Sept. 5	Safety Harbor, Fla.	Aug. 24
Sept. 6	Stockton, Calif.	Aug. 24
Sept. 6	Albion, Ind.	Aug. 24
Sept. 6	Goshen, Ind.	Aug. 24
Sept. 6	Red Bank, N. J. Adv. Aug. 17 to 31.	Aug. 17
Sept. 6	Goshen, Ind.	Aug. 31
Sept. 6	Palo Pinto, Tex.	Aug. 31
Sept. 6	Ebensburg, Pa.	Aug. 31
Sept. 6	Nevada	Aug. 31
Sept. 6	Akron, O.	Aug. 31
Sept. 7	Richmond Hill, N. Y.	Aug. 31
Sept. 7	Akron, O.	Aug. 31
Sept. 7	Charleston, S. C.	Aug. 31
Sept. 7	De Land, Fla.	Aug. 31
Sept. 7	Sumter, S. C.	Aug. 31
Sept. 8	Salt Lake City, Utah	Aug. 31
Sept. 8	Stratford, Conn. Adv. Aug. 31.	Aug. 31
Sept. 8	Somerville, N. J. Adv. Aug. 17 to 31.	Aug. 17
Sept. 11	Crescent City, Calif.	Aug. 17
Sept. 11	Michigan	Aug. 31
Sept. 11	Ebensburg, Pa.	Aug. 31
Sept. 11	Washington	Aug. 31
Sept. 11	Yonkers, N. Y. Adv. Aug. 31.	Aug. 31
Sept. 11	Mamaroneck, N. Y. Adv. Aug. 24 and 31.	Aug. 31
Sept. 12	Michigan	Aug. 31
Sept. 12	Mound City, Kan.	Aug. 24
Sept. 12	Bridgeton, N. J.	Aug. 24
Sept. 13	Maryland Adv. Aug. 31.	Aug. 31
Sept. 14	Mobile, Ala. Adv. Aug. 24 and 31.	Aug. 24
Sept. 14	Tennessee	Aug. 24
Sept. 18	Charleston, Miss. Adv. Aug. 24 and 31.	Aug. 24
Sept. 18	Minnesota	Aug. 31
Sept. 19	New Orleans, La.	July 6
Sept. 26	Alabama	Aug. 31
Sept. 29	Tulsa, Okla.	Aug. 24
Oct. 3	Anderson, S. C.	Aug. 31
Oct. 3	Washington	Aug. 31

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Sept. 6	Cohoes, N. Y. Adv. Aug. 17 to 31.	Aug. 17
Sept. 7	Trenton, N. J.	Aug. 31
Sept. 11	Sacramento, Calif.	Aug. 31

BUILDINGS

Bids Close		See Eng. News-Record
Sept. 2	Worcester, Mass.	Aug. 31
Sept. 5	Smyrna, Del.	Aug. 10
Sept. 5	Teaneck (Englewood P. O.), N. J.	Aug. 24
Sept. 5	Ann Arbor, Mich.	Aug. 31
Sept. 6	Milaca, Minn.	Aug. 17
Sept. 7	Columbus, O.	Aug. 17
Sept. 7	Phila., Pa.	Aug. 31
Sept. 7	New York, N. Y.	Aug. 31
Sept. 8	Raleigh, N. C.	Aug. 31
Sept. 11	Oakland, Calif.	Aug. 10
Sept. 11	Johnstown, Pa.	Aug. 31
Sept. 11	Pittsburg, Pa.	Aug. 31
Sept. 11	Buffalo, N. Y.	Aug. 31
Sept. 12	Port Jervis, N. Y.	Aug. 31
Sept. 15	Atchinson, Kan.	Aug. 31
Sept. 15	Racine, Wis.	Aug. 31
Sept. 16	St. Thomas, Ont.	Aug. 24
Sept. 18	Glens Falls, N. Y.	Aug. 31
Sept. 18	Cleveland, O.	Aug. 31
Sept. 18	Saratoga Springs, N. Y.	Aug. 31
Sept. 20	Dearborn, Mich.	Aug. 31
Sept. 30	Duluth, Minn.	July 13
Oct. 1	Duluth, Minn.	Aug. 3

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Sept. 5	Dredging — New York, N. Y. Adv. Aug. 3 to 31.	Aug. 3
Sept. 5	Steel Gates — Nashville, Tenn. Adv. Aug. 3, 10, 24 and 31.	Aug. 3
Sept. 5	Dykes, etc.—New Orleans, La.	Aug. 3
Sept. 5	Spur-dikes — New Orleans, La.	Aug. 10
Sept. 5	Dredge Pontoons, etc.—Mobile, Ala. Adv. Aug. 17 to 31.	Aug. 17
Sept. 5	Brick—Chelsea, N. Y.	Aug. 31
Sept. 6	Motors, etc.—Yuma, Ariz.	July 27
Sept. 6	Dredging—Phila., Pa.	Aug. 10
Sept. 6	Riprap Protection — Hampton Roads, Va.	Aug. 24
Sept. 7	Stone—New Orleans, La. Adv. Aug. 10 to 31.	Aug. 10
Sept. 8	Mezzanine—St. Louis, Mo.	Aug. 24
Sept. 12	Hospital — Northampton, Mass.	Aug. 24
Sept. 13	Guard House, etc.—San Diego, Calif.	Aug. 24
Sept. 13	Hangar—Anacostia, D. C.	Aug. 31
Sept. 14	Dredging—Norfolk, Va.	Aug. 17
Sept. 15	Repairing Jetty—Providence, R. I. Adv. Aug. 24 and 31.	Aug. 24
Sept. 15	Barges—New Orleans, La. Adv. Aug. 24 and 31.	Aug. 24
Sept. 18	Barges—Florence, Ala. Adv. Aug. 24 and 31.	Aug. 24
Sept. 18	Turbine—Florence, Ala. Adv. Aug. 24 and 31.	Aug. 24
Sept. 20	Quarters — Langley Field, Va.	Aug. 31
Sept. 21	Jetty Repairs—Jacksonville, Fla. Adv. Aug. 24 and 31.	Aug. 24
Sept. 22	Cast Iron Mains, etc. — Fitzsimons, Colo. Adv. Aug. 31.	Aug. 31
Sept. 26	Repairing Walls—Savannah, Ga. Adv. Aug. 31.	Aug. 31
Sept. 27	Quarters — Ft. Bayard, N. M. Adv. Aug. 31.	Aug. 31
Sept. 28	Dredging—Buffalo, N. Y. Adv. Aug. 31.	Aug. 31
Oct. 31	Dredging—Honolulu, H. T. Adv. Aug. 31.	Aug. 31

MISCELLANEOUS

Bids Close		See Eng. News-Record
Sept. 2	Substructure & Foundations—Everett, Mass.	Aug. 31
Sept. 5	Fire Alarm System, etc.—Kansas City, Mo.	Aug. 10
Sept. 5	Portland Cement, etc. — St. Paul, Minn.	Aug. 31
Sept. 6	Truck Bodies, etc.—San Francisco, Calif.	Aug. 17
Sept. 6	Refrigeration Work—Marcy, N. Y.	Aug. 24
Sept. 8	Mechanical Equipment — Wilmington, Del.	Aug. 24
Sept. 8	Dumping Platform—New York, N. Y.	Aug. 31
Sept. 12	Foundation — Des Moines, Ia.	Aug. 31
Sept. 15	Piping, etc. — Hammond, Ind.	Aug. 24
Sept. 16	Strain & Pin Type Insulators —Melbourne, Australia	July 27
Sept. 16	Railroad Ties — Toronto, Ont.	Aug. 31
Oct. 10	Steam Turbine, etc.—New Orleans, La. Adv. Aug. 17 to 31.	Aug. 17
Nov. 4	Transformers, etc. — Melbourne, Australia Adv. Aug. 17 and 31.	Aug. 17

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., Putnam — Water Works Dept. plans model filtration plant, $35,000. Private plans.

Pa., New Brighton—Beaver Valley Water Co., plans to relay mains in 3rd Ave. and other streets. $15,000. Engineer not announced.

Fla., Zephyrhills—Sept. 12, to vote on $31,500 bonds for waterworks. A. W. Rodgers, city clk.

Waterworks (Continued)

Mich., North Muskegon (Muskegon P. O.)—Water Dept. plans 1 story, 20 x 20 ft. stone pump house. $20,000. Hoad & Decker, Ann Arbor, engrs.

Tex., Clarendon — Attorney Generals Dept., Austin, approved $75,000 bonds issue for waterworks improvements, here. Address O. C. Watson, mayor.

Tex., Clifton—Attorney Generals Dept., Austin, approved $20,000 bond issue for waterworks improvements, here.

Tex., Lubbock—See "Sewers."

Okla., Woodward—Making plans waterworks. Black & Veatch, 701 Mutual Bldg., Kansas City, Mo., engrs.

Utah, Clearfield—Plans complete new waterworks system. $50,000. Caldwell & Richardson, Templeton Bldg., Salt Lake City, engrs.

Utah, Ogden—Rejected bids furnishing and laying 1,500 ton 12-20 in. Class B c.i. pipe. $150,000. Will readvertise. Noted Aug. 17.

Ore., Eagle Point—Eagle Point Irrigation Dist. rejected bid opened Aug. 10, canal excav., 150,000 cu.yd. earth and 20,000 cu. yd. rock excav. Will readvertise. R. Cowgill, Medford, engr.

Calif., Napa—Voted $600,000 bonds, $265,000 of which will be used to purchase system of Napa City Water Works, balance for improvements, incl, single arch concrete dam with gravity section, 108 ft. high, 600 ft. long at top, storing 630,000,000 gal., cost, incl. outlet, control works and spillway, $220,000; pipe line from diversion dam in Milliken Canyon to proposed reservoir, 25,600 ft. 14 in. double dipped riveted steel slip joint pipe, 1,600 ft. 16 in. machine-banded, dipped riveted wood stave pipe, pressure break, valves, fittings, etc., est. cost of pipe and fittings, $52,000; chlorinator for sterilizing water, installed at reservoir, $3,000. H. A. Harrold, city engr., A. Kempkey, Hobart Bldg., San Francisco, consult, engr. Noted July 13.

Calif., Tracy—Will vote on $136,000 bonds to construct septic tank, watermain extensions, purchase fire equipment, etc. W. D. Harrington, Tracy, engr.

Calif., Westley—Birtschmann Ranch had plans prepared, canal 8 mi. long, 3 to 4 ft. wide, 27,000 yd. earthwork; enlarging existing intake channel, 27,000 cu.yd. earthwork; 7,900 lin.ft. 18-30 in. wood stave pipe line; 3,000 lin.ft. 11,000 volt power line; main pumping plant involves 60 cu.yd. excav., 30 cu.yd. backfill, 42 cu.yd. rein.-con., two 12-in. horizontal centrifugal pumps, direct connected to two 250 hp. motors and two 18 ft. suction pipes, 35 ft. long, steel discharge wyes connecting to wood stave pipe line; 1 priming pump for above; auxiliary pumping plant involves one 8 in. horizontal centrifugal pump, 1,700 lin.ft. 12 in. pipe, one 12 hp. gasoline engine, 1 small priming pump, to operate at a 50 ft. head; 880 lin.ft. No. 48 steel flume, etc. $100,000. Easley & Anderson, Antioch, engrs.

Ont., Collingwood — Sept. 5, to vote on $25,000 bonds to lay new intake pipe from lake into pumphouse. W. Holden, mayor, interested in prices on pipe.

Ont., Toronto — Plans pumping station incl. intake, pumphouse, filterhouse, filters, pumps, etc., 40,000,000 to 60,000,000 gal. per day. $2,500,000. R. C. Harris, city engr. and comr. of works.

Ont., Wheatley—Plans waterworks system. $30,000.

BIDS DESIRED

N. Y., Mineola—Sept. 14, by Bd. Village Trustees, about 3 mi. 4, 6 and 8 in. mains, hydrants, etc. C. F. Quinn, clk. S. B. Bowne, Mineola, engr.; adv. this issue.

N. Y., Waterville—Sept. 6, by Bd. Water Comrs., concrete spillway and rein.-con. flume. J. P. Lawyer, 712 Washington St., Utica, engr.; adv. this issue.

Mich., Monroe—Sept. 11, by F. M. Kressbach, city clk., constructing and placing new submerged water intake crib in Lake Erie, near existing waterworks intake crib. Hoad, Decker, Shoecraft & Drury, Ann Arbor, consult. engrs.; adv. this issue.

Minn., St. Paul—Sept. 5, by H. W. Austin, city purch. agt., two horizontal duplex piston pumps for Water Dept. O. Claussen, city engr.

Minn., Thief River Falls—Sept. 12, waterworks improvements, filtration plant 1,000,000 gal. capacity, incl. filter plant building and motor house, filter equipment and pump equipment. $30,000. A. H. Akre, city clk. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engr. Noted July 20.

CONTRACTS AWARDED

N. Y., Rochester—See "Streets and Roads."

N. C., Kernersville — Waterworks and sewerage systems to Boyd-Higgins & Goforth, Charlotte, (street address not available), $100,000; stand pipe to R. D. Cole, Newnan, Ga. Noted June 8.

N. C., Lincolnton—For 6 mi. 6-10 in. sewer line, 2 mi. 6 in. water mains, 200,000 gal. concrete reservoir, pump and motor equipment, to Boyd-Higgins & Goforth, Charlotte, (street address not available), $60,000. Noted July 13.

O., Cleveland—Cuyahoga Co., constructing Impvt. 8 of county water supply system, 25,400 ft. 6-12 in. c.i. pipe, to D. Pfahl & Co., Berea Rd., $88,532. Noted Aug. 24.

Wis., Madison—For deep well and equipment, to McCarthy Well Co., Wabash and Eustis Sts., St. Paul, Minn. Engrs. est. $25,000.

Wis., Spring Green—For pumping station, incl. equipment at waterworks, to E. H. Hutter, Spring Green. Engrs. est. $25,000.

Wis., Stevens Point—For 30 in. well, 32 ft. deep, and pump station, to Cast Stone Constr. Co., Michigan Ave., Eau Claire, $7,000; one 1,000 gal. and one 1,500 gal. direct connected centrifugal pumps, to Ingersoll-Rand Co., 343 South Dearborn St., Chicago, $4,000; labor for laying 20,200 ft. 6-12 in. c.i. pipe, to J. E. McVicker & Co., Stevens Point. $15,000. City has purchased pipe. Noted Aug. 10.

Minn., Springfield—Watermain extension, 16,200 lin.ft. 4-8 in. Class B c.i. pipe, thirty-six 4-8 in. gate valves, 22 hydrants, 12,000 lb. c.i. specials, to Siscoe & Frankamp, Mason City, Ia., $23,000. Noted Aug. 3.

S. D., Mitchell—F. McGovern, city auditor, 18,000 lin.ft. 6-10 in. c.i. water mains, hydrants, valves, etc. to Porett & Tuttle, Mitchell. $34,479. Noted July 13.

N. D., Walhalla—Waterworks system incl. 5,800 lin.ft. 6-in. c.i. pipe, well, pumping station, elevated steel tank, to J. T. Kennedy, Grand Forks, $26,394. Noted July 27.

Mont., Glendive—For 34,760 lin.ft. 4-8 in. c.i. mains, hydrants, castings, valves, specials, etc., cutting over 500 existing water services, to Security Bridge Co., 502 North 32nd St., Billings, $44,500. Noted July 27.

Calif., Santa Rosa—Constructing air lift for artesian well, rein.-con. aerator, flume, receiving reservoir with 350,000 gal. capacity, pumping buildings, compressors, motors, crane, pumps, meters, electrical machinery, etc., to Butte Electrical Equipment Co., 530 Folsom St., San Francisco, $46,000. Noted Aug. 17.

Sewers

PROPOSED WORK

Pa., Ambridge—Plans to vote on $90,000 bonds for new sewers. Address C. F. Straube, burgess.

Pa., Taylor—See "Streets & Roads."

Ky., Hazard—Preparing plans and takes bids within 30 days for new sewerage system. J. N. Chester Engineers, Union Bank Bldg., Pittsburgh, engrs.

O., Akron—Plans election in November to vote on $3,000,000 bonds for trunk sewers in various parts of city. J. E. Root, Delaware Bldg., engr.

Wis., Beloit—Plans 41 mi. sanitary sewers. $450,000. Mead & Seastone, Journal Bldg., Madison, engrs.

Minn., Alexandria—Rejected bids opened July 31 and Aug. 14, sewer extensions and improvements in various streets, 15,273 lin. ft. 8-15 in. pipe, 1 Imhoff tank, sludge bed, well and pump. $60,000. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs. Noted Aug. 10.

Tex., Lubbock—Preparing plans sewage disposal plant, extensions to sewers and watermains. $100,000. Hawley & Sands, Cotton Exch. Bldg., Ft. Worth, engrs. Noted Aug. 3.

Wash., Tacoma—Passed resolution for storm and sanitary sewers in entire South Tacoma Dist. $950,000. J. C. Manley, city engr.

Tex., Ft. Worth—Takes bids about Sept. 5 for complete activated sludge disposal plant, necessary sewers, etc. $650,000. L. W. Lewis, city engr. Hawley & Sands, Cotton Exch. Bldg., consult, engrs.

Okla., San Springs—Making plans storm and sanitary sewers. $90,000 bonds voted. Holway Eng. Co. 329 Kennedy Bldg., Tulsa, engrs.

Colo., Denver—Plans 32,000 ft. 8 in. and 1,200 ft. 10 in. vitr. sewers in Berkeley Special Sanitary Dist. $49,000. A. K. Vickery, City Hall, engr.

Calif., Modesto—Bids for storm sewers in Dist. 4 were returned unopened, due to error in proceedings. New proceedings will be started. G. Freitas, city engr. Noted June 8.

Calif., El Segundo—Voted $200,000 bonds for sewerage system. A. W. Cory, city engr.

Que., Montreal—Plans 420 ft. of 12 in. tile pipe in Trudel Lane from St. Martin to Richmond Sts. $1,134, 1,916 ft. of 2 x 3 brick in Mariette St. from Sherbrooke St. to private lane to Trenholme Park $10,255, 530 ft. of 2 x 3 brick in Hall St. from Dublin St. to Park Marguerite Bourgeois $2,823, 434 ft. of 12 in. tile in Park Marguerite Bourgeois from Hall to Favard Sts. $1,165, 2,239 ft of 2 x 3 brick in Jacques Hertel St. from Monk Blvd to Orchard St. $19,542.

Ont., Fort Erie—Plans sewerage system To exceed $30,000. J. W. Barnhart, reeve.

Ont., Preston—Plans sanitary sewers and ejector station, 6,000 ft. pipe, 8 in. up. $30,000. G. Wurster, town clk.

BIDS DESIRED

N. J., Hackensack—Sept. 25, by Hackensack Improvement Comn., Municipal Bldg., 346 State St., furnishing pumping equipment, incl. A. B. Wood patent trash pumps, motors, etc., Contr. No. 3. L. Lozier, Bank Bldg., Main and Mercer Sts.; adv. this issue.

N. J., Highland Park—See "Streets & Roads.

N. J., Little Falls—Sept. 6, by Little Falls Twp., extending sewerage system, enlarging sewage disposal works and constructing pumping station. H. J. Harder, 129 Market St., Paterson, engr.

Pa., Williamsport—Sept. 2, by G. K Harris, supt. streets and improvements, terra cotta sanitary sewers, 557 ft. in Pearl St., 485 ft. in Hancock St., 120 ft. in South Hancock St., all 8 in. pipe, storm sewers, 490 ft. 42 in. pipe in Grafius Run, 3,000 ft. 18, 24, 27 and 30 in. pipe in West 4th St., monolithic concrete sewer across concrete bridge, 70 ft. 48 in. pipe, also 20 ft. rein.-con. span over Doughertys Run and 16 ft. span on Doughertys Run Rd. L. Mussina, city engr.

Pa., Upper Darby (Phila. P. O.)—Sept. 5, by Upper Darby Twp., 12,700 ft. 8-18 in vitr. sewers in various streets. $75,000. A F. Damon, 69th St. Terminal, Phila., engr.

Fla., Jacksonville—Sept. 14, furnishing 1,250 ft. 6 in., 29,350 ft. 8 in. and 2,180 ft. 10 in. terra cotta pipe. W. E. Sheddan, city engr.

Fla., Jacksonville—Sept. 21, laying 8 in. rein.-con. sewers in Adams, Myrtle, Liberty, 21st, 22nd, Terrace, Cedar, Monroe, Hogan, Julia and Main Sts. $25,000. W. E. Sheddan, city engr.

Ky., Madisonville—Sept. 11, by Bd. Pub. Wks., 9.2 mi. 8-12 in. sanitary sewers. F. P Stum, chn. Howerton-Tirsway Co., Asheville, N. C., engrs.; adv. this issue.

O., Lima—Sept. 9, at office of C. A. Bingham, city manager, constructing relief trunk sewers, Contrs. 9 and 11. B. F. Darling, superv. engr.; adv. this issue.

O., Sebring—Sept. 12, by J. G. Eardley, village clk., for sewage treatment plant. Burgess & Niple, 223 East Broad St., Columbus, engrs.; adv. this issue. Noted Jan. 19.

Mich., Springwells—Sept. 5, by B. P. Esper, village clk., Sect. 10 Sewer, 1,000 ft. 42 in. and 1,450 ft. 72 in. vitr. crock, segment block, brick or concrete, also Sect. 14 Sewer, 5,058 ft. 72 in. concrete, brick or segment block. A. Roth, village engr. C. W. Hubbell, consult. engr., both at 2348 Penobscot Bldg., Detroit.

Ill., Bloomington—Sept. 23, by Trustees Bloomington and Normal Sanitary Dist., 404 Unity Bldg., for Division St. sewer extension and Valley sewer overflow chamber. Taylor & Woltmann, 428 Unity Bldg., engrs.; adv. this issue.

Ill., Lake Forest—Sept. 28, by Bd. Trustees, North Shore Sanitary Dist. of Lake Co., Room 295 Anderson Bldg., 2 sewage treatment plants, pumping stations, settling tanks, etc. Pearse, Greeley & Hansen, 39 West Adams St., Chicago, engrs.; adv. this issue. Noted June 15.

Wis., Milwaukee—Sept. 8, by Metropolitan Sewerage Comn., 508 Market St., 7,000 lin.ft. 72 in. and 865 lin.ft. 36 in. concrete sewer in tunnel and appurtenances, from Humboldt Ave. and Lake St. to Adams Ave. on Port Washington Rd. J. H. Fowles, secy. I. C. Hatton, engr.

Kan., Wichita—Sept. 12, at office of E. S. Worrell, city clk., constructing storm water sewer No. 15. P. L. Brockway, city engr.; adv. this issue.

N. C., Kernersville—See "Waterworks."

BIDS RECEIVED

N. Y., Brooklyn—E. Rigelmann, boro pres., Boro Hall, opened bids Aug. 23, sewers in (1) Gravesend Ave., repairing sewer in (2) Foster Ave., (3) Greene Ave., etc., from O'Rourke Eng. Constr. Co., 17 Battery Pl., New York, (1) $372,409; Necaro Co., 94 Court St., (1) $438,999 (2) $104,060; J. F. Cogan Co., 233 Bway., New York, (1) $455.636 (2) $142,700; P. J. Donlon Contg. Co., Snyder Ave. and East 56th St., (2) $144,610; D. Bonnacci. 672 Mc-

Sewers (Continued)

Graw St., (3) $24,506; G. L. Schrade, (3) $29,125; Murphy Bros., 262 Bay 43rd St., (3) $29,473. Noted Aug. 17.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., alterations and improvements to sewer in West 57th St., etc., from Melrose Constr. Co., 103 East 125th St., $42,832; T. A. Reilly, 48 East 42nd St., $44,577; P. J. Donlon Contg. Co., Snyder Ave. and East 56th St., Brooklyn, $48,081. Noted Aug. 17.

CONTRACTS AWARDED

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., sanitary sewers and reconstructing existing sewers in Carmine St., etc., to Patrick McGovern & Co., 50 East 42nd St., $235,000. Noted Aug. 3.

Fla., Lake Worth—Sanitary sewerage system and septic tank, Sect. 1 and Sect. 2, to Bunker & Lockman, Lake Worth, $47,368 and $42,345. Noted July 13.

Mich., Detroit—To J. Porath, 745 Griswold St., Ashland Ave. Sewer, Sect. 1, $331,951; A. Tobin, 449 West Columbia Ave., Ashland Ave. Sewer, Sect. 2, $276,439; Jeynes & Affeld, 1208 Ford Bldg., Clark Ave. Sewer, Sect. 5, $238,362; Connelly Bros., 610 Lincoln Bldg., Euclid Ave. Arm Bates St. Sewer, $56,556; Holbrook Ave. Arm Bates St. Sewer, $47,182; W. Porath, 1410 West Grand Blvd., Montcalm Ave. Arm Bates Sewer, $10,917.

Wis., Hawkins—Hawkins Electric Light & Power Co., will build 1 story, 34 x 152 ft., brick and steel power plant, by day labor. Archts. est. $40,000.

Wis., Milwaukee—Metropolitan Sewerage Comn. of Milwaukee Co., 508 Market St., extension to intercepting sewerage system to Shorewood and Whitefish Bay, 484 lin. ft. 18 in. c.i. siphon, 4,872 lin.ft. 42 in. concrete sewer, 206 ft. manholes, etc., to Knowles & Fehr, Inc., 314 North Dearborn St., Chicago, $149,300. Noted Aug. 10.

B. C., Chilliwack—Supplying and laying 6,000 ft. of 6-12 in. concrete pipe in Yale Rd. and Young St., and building small pumping station, to Hodgson, King & Marble, 626 Pender St. W., Vancouver, $23,924.

Waste Disposal

PROPOSED WORK

Pa., Ambridge—Plans garbage disposal plant. $15,000. Engineer not announced.

BIDS RECEIVED

Wis., West Allis—Bd. Pub. Wks., new unit, 5 ton capacity garbage incinerator, complete with building of sufficient size to permit an additional 15 ton unit when required, from Jones Odorless Crematory Co., 1317 Syndicate Trust Bldg., St. Louis, Mo., 15 ton, 2 unit plant $16,000; Vulcan Incinerator Co., St. Louis, Mo., $17,750; Nye Odorless Crematory Co., Georgia Life Bldg., Macon, Ga., $20,000. Noted Aug. 10.

Bridges

PROPOSED WORK

Rhode Island—State Bridge Comn., Providence, soon takes bids one 30 ft. arch, one 20 ft. and one 12 ft. slab bridges, concrete in Bristol. Hopkinton and South Kingstown. $25,000. C. L. Hussey, state bridge engr.

N. Y., Lindley—Plans new concrete or steel bridge over Cowanesque River. $25,000. A. Orr, superv.

N. J., Trenton—Mercer Co. takes bids in September for concrete viaduct over tracks of Pennsylvania R.R. and canal on Olden Ave. $200,000. J. A. Waddell, 35 Nassau St., New York City, engr. Noted May 25.

Pa., Honesdale—Wayne Co. plans reconstructing Holbertville Bridge, 55 ft. long, 16 ft. wide, $20,000. Equinunk Bridge, $10,000. Address B. Kukendall, Towanda.

Tenn., Knoxville—See "Railways under Tennessee."

Wash., Port Townsend—See "Streets and Roads."

Calif., Stockton—Having plans prepared two concrete pile trestles, one on either side of present street railway, 202 ft. long, over Mormon Channel, on Center St. W. B. Hogan, city engr.

BIDS DESIRED

Pa., Phila.—Sept. 8, by F. H. Caven, dir. Pub. Wks., removing steel girder bridge and piers and building 380 ft. new steel girder bridge encased in concrete, 80 ft. wide, 40th St. and Pennsylvania R. R. $350,000. S. Noyes, City Hall, engr.

Pa., Warren—Sept. 6, by Boro. Council, concrete, steel or other type bridge over Mill Race. $25,000.

Pa., Williamsport—See "Sewers."

Alabama—Sept. 26, by W. S. Keller, state highway engr., Montgomery, 6 concrete girder bridges, total length 640 ft., 18 ft. roadway, on Huntsville-Guntersville Rd., Madison Co., 1,700.27 cu.yd. concrete, 196,286 lb. reinforcing, 1,082 cu.yd. dry, 1,247 cu.yd. wet and 78 cu.yd. rock excav., 822 sq.yd. 4 in. concrete surfacing, etc.

Wis., Wauwatosa—Sept. 6, by W. Cary, clk. Milwaukee Co., Milwaukee, for 80 ft. rein.-con. arch span, over West Main St., 40 ft. roadway, two 11 ft. sidewalks, for city and Milwaukee Co. $35,000-$40,000.

Ia., Montezuma—Sept. 5, by Auditor Poweshiek Co., for 26 culverts and extensions. C. E. Olson, co. engr.

Minn., Duluth—Sept. 7, by F. W. Borgen, aud. St. Louis Co., 5 bridges as follows: Bridge 1-8.20-1 on Marcon Rd., 35 ft., T beam, concrete and steel, $4,500; Bridge D.2-25-1 on Shillihon Rd., 100 ft., concrete with earth approach, $8,500; Bridge C. 7-27-1 on Bear Trap Rd., 27 ft., T beam, concrete and steel, $4,000; Bridge D.O. 12-1, on Co. Ditch Rd., two 35 ft. T beams, concrete and steel, $9,000. R. W. Acton, Co. engr.

BIDS RECEIVED

Del., Laurel—State Hy. Dept., Dover, opened bids Aug. 23, 1 span Scherzer rolling lift bridge in Laurel, superstructure only, from A. S. Fox & Co., Callahan Bank Bldg., Dayton, O., $24,384; R. J. Mansfield, 135 William St., New York City, $25,471; Penn Bridge Co., Beaver Falls, Pa., $29,750.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, opened bids Aug. 18, following bridges, (1) 2 concrete substructures for steel and 4 concrete spans Route 1, Sect. 29-B, Saline Co., (2) superstructures for steel Route 1, Sect. 29-C, Saline Co., (3) 2 steel and 2 concrete spans Route 1, Combination S, Saline Co., (4) 1 concrete, Route 1, Sect. 30-B, Saline Co., (5) 4 concrete Route 1, Sect. 31-B, Saline Co., (6) 2 concrete substructures for steel and 9 concrete Route 1, Combination T, Saline Co., (7) 2 steel and 9 concrete Route 1, Combination V, Saline Co., (8) 7 concrete Route 1, Sect. 33-B, Saline Co., (9) 1 steel superstructure Route 1, Sect. 33-C, Saline Co., (10) 1 steel and 7 concrete Route 1, Combination V, Saline Co., (11) 2 concrete Route 1, Sect. 34-B, Williamson-Johnson Co., (12) 9 concrete Route 1, Combination W, Williamson-Johnson Co., (13) 1 steel and 9 concrete Route 1, Combination X, Williamson-Johnson Co., (14) 2 concrete Route 1, Sect. 37-B, Johnson Co., (15) 11 concrete Route 1, Combination Y, Williamson-Johnson Co., (16) 1 steel and 11 concrete Route 1, Combination Z, Williamson-Johnson Co., (17) 1 steel superstructure Route 1, Sect. 46, Iroquois Co., (18) 9 concrete Route 3, Sect. 8-B, Rock Island Co., (19) 4 concrete Route 3, Sect. 37-B, McDonough Co., (20) 2 concrete Route 3, Sect. 71-B, Randolph Co., (21) 1 steel superstructure Route 4, Sect. A1, Cook Co., (22) repairs to 1 steel Route 7, Sect. B-1, La Salle Co., (23) 1 substructure for steel, Route 8, Sect. 32-B, Woodford Co., (24) 1 superstructure for steel Route 8, Sect. 32-C, Woodford Co., (25) 3 concrete Route 12, Sect. 15-B, Marion Co., (26) 1 concrete Route 20, Sect. 12-B, Lake Co., (27) 3 concrete spans Federal Aid Project 26, Sect. 20-B, Logan Co., (28) 1 steel superstructure, Route 26, Sect. 20-C, Logan Co., (29) 1 steel and 2 concrete Route 26, Combination A-1, Logan Co., (30) 2 bridges Route 30, Sect. 17-B, Will Co., (31) 4 concrete spans and 1 concrete bridge Route 33, Sect. 43-B, Fulton Co., (32) 1 steel superstructure Route 33, Sect. 43-C, Fulton Co., from:

W. H. Shons, 109 Spring St., Freeport, (1) $26,546, (5) $15,390, (8) $30,644, (22) $990, (26) $20,543, (27) $15,617.

D. Jenkins, Terre Haute, Ind., (1) $22,681, (8) $26,607.

Rauth Bros. & Ackers, Ottumwa, Ia., (1) $27,767, (11) $5,950, (14) $10,893, (19) $13,584, (20) $26,243, (26) $17,988.

International Steel and Iron Co., 1243 Edgar St., Evansville, Ind., (2) $16,386, (9) $6,480, (17) $4,224, (32) $4,910.

Rochester Bridge Co., Rochester, Ind., (2) $16,071, (9) $6,482, (17) $4,462, (21) $11,772, (24) $10,035, (28) $8,350, (32) $4,765.

St. Louis Structural Steel Co., Bank of Commerce Bldg., St. Louis, Mo., (2) $16,665, (24) $10,462.

M. and P. Montg. Co., Rockford, (4) $3,414, (6) $55,000, (11) $6,077, (14) $11,598, (15) $50,000.

W. C. Johnson, 512 South High St., Belleville, (4) $3,845, (7) $74.000, (16) $65,000, (20) $26,054, (25) $19,208, (29) $27,000.

R. W. Cropper Eng. Co., Chicago, (street address not available), (5) $15,603, (7) $32,268.

Mississippi Valley Structural Steel Co., Decatur, (9) $7,014, (28) $8,413.

Coopers Constr. Service Co., St. Louis, Mo., (street address not available), (11) $6,773, (14) $11,614.

Continental Bridge Co., 460 Monadnock Blk., Chicago, (17) $4,193.

J. R. Sterns, Kirkwood, (18) $15,358, (27) $16,202.

Howard Constr. Co., Rock Island, (18) $13,315.

Layton Constr. Co., Muscatine, Ia., (18) $6,604.

D. Alford, Cuba, (19) $12,861, (31) $21,392.

H. C. Holmes, Macomb, (19) $12,104.

L. Richards, Hoopeston, (20) $24,151.

Standard Eng. and Constr. Co., Toledo, O., (street address not available), (21) $12,616.

Joliet Bridge and Constr. Co., Joliet, (22) $1,880.

McCoy & Whitnell, St. Louis, Mo., (street address not available), (23) $16,144.

Porter McCully Co., Mackinaw, (23) $16,051.

Hedges Constr. Co., 111 West Washington St., Chicago, (23) $13,871.

Clinton Bridge Wks., Clinton, Ia., (24) $10,609.

Zimmerly Bridge Co., Paris, (25) $18,970.

J. C. Beckenmeyer, Carlinville, (25) $18,313.

Dow & Jacobson, Waukegan, (26) $22,999.

G. C. Fairels, Milburn, (27) $14,416.

Illinois Steel Bridge Co., Jacksonville, (28) $8,150, (32) $4,553.

Powers & Thompson, Joliet, (30) $16,030.

F. Lorenz, Oak Glen, (30) $9,101.

D. Kiel, Long Point, (31) $15,488. Noted Aug. 3.

Tex., Hallettsville—See "Streets and Roads."

CONTRACTS AWARDED

N. Y., Ballston Spa—J. H. Whitney, clk. Saratoga Co., for Saratoga Lake Bridge, steel, over narrows at north end of Saratoga Lake, to Brann & Stuart Co., Inc., 310 Commercial Trust Bldg., Phila., $111,102. Noted July 27.

North Carolina—State Hy. Dept., Raleigh, rein.-con. bridges and culverts on State Project 131, Gates Co., to W. D. Murray-Sadler Corp., Norfolk, Va. (street address not available), $33,196. Noted Aug. 3.

Fla., Miami—Bridge over Miami River at Southwest 2nd Ave., to Comer-Ebsary Foundation Co., Miami, $144,090. Noted Aug. 10.

Tenn., Maynardville—Union Co. concrete bridge, two 155 ft. spans, solid rock foundation, at Witts Ferry, to Rhoel & Steel, Holston Bank Bldg., Knoxville, $24,876.

Ia., Marshalltown—Marshall Co., 22 culverts, 2 slab bridges and 2 I-Beam bridges to Ingersoll-Stoufer Eng. Co., Marshalltown, $25,000. Concrete figures $20.03 per cu.yd.

Tex., New Boston—O. B. Pirkey, judge Bowie Co., steel span—timber trestle over Sulphur River, 1.5 mi. incl. approaches, 150 ft. steel span over main channel, concrete piers, etc., to Smith Bros., 313 Sumpter Bldg., Dallas, $95,582. Engrs. est. $105,140. Noted July 27.

California—State Hy. Comn., Sacramento, rein.-con. girder bridge, over San Gabriel River, near Azusa, Los Angeles Co., to D. A. Foley & Co., Aitkin, Minn., $124,089. Noted July 27.

B. C., Vancouver—Burrard Inlet Bridge & Tunnel Co., North Vancouver, bridge over Second Narrows, Burrard Inlet to connect Vancouver and North Vancouver incl. 303 ft. solid embankment, 250 ft. timber trestles, 436 ft. steel girders, bascule bridge with 185 ft. lift span, 1 mi. single track railway with 50 ft. walk on each side, three 60 ft. steel girder bridges with concrete abutments on North Vancouver side, and ¾ mi. roadway on Vancouver side, to McClintic Marshall Constr. Co., Pittsburgh, $1,241,530.

Dams

CONTRACTS AWARDED

Conn., Orange—New Haven Water Co., 100 Crown St., New Haven, raising Dam No. 2 at Maltby Lakes, here, increasing volume of reservoir, will be raised 5 ft. all along, to C. W. Blakeslee & Sons, 57 Waverly St., New Haven. Engrs. est. $50,000.

B. C., Stave Falls—British Columbia Ry. Co., Hastings and Carrol Sts., Vancouver, will build concrete dam, 640 ft. long, 50 ft. high, with sluices, gates, etc., also raising existing dam 14 ft., by day labor. $900,000. J. J. Newell, c/o owners, engr.

Railways

PROPOSED WORK

Tennessee—Knoxville & Carolina R.R., 847 Main St., Knoxville, plans placing 25,000 cu.yd. ballast, improving trestles and bridges, steel girders with concrete foundations. $100,000. C. A. Murphy, supt.

Michigan—Ann Arbor R.R., Owosso, having plans prepared 6 mi. industrial branch from Coldwater Lake to Mt. Pleasant. $200,000. C. Allen, Owosso, ch. engr.

BIDS DESIRED

Ontario—See "Miscellaneous"—Railroad ties—Toronto.

CONTRACTS AWARDED

New York—Transit Comn., 49 Lafayette St., New York, installing tracks for portion of 14th St.-Eastern Line, in Boroughs of Manhattan and Brooklyn, to T. H. Reynolds Constr. Co., 50 Park Pl., New York. $241,470. Noted Aug. 24.

Texas—F. Kell, Wichita Falls, general contractor for 13.2 mi. railroad construction between Byers, Clay Co., Tex., and Waurika, Jefferson Co., Okla. The 6 mi. on the Texas side to Texas-Oklahoma line at Red River is known as Wichita Falls and Oklahoma Ry. Co. and that portion from Red River to Waurika on Oklahoma side is known as Wichita Falls and Oklahoma R.R. of Oklahoma. Construction on this line has been let as follows: Grading, incl. 325,000 yd. embankment and excavation, to L. M. Kirkes; 15 mi. main line and side tracks, 4,700 ft. bridging (4,300 ft. of this being in Red River bridge), one 125-ft. steel span on concrete piers with pile trestle over Beaver Creek at Waurika, to F. W. McCabe. This corrects report in July 20 issue.

California—Western Pacific Ry. Mills Bldg., San Francisco, grading, ballasting and laying tracks on 6 mi. road, near Stockton, to be known as North Channel Spur, to Utah Constr. Co., Phelan Bldg., San Francisco, $350,000.

Excavation, Drainage, Irrigation

PROPOSED WORK

Fla., Ft. Lauderdale—Bd. Comrs. Broward Co., rejected bids opened Aug. 15, constructing inlet from New River Sound to Atlantic Ocean, near here. G. B. Hills Co., Jacksonville, engrs. Noted July 13.

La., Arabi—State Hy. Comn., Redmond Bldg., Baton Rouge, and St. Bernard Parish plan to drain Arabi and surrounding section by a 3 mi. canal, 35 ft. wide, starting from Amer. Sugar Refinery property, leading to Bayou Bienvenu. Cost between $30,000 and $35,000. D. Buie, state engr. F. Joachim, police juror of St. Bernard Parish.

Calif., Gridley—Sutter-Butte Canal Co., having plans prepared, extending Encinal Ditch, to irrigate 10,000 acres, 7 mi. long, concrete lined; also 5 mi. extension to "C" Line Ditch. N. Ware, Gridley, ch. engr. Noted June 29.

Calif., Paradise — Paradise Irrigation Dist. soon takes bids laying about 13,000 lin.ft. of 36 in. pipe line, and several thousand feet distributing mains, mostly 4 in. $70,000.

Ont., Prairie Siding—Kent Co., Chatham, plans drainage pumping system incl. pumphouse, pumps, etc., to replace one destroyed by fire. $28,000. Prices wanted on equipment. J. Gosnell, County Bldg., Chatham, engr.

Ont., Queenston—Hydro Electric Power Comn., University Ave., Toronto, plans 20 mi. canal, 80 ft. wide from here to Niagara Falls, generating 1,000,000 additional hp. $100,000,000. F. A. Gaby, University Ave., Toronto, ch. engr.

BIDS RECEIVED

R. I., Providence—Bd. Contract and Suppy, opened bids Aug. 21, excavating and filling at Municipal Wharf, Fields Point, 70,000-80,000 cu.yd. dry excav., from Wilson & English, 50 Church St., New York City, $0.3125 per cu.yd. (steam shovel); Briggs Eng. and Constr. Co., 710 Union Trust Bldg., $0.32 per cu.yd. (steam shovel), $0.24 per cu.yd. (hydraulic); W. Aubin, Woonsocket, $0.3475 per cu.yd. (steam shovel). Engrs. est. $25,000.

Streets and Roads

PROPOSED WORK

Rhode Island—State Bd. Pub. Roads, Providence, plans improving 1⅓ mi. Smithfield and Branch Aves. from Pawtucket line to Central Falls line, in Lincoln; 2⅓ mi. Apponang Rd. from Pawtuxet to Norwood, in Warwick; 1⅜ mi. Ten Rod Rd. from Wickford Junction to Collation Corners, in North Kingstown; 1⅓ mi. Child St., in Warren; 6 mi. Putnam Pike, in Gloucester; 2½ mi. road from Usquepang to West Kingston, in South Kingstown; all 18 ft.

N. Y., Niagara Falls — Rejected bids opened Aug. 1, paving James Ave. from Lewiston Rd. to Washington St., also Whitney Ave. from 22nd to 24th Sts., sheet asphalt, vertical fibre brick or warrenite bitulithic.

N. Y., Rochester—Plans paving Versailles Rd., warrenite bitulithic. $44,300, Navarre Rd., bithulithic, $17,900, Alcazar St., bitulithic, $9,400, Industrial St., asphalt, $30,000, Oak St., asphalt, $13,700, North Union St., asphalt, $16,600, Parsells Ave., asphalt, $2,600, Burkhard Pl., asphalt, $6,500; widening Field Rd., $20,000, Lawn St., $26,000; extending Almira St., $5,000; resurfacing Phelps Ave., asphalt, $4,500, Oak St., asphalt, $5,500; grading, laying sidewalks and sewers in Riddle St., $8,540, Taft St., $1,090; Rosewood Terrace, $1,000. C. A. Poole, city engr.

N. J., Mays Landing—Atlantic Co. rejected bids opened Aug. 9, reconstructing Sect. 6 of Route 14, Hamilton Twp., 8,123 sq.yd. warrenite bitulithic on concrete. Will readvertise. A. H. Nelson, 636 Guarantee Trust Bldg., Atlantic City, co-engr. Noted July 27.

Pa., Beaver—Soon takes bids paving and curbing Elliott Ave., probably brick. $60,000. A. W. Anderson, Municipal Bldg., Engr.

Pa., Pittsburgh—Plans grading, paving and curbing South Murtland and Bryant Sts., 38 and 44 ft., $26,000; Edgerton Ave. from South Dallas to Lloyd Sts., 44 ft., $25,000.

Pa., Taylor—Plans grading, paving and curbing, $24,000; improving sewerage system, $9,000; swimming pool and other improvements to park, $2,000.

North Carolina—State Hy. Comn., Raleigh, soon takes bids extending road 1⅓ mi. between Sanford and Jonesboro, State Project 446, Lee Co., 18 ft., 3,000 cu.yd. excav., 15,800 sq.yd. concrete or asphaltic paving. C. M. Upham, state highway engr.

N. C., Hendersonville—Henderson Co. plans constructing secondary and lateral roads or main highway from Buncombe Co. line to South Carolina line. $590,000. W. T. Bane, Route 3, Chn. Co. Hy. Comn.

N. C., High Point—Plans opening up, grading and paving new street connecting Jordan and Rankin Sts., also bridge over Southern Ry. $35,000.

N. C., Louisburg—Plans concrete paving various streets. $25,000. M. S. Davis, Louisburg, engr.

N. C., Maxton—Plans concrete or asphaltic paving various streets. $50,000. Mees & Mees, Charlotte, (street address not available), engrs.

Fla., Clearwater—Bd. Comrs. Pinellas Co., rejected bids which were to be opened Aug. 17, improving Haines Rd., as bond issue was defeated. C. E. Burleson, Clearwater, engr. Noted Aug. 10.

Ohio—Dept. Highways and Pub. Wks., Columbus, rejected bids opened Aug. 11, grading, bridging and paving 6.322 mi. Sect. "L" Mt. Gilead-Mansfield Rd., Morrow Co., Kentucky rock asphalt, bituminous concrete or rein.-con. Noted Aug. 17.

O., Youngstown—Plans cement sidewalks on 17 streets. $25,000. I. Turner, city engr.

Indiana—State Hy. Comn., Indianapolis, rejected bids surfacing 8.877 mi. French Lick Rd., 16 ft., Dubois Co., 95,627 sq.yd. concrete on concrete, 135,428 cu.yd. earth excav., 84,149 lb. steel. $114,240. Will readvertise. Noted Aug. 3.

Indiana—State Hy. Dept., Indianapolis, plans hard surfacing 11.2 mi. State Rd. 6, Marion Co.; 8 mi. State Rd. 10, and 7 mi. State Rd. 4, Vanderburg Co.; 11.5 mi. State Rd. 1, St. Joseph Co.; 26 mi. State Rd. 1, Jackson Co.; 12 mi. State Rd. 2, Allen Co.; 24 mi. State Rd. 1, Hamilton Co. All 16 ft. C. Gray, state engr.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and gravel surfacing 12 mi. Federal Aid Project 80, Sects. A and B, 18 ft., Machinac Co. F. F. Rogers, state highway comr.

Wis., Edgerton—Making plans paving 1.1 mi. Albion Rd., Victoria and Randolph Sts., 28 ft., one course rein.-con., concrete curb and gutter, $30,000. A. W. Ely, 29 West Milwaukee St., Janesville, Engr.

Ia., Albia—Rejected bids opened Aug. 21 for 11,000 sq.yd. paving and 3,200 lin.ft. curb and gutter. Will revise plans. $30,000. M. G. Hall Co., Centerville, engrs. C. C. Atchison, clk. Noted July 20.

Ia., Ft. Dodge—Making plans paving 11 blocks 11th Ave. S., between 10th St. and Central Ave., 7th St. S.W., between 11th Ave. and 7th St. viaduct. $40,000. H. C. Reynolds, city engr.

Minn., Waseca—Waseca Co. rejected bids opened Aug. 22, 11 mi. State Rd. 3, Job 2205, 13,800 c.yd. gravel surfacing. Noted Aug. 10.

Kan., Ft. Scott—Plans paving National Ave. section of Judson, Cranford and Main Sts. $28,252. N. Welsh, city engr.

Neb., Lincoln—Passed ordinance paving in Dist. 507, about 30 blocks. G. W. Bates, city engr.

N. D., Hillsboro—Plans paving 10 blocks. $30,000. N. G. Nyhus, city aud.

Tex., Alpine—Brewster Co. to vote on $300,000 bonds Sept. 16, grading and gravel surfacing 80 mi. State Highway 12. J. M. Pouncey, secy.

Tex., Clarksville—Red River Co. making plans grading and graveling 14.2 mi. State Highway 5 extending from Clarksville to Paris, 12 ft. $122,435. J. B. Rieman, co. engr.

Tex., Johnson City—Blanco Co. making plans grading, gravel and adobe surfacing building structures and five 20 ft. bridges, on 8.71 mi. Austin Fredericksburg Highway, East from Killespie Co. line, 16 ft., $61,842. M. W. Schofield, co, engr.

Tex., Johnson City—Blanco Co. making plans grading, gravel and adobe surfacing, etc., incl. 2 bridges on 6 mi. State Highway 20-A, between here and Hays Co. line. 16 ft. $40,713. M. W. Schofield, co. engr. Noted July 6.

Tex., Laredo—Webb Co. making plans grading, surfacing with bituminous macadam, and building steel and concrete structures on 23 mi. Laredo-Mirando City Pike, 16 ft., $150,000. E. J. Foster, Laredo, engr. Noted May 25.

Tex., Richmond—Fort Bend Co., preparing plans grading and surfacing 10.4 mi. State Highway 19 between Bragoria and Harris Counties, 18 ft., gravel with 1 in. bituminous topping. $150,000. C. H. Kendall, co. engr.

Wash., Port Townsend—Jefferson Co. soon receives bids reconstructing 1 mi. Olympic Highway from Brinnon eastward, incl. bridge across Dosewallips. $70,000. C. L. Peach, Port Townsend, engr.

Calif., Berkeley—Had plans prepared improving Telegraph Ave. from south city limits to Dwight Way, 21,400 sq.ft. grading, 202,700 sq.ft. 5 in. asphaltic concrete base wth 2 in. asphaltic concrete surface, 9,340 ft. concrete curb and gutter, 2 concrete catchbasins. C. L. Huggins, city engr.

Calif., Fresno—Had plans prepared improving N. St. and Butler Ave. between Stanilaus and O Sts., 322,910 sq.ft. grading, 300,220 sq.ft. asphaltic pavement, 21,785 sq.ft. concrete gutter, 11,968 lin.ft. concrete curb, 5,418 sq.ft. cement walks, 819 lin.ft. corrugated metal culvert, 12 manholes. W. Stranahan, city engr.

Calif., San Francisco—City and San Francisco Co. having plans prepared grading and paving north section Sloat Blvd. between 19th and 35th Aves. $54,000. M. M. O'Shaughnessy, city engr.

Calif., Santa Rosa—Sonoma Co. rejected bids 1.71 mi. Two-Rock-Tomales Rd., 3,500 cu.yd. excav., 1,340 cu.yd. crushed rock, 16,070 sq.yd. asphaltic surfacing; 1.5 mi. Dry Creek Rd., 4,000 cu.yd. excav., 1,340 cu.yd. crushed rock, 15,800 sq.yd. asphaltic surfacing. Work will be done by day labor. R. P. Smith, co. surv.

Ontario—Provincial Hy. Dept., Toronto, plans 6 mi. concrete highway between Lambeth and Talbotville, Elgin and Middlesex Counties. $400,000.

BIDS DESIRED

Conn., Stratford—Sept. 8, constructing Telford Rd. on West Broad St. between Barnum and Linden Aves., R. H. Hunter, town mgr.; adv. this issue.

N. Y., Buffalo—Sept. 5, by Bd. Supervs. Erie Co., City and County Hall, paving 5,200 ft. Lake Rd. 98 (Angola on Lake). 20 ft., 6,400 lin.ft. concrete curb, 9,300 cu.-yd. dry earth excav. and 12,100 sq.yd. concrete. To exceed $25,000. G. C. Diehl, Ellicott Sq. Bldg., engr.

N. Y., Mamaroneck—Sept. 11, at office of F. L. Merritt, clk. Bd. Supervs., Westchester Co., Court House, White Plains, improving Mamaroneck Ave. from Washington Sq. north to County Highway 1581, here; adv. this issue.

N. Y., Richmond Hill—Sept. 7, by Dept. Parks, Municipal Bldg., New York, improving main drive in Forest Park from Forest Parkway to Woodhaven Ave., here. F. D. Gallatin, pres.

N. Y., Yonkers—Sept. 11, at office of F. L. Merritt, clk. Bd. of Supervs., Westchester Co., Court House, White Plains, improving 0.57 mi. Palmer Ave. from Central Ave. west to Miles Square Rd.; adv. this issue.

N. J., Burlington—Sept. 5, by W. W. Marrs, city clk., for 14,500 sq. ft. concrete sidewalk, repairing 5,000 sq.ft. brick and flag sidewalk, 600 lin.ft. concrete curb, re-

Streets and Roads (Continued)

setting 2,500 lin.ft. stone curb, 100 cu.yd. grading, 1,000 sq.yd. cinder foundation and 5,000 new paving brick. B. A. Sleeper, Burlington, engr.

N. J., Highland Park—Sept. 5, by Mayor and Borough Council, Borough Council Chambers, 10 North 2nd Ave., constructing pavement on Montgomery and Johnson Sts., Cedar, Adelaide, South 6th Aves., also storm sewer in Cedar Ave. R. P. Wilson, 46 Paterson St., New Brunswick, civil engr.; adv. this issue.

Pa., Ebensburg — Sept. 6, by Supervs. Cambria Twp., c/o H. T. Jones, controller Cambria Co., reconstructing 161,000 lin.ft. Wimore Rd., vitr. brick on concrete. Owen & Plummer Inc., Otto Bldg. Johnstown, engrs.

Pa., Ebensburg—Sept. 11, by G. Prindible, burgess, c/o Controller Cambria Co., paving 2,513 lin.ft. Beech Ave., 20 ft., vitr. brick on concrete, with raised stone curb or one course concrete and hillside vitr. brick with raised concrete curb. $30,000. J. F. Blankenkom, c/o Clay Mfg. Co., Patton, boro clk.

Maryland—Sept. 13, by State Roads Comn., Baltimore, building 4 sections state highway, Howard Co., Contr. HO-23; Harford Co., Contr. H-29; Prince George Co., Contr. P-37; Calvert Co., Contr. C-14; J. N. Mackall, chn.; adv. this issue.

N. C., Nashville—Sept. 4, by Nash Co. Hy. Comn., constructing 18 mi. sand-clay or gravel road from Nashville via Stricklands Mill to Baileys. $80,000. W. S. Wilkerson, Nashville, Chn. Noted April 6.

S. C., Anderson—Oct. 3, by Anderson Co. Hy. Comn. grading, surfacing and bridging 8 mi. section of Anderson-Liberty Rd., 48,218 cu.yd. common and 1,200 cu.yd. rock excav., 24,135 cu.yd. topsoil, 1,142 lin.ft. rein.-con. pipe, 221 cu.yd. concrete, 262 sq.yd. bituminous pavement, etc. W. A. Sanders, Anderson, engr.

S. C., Charleston—Sept. 7, by Sanitary & Drainage Comn., improving 9.55 mi. road between Tide Water Creek and Atlantic Coast Line Crossing near Maggetts, Charleston Co., 62,190 cu.yd. excav., 88,426 sq.yd. plain concrete and 12,420 sq.yd. rein.-con. surfacing, 807 lin.ft. rein.-con. pipe, 52.8 cu.yd. concrete headwalls, etc.; 10.7 mi. section of Mt. Pleasant-McCellanville Rd., 38,658 cu yd. excav., 15,694 cu.yd. shell surfacing, compacted, 114.95 cu.yd. concrete, etc. J. W. Martin, 39 Broad St., engr.

S. C., Sumter—Sept. 7, by Sumter Co Permanent Rds. Comn., hardsurfacing 4.3 mi. Bishopville Rd., 6.1 mi. Sumter-Manning Rd., 4.3 mi. Pinewood Rd., 4.2 mi. Camden Rd., 4.3 mi. Mayesville Rd.; grading and surfacing 4.31 mi. section of Sumter-Mayesville Rd., 6,720 cu.yd. excav., 46,196 sq yd. plain concrete surfacing or 5 in. concrete base and header with either asphaltic concrete or sheet asphalt surface, etc. Lee, Pennell & Murray, Sumter, engrs.

Fla., DeLand—Sept. 7, by Bd. Comrs. Volusia Co., paving with 6 in. rock base, rolled, oiled and sounded, alternate of 7 in. rock base, 17 mi. Sect. Dixie Highway between Tarvia Rd. south to Brevard Co. line, $136,000; 5 mi. sect. Dixie Highway from Rose Bay to New Smyrna, $350,000; 30 mi. New Smyrna-Osteen Ferry Rd., $240,000. Engineer not announced.

Alabama—Sept. 26, by W. S. Keller, state highway engr., Montgomery, grading and gravel surfacing 8.99 mi. Jasper-Birmingham Highway from Warrior River to Jefferson Co. line, Walker Co., 58 acres clearing, 40,538 cu.yd. common and 22,208 cu.yd. solid rock excav., 2,948 sta.yd. overhaul, 778.96 cu.yd. concrete, 55,648 lb. reinforcing, 10,272 cu.yd. washed Warrior River gravel for surfacing within 1 mi., 15,249 cu.yd. shipped pit gravel within 1 mi., 67,101 one-half mi. units additional haul, etc.; surfacing, grading and bituminous macadam, 6.87 mi. Decatur-Moulton Rd., Lawrence Co., 24 acres clearing, 58,853 cu.yd. common excav. and borrow, 4,000 cu.yd. solid rock excav., 47,500 sta.yd. overhaul, 1,339.16 cu.yd. concrete, 25,940 lb. reinforcing, 16,125 cu.yd. crushed stone base, 64,600 sq.yd. 2½ in. bituminous macadam, penetration method, etc., 7.648 mi. sect. Huntsville-Guntersville Rd., Madison Co., 21 acres clearing, 24,105 cu.yd. common excav. and borrow, 15,855 cu.yd. solid rock excav., 638.67 cu.yd. concrete, 50,070 lb. reinforcing, 23,800 sq.yd. 2½ in. bituminous macadam, penetration method, 5,850 cu.yd. crushed stone base, 14,430 cu.yd. local gravel surfacing within 1 mi., 60,000 one-half mi. units additional haul.

O., Akron—Sept. 6, by M. P. Tucker, dir. Pub. Serv. grading and laying sidewalks on 2,200 ft. Lakemont and Hillcrest Sts., $12,000, 3,500 ft. Englewood Ave., $19,000; grading and paving 2,800 ft. North Main St., 54 ft., $70,000; grading, paving and laying sidewalks on 1,000 ft. Middlebury Ave., 24 ft., $12,000, 2,000 ft. Aqueduct St., 28 ft., $38,000. E. A. Kemmler, Delaware Bldg., engr. Noted Aug. 24.

O., Akron — Sept. 7, by S. Porter, clk. Summit Co., grading and paving 1.32 mi. Brittain Massillon Rd., Sect. B-2, 16 ft., 12,250 cu.yd. excav., 12,500 sq.yd. rein.-con., $45,762; 1.19 mi. Richfield-Hudson Rd. 19, Sect. A, 16 ft., 7,500 cu.yd. excav., 11,250 sq.yd. 3 in. bituminous macadam on 5 in. waterbound macadam, $26,131. J. Weaver, co. engr.

Ind., Angola—Sept. 2, by Comrs. Steuben Co., grading and graveling 15,370 ft. Lynn Collins Rd., 18 ft. $26,500. F. Hubbel, Angola, engr. Noted Aug. 24.

Ind., Goshen—Sept. 4, by Comrs. Perry Co., surfacing 3 mi. Henry Parks Rd., 18 ft., crushed stone. $26,300. M. M. Groves, Cannelton, engr.

Ind., Goshen—Sept. 6, by Comrs. Elkhart Co., paving 13,444 ft. "V" Road, 18 ft., crushed stone. $27,000. C. L. Kinney, Goshen, engr.

Ind., Greencastle — Sept. 2, by Comrs. Putnam Co., macadam surfacing 7,921 ft. James B. Scott Rd., 16 ft., 14,071 sq.yd. bituminous concrete on concrete. $31,000. A. Plummer, Greencastle, engr. Noted Aug. 24.

Ind., Lawrenceburg—Sept. 4, by Comrs. Dearborn Co., paving 31,498 ft. Jacob Hoffmeier Rd., 16 ft., broken stone. $42,000. H. Fitch, Lawrenceburg, engr. Noted Aug. 24.

Ind., Marion—Sept. 5, by Comrs. Grant Co., paving 10,600 ft. Lewis E. Bryant Rd., 16 ft., 19,730 sq.yd. asphalt on concrete, $44,500; 14,237 ft. J. C. Lake Rd., 16 ft., 25,547 sq.yd. asphalt on concrete, $52,000. G. Swisher, Marion, engr. Noted Aug. 24.

Ind., Monticello—Sept. 5, by Comrs. White Co., paving 12,880 ft. Charles E. Carlson Rd., 16 ft., broken stone, $26,595; grading and gravel surfacing 15,731 ft. Robert Chamberlain Rd., 16 ft., $25,703. G. A. Thomas, Monticello, engr.

Ind., Spencer—Sept. 5, by Comrs. Owen Co., limestone surfacing 26,400 ft. William Grant Rd., 16 ft. $29,000. L. Drescher, Spencer, engr.

Ind., Winamac—Sept. 5, by Comrs. Pulaski Co., grading and graveling 23,892 ft. R. A. Phillips Rd., 16 ft. $31,000. R. E. Nutt, Winamac, engr. Noted Aug. 24.

Michigan—Sept. 11, by State Hy. Dept., Lansing, grading and surfacing 3.992 mi. State Trunk Line Rd. 22-6, Sect. A, 16 ft., Benzie Co., 25,342 cu.yd. excav., 37,469 sq. yd. gravel. F. F. Rogers, state highway comr.

Michigan—Sept. 12, by State Hy. Dept., Lansing, grading and surfacing 5.187 mi. State Trunk Line Rd. 14-5, Sects. A and B, 16 ft., Clare Co., 12,194 cu.yd. excav., 48,608 sq.yd. gravel. F. F. Rogers, state highway comr.

Ia., Manchester—Sept. 1, by Auditor Delaware Co., grading 12.54 mi. Primary Rd. Project 236, radiating north and west of here, 156,697 cu.yd. earth and 1,530 cu.yd. loose rock excav., 73,539 lin.ft. 6 in., 2,310 lin.ft. 8 in. and 500 lin.ft. 12 in. tile, etc.; gravel surfacing 12,444 mi. Federal Aid Project 103, from here south to county line.

Ia., Montezuma — Sept. 5, by Auditor Poweshiek Co., grading 8.092 mi. Primary Project 247, from northwest of Malcom north to Tama Co. line, 92,079 cu.yd. earth excav., 18,854 lin.ft. 6 in. tile, etc. C. E. Olson, co. engr.

Minnesota—Sept. 18, by State Hy. Dept., St. Paul, 15.6 mi. State Project 6-07, Federal Aid Project 291, 177,000 cu.yd. excav., culverts, 3 bridges, $42,000; 9 mi. State Project 6-08, Federal Aid Project 270, 102,365 cu.yd. excav., monolithic and port culverts, $25,000, both in Lincoln Co. J. C. West, Ivanhoe, and State Hy. Dept., 1246 University Ave., St. Paul, engrs.

Tex., Palo Pinto—Sept. 6, by E. L. Pitts, judge Palo Pinto Co., improving State Highway 1, Sect. A, 87.81 acres clearing and grubbing, 47,234 cu.yd. road excav., 94,113.3 cu.yd. borrow, 26,701.2 cu.yd. overhaul, 15,875.2 cu.yd. loose and solid rock excav., 5,079 cu.yd. ditch excav., 127,753.6 cu yd. crushed stone hauled, 114,738 sq.yd. bituminous surface, 268,648 lb. reinforcing, 2,921.25 cu yd. class A and class B concrete. G. W. Courter, Palo Pinto, engr.

Colo., Denver—Sept. 6, by Dept. Impvts. and Parks, 21,400 sq.yd. asphalt paving, in Capital Hill Paving Dist. 1. $42,620. A. K. Vickery, City Hall, engr.

Utah—Sept. 5, by State Road Comn., Salt Lake City, grading and gravel surfacing 9.02 mi. road from Millard Co. line to Levan, Juab Co. $49,724. H. C. Means, state road engr.

Utah, Salt Lake City—Sept. 8, by Salt Lake Co. Comn., hardsurfacing 2.3 mi. 48th St. south from 9th St. east to Holiday St., 18 ft. A. Christopherson, co. engr.

Nevada—Sept. 6, by State Hy. Comn., Carson City, grading and paving 1.59 mi. Route 1, Sect. B-3, through Sparks, Proposal 1, 16,800 sq.yd. concrete pavement, 3,100 cu.yd. excav., 1.59 mi. prepare subgrade and shoulders, etc., Proposal 2, 3,650 ton asphaltic concrete base course, 1,830 ton top course, 3,975 cu.yd. excav., 1.59 mi. prepare subgrade and shoulders, etc. G. W. Borden, state highway engr.

Washington — Sept. 11, by State Hy. Dept., Olympia, grading and crushed rock surfacing 7 mi. State Rd. 4, from Tonasket eastward, Okanogan Co.; paving 2.4 mi. National Parks Highway from Elbe to Park Junction, Pierce Co; 5 mi. Sunset Highway from Issaquah to Preston, King Co. J. Allen, state highway engr.

Washington—Oct. 3, by State Hy. Bd., Olympia, grading and draining 20.5 mi. Inland Empire Highway, Umtanum and Selah, Kittitas and Yakima Counties; grading and crushed rock surfacing 12.25 mi. North Bank Highway, from Underwood to Lyle, Klickitat Co. J. Allen, state highway engr.

Calif., San Jose — Sept. 5, by Supervs. Santa Clara Co., paving King Rd., Supervisor Dist. 2, 129,120 sq.ft. oil macadam; 5,035 lin.ft. Naglee Ave., Supervisor Dist. 4, 90,920 sq.ft. oil macadam; Washington St. in town of Santa Clara, Sect. A, 45,666 sq.ft. 1½ in. asphaltic concrete on 5 in. hydraulic concrete, Sect. B, 37,836 sq.ft. 6 in. oil macadam. I. J. Ryder, co. surv.

Calif., Stockton — Sept. 5, improving Pershing and Oranges Sts., etc., 11,266 cu. yd. excav., 9,484 cu.yd. fill, 23,907 lin.ft. concrete curb and gutter, 134,255 sq.ft. cement walks, 448,081 sq.ft. 3 in. asphaltic concrete on 3 in. macadam. W. H. Hogan, city engr.

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., opened bids Aug. 22, grading, curbing, recurbing, flagging and reflagging (1) 46th St., etc., paving (2) 7th Ave., from W. J. Fitzgerald, 547 West 45th St., New York, (1) $63,637 (2) $12,566; Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (1) $66,447 (2) $13,173; Sicilian Asphalt Paving Co., 41 Park Row, New York, (1) $68,099 (2) $12,943. Noted Aug. 17.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., opened bids Aug. 21, recurbing, reflagging and paving (1) Dutch Kills St., paving (2) North Jane St. (3) Howland St. (4) Pettit Pl. (5) 122nd (Brevoort) St., grading, regrading, curbing and paving (6) Van Alst Ave. (7) South Jane St., also receiving basins in westerly corner Ely and Van Alst Aves., etc., grading, curbing and laying sidewalks on (8) Crown Pl. (9) 122nd (Brevoort) St. (10) Gates Ave., grading (11) 42nd St., recurbing and paving (12) Bleecker St., grading, curbing, laying sidewalks and crosswalks on (13) 81st St., grading westerly sidewalks and gutter spaces, setting curb and laying sidewalks where necessary on (14) 126th (North Villa) St., grading, curbing, laying sidewalks and paving (15) Gleane St., etc., from Cleveland Trinidad Paving Co., Flushing (1) $7,764 (4) $3,174 (5) $3,714 (12) $3,505 (15) $10,592; Sicilian Asphalt Paving Co., 41 Park Row, New York, (1) $7,879 (5) $3,433 (12) $3,193 (15) $10,448; Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn (1) $7,996 (4) $3,300 (5) $3,130 (12) $2,968 (15) $11,048; Astoria Contg. Co., 320 Grand Ave. (2) $6,608 (7) $25,135; Kennedy & Smith, Inc., 93 Amity St., Flushing (2) $6,726 (3) $6,163 (9) $2,015 (11) $3,072 (13) $3,730; Welsh Bros. Contg. Co., 32 Queens St., (2) $6,837 (3) $5,731 (6) $14,654 (7) $24,780; H. J. Mullen Contg. Co., Jamaica Ave. and 144th St., Jamaica, (3) $6,134 (6) $14,806 (9) $1,781 (13) $3,940 (14) $1,210; Peace Bros., Inc., 20 Main St., Flushing (6) $14,470 (8) $2,613 (10) $4,965; F. J. Clancy (7) $25,095; R. A. Hess, Inc., Corona, (8) $2,056 (11) $3,076; J. J. O'Brien, Inc., (8) $2,365 (14) $1,214; H. E. Kordes Co., Inc., 2577 Cooper St., Brooklyn, (9) $2,064 (10) $3,855; C. Kurth, 9519 12th St., Richmond Hill (10) $3,949 (11) $3,003 (13) $3,538 (14) $1,128. Noted Aug. 17.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., opened bids Aug. 21, repaving with asphalt, Broad St., etc., from W. J. Fitzgerald, 547 West 45th St., $45,734, Uvalde Asphalt Paving Co., 1 Bway, $52,944, Sicilian Asphalt Paving Co., 41 Park Row, $54,009; 78th St., etc., from Asphalt Constr. Co., 208 Bway, $20,804, Interboro Asphalt Co., 233 Bway, $20,831, W. J. Fitzgerald, 547 West 45th St., $21,303. Noted Aug. 17.

Pa., Phila.—Opened bids Aug. 24, grading, paving, etc., (1) Torresdale Ave. from Frankford Ave. to Lewis St., (2) 22nd St. from Locust to Fitzwater Sts., (3) Buist Ave. from 70th to 71st Sts., Haines St. from Ognotz Ave. to Limekiln Pike, (4) Columbia Ave. from 59th to 60th Sts.,

Streets and Roads (Continued)

Louden St. from C to D Sts., Turner St. from 54th to Columbia Aves., (5) Pittsville Ave. from Limekiln Pike to Ognotz Ave., 25th St. from Wolf to South Sts., (6) Fayette St. from Washington Lane to Limekiln Pike, (7) Ferndale St. from Solly to Benson Sts., (8) Luzerne St. from 2nd St. to Pennsylvania R.R., (9) Lombard St. from 27th St. to Schuylkill River, (10) Turner St. from 59th to 60th Sts., (11) 28th St. from Clearfield St. to Chalmers Ave., (12) Washington Lane from Wissahickon Ave. to Walnut Lane, (13) furnishing 400 tons crushed stone, from:

Barber Asphalt Paving Co., Land Title Bldg., (1) $22,562 (2) $33,774 (3) $29,563 (4) $21,006 (5) $27,963. Eastern Paving Co., Colonial Trust Bldg., (1) $13,282 (2) $36,574 (3) $27,339 (4) $18,488 (5) $27,158. Union Paving Co., 35th and Spruce Sts., (2) $37,605. H. B. Warren, Phila., (street address not available), (6) $24,022. F. Mack Contg. Co., Commercial Trust Bldg., (6) $26,984 (11) $7,076 (12) $3,043. Fish-Rutherford Co., Real Estate Trust Bldg., (6) $27,322 (8) $25,173 (9) $4,075. Curtiss Bros., Tacony (Phila. P. O.), (7) $2,065. T. L. Flannigan, 1204 East Montgomery Ave., (7) $2,273 (8) $22,681. J. Mehan & Sons, 915 West Dauphin St., (8) $26,132 (9) $3,903 (10) $2,630 (11) $6,903. United Paving Co., Colonial Trust Bldg., (9) $3,999. E. A. Mullen, 5512 Vine St., (10) $2,698 (11) $6,999 (12) $3,279. Birdsboro Stone Co., Birdsboro, N. J., (13) $10,000. I. F. Dyer Quarry Co., Chestnut Hill, (13) $8,000. W. J. Sand & Supply Co., Widener Bldg., (13) $8,500.

O., Akron—M. P. Tucker, dir. Pub. Serv., opened bids August 23, grading and paving (1) 900 ft. Nieman St. (a) brick (b) asphalt (2) 150 ft. Delbeth Rd. (a) brick (b) asphalt, grading, laying walks and paving (3) 450 ft. Kenmore Blvd. (4) 500 ft. Carpenter St. (5) 740 ft. School St., grading, 4 in. cement walks and (a) gravel roadway (b) cinder roadway (6) 1,200 ft. Carlysle St. (7) 1,300 ft. McKinley Ave. (8) 3,000 ft. Pitkin Ave., from Columbus Asphalt Paving Co., 304 Buckeye Bldg. (1a) $16,942 (1b) $16,683 (2a) $6,384 (2b) $6,224; E. and D. McShaffrey Co., 574 Rhodes Ave., (1a) $17,221 (4) $9,068 (5) $19,141; T. E. McShaffrey Constr. Co., 170 South Forge St., (1a) $17,636 (1b) $17,012 (2a) $6,129 (2b) $5,809; E. H. Rawle, 839 Bloomfield Ave. (3) $8,000 (4) $9,255 (7a) $6,592 (7b) $5,952; G. J. Stubbs, 30 West State St. (6a) $7,421 (6b) $6,671 (7a) $6,391 (7b) $5,631 (8a) $16,664 (8b) $14,764; Timms-Clark Co., 437 Second Natl. Bldg., (6a) $7,897 (7b) $6,909 (8a) $17,740 (8b) $15,365; J. P. McCausland, R.F.D. 8, Cuyahoga Falls, (6a) $7,432 (6b) $7,169; Di Foti Constr. Co., 72 Furnace St., (7a) $6,846 (7b) $6,326 (8a) $16,363 (8b) $14,938. Noted Aug. 10.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving (1) 5.372 mi. Route 1, Sect. 25, Clark Co., (2) 1.288 mi. Route 1, Sect. 164, Cook Co., (3) 5.037 mi. Route 3, Sect. 8, Rock Island Co., (4) 5.037 mi. Route 3, Combination A, Rock Island Co., (5) 4.867 mi. Route 3, Sect. 71, Randolph Co., (6) 4.867 mi. Route 3, Combination A-2, Randolph Co., (7) 4.622 mi. Route 3, Sect. 72, Randolph Co., (8) 9.489 mi. Route 3, Combination A-3, Randolph Co., (9) 9.489 mi. Route 3, Combination A-4, Randolph Co., (10) 0.607 mi. Route 6, Sect. 28, Whiteside Co., (11) 1.664 mi. Route 6, Sect. 29, Whiteside Co., (12) 5.942 mi. Route 9, Sect. 9, McLean Co., (13) 5.942 mi. Route 9, Combination B, McLean Co., (14) 3.753 mi. Route 9, Sect. 10, McLean Co., (15) 3.753 mi. Route 9, Combination C, McLean Co., (16) 9.695 mi. Route 9, Combination D, McLean Co., (17) 9.695 mi. Route 9, Combination E, McLean Co., (18) 6.098 mi. Route 10, Sect. 19, Sangamon Co., (19) 4.609 mi. Route 20, Sect. 12, Lake Co., (20) 6.566 mi. Route 22, Sect. 13, Will Co., (21) 0.769 mi. Route 22, Sect. 17, Kane Co., (22) 5.089 mi. Route 31, Sect. 5, Adams-Brown Co., (23) 5.673 mi. Route 31, Sect. 6, Brown Co., (24) 10.762 mi. Route 31, Combination F, Adams-Brown Co., (25) 5.362 mi. Route 38, Sect. 1, Jersey Co., (26) 4.872 mi. Project 26, Sect. 21, Logan Co., (27) 5.682 mi. Project 26, Sect. 22, Logan Co., (28) 10.554 mi. Project 26, Combination G, Logan Co., (29) 5.003 mi. Project 28, Sect. 26, Livingston Co., (30) 4.233 mi. Project 29, Sect. 36, Iroquois Co., (31) 6.6 mi. Project 29, Sect. 37, Iroquois Co., (32) 2.9 mi. Project 29, Sect. 38-D, Iroquois Co., (33) 13.733 mi. Project 29, Combination H, Iroquois Co., (34) 5.005 mi. Project 39, Sect. 2, Carroll Co., (35) 6.628 mi. Project 44, Sect. 2, Christian Co., (36) 3.655 mi Project 30, Sect. 15, Kankakee Co., (37) 5.625 mi. Project 30, Sect. 16, Kankakee Co., (38) 4.041 mi. Project 30, Sect. 17, Kankakee-Will Co., (39) 4.041 mi. Project 30, Combination H, Kankakee Co., (40) 13.321 mi. Project 30, Combination I, Kankakee-Will Co., (41) 13.321 mi. Project 30, Combination I-1, Kankakee-Will Co., (42) 4.168 mi. Project 32, Sect. 11, Washington-Jefferson Co., (43) 3.404 mi. Project 32, Sect. 12, Jefferson Co., (44) 5.158 mi. Project 32, Sect. 13, Jefferson Co., (45) 12.73 mi. Project 32, Combination J, Washington-Jefferson Co., (46) 5.165 mi. Project 33, Sect. 42, Fulton Co., (47) 5.372 mi. Project 36, Sect. 66 (concrete) Woodford-Marshall-La Salle Co., (48) 5.372 mi. Project 36, Sect. 66 (brick) Woodford-Marshall-La Salle Co., (49) 4.873 mi. Project 36, Sect. 67, Marshall-La Salle Co., (50) 10.245 mi. Project 36, Combination K, Marshall-La Salle Co., (51) 5.208 mi. Project 38, Sect. 45, Schuyler Co., (52) 3.638 mi. Project 38, Sect. 46, Schuyler Co., (53) 8.846 mi. Project 38, Combination L, Schuyler Co., (54) 0.35 mi. Route 6, Sect. E, Bond Co., (55) 0.94 mi. Route 15, Sect. K-29a, La Salle Co., (56) 1.68 mi. Route 7, Sect. N-29a, Madison Co.; grading (57) 90,505 cu.yd. Route 1, Sect. 29-A, White-Gallatin-Saline Co., (58) 30,125 cu.yd. Route 1, Sect. 30-A, Saline Co., (59) 47,500 cu.yd. Route 1, Sect. 31-A, Saline Co., (60) 168,130 cu.yd. Route 1, Combination M, Saline Co., (61) 45,895 cu.yd. Route 1, Sect. 33-A, Saline Co., (62) 60,410 cu.yd. Route 1, Sect. 34-A, Williamson-Johnson Co., (63) 146,305 cu.yd. Route 1, Combination N, Williamson-Johnson Co., (64) 31,400 cu.yd. Route 1, Sect. 45A, Johnson Co., (65) 55,970 cu.yd. Route 1, Sect. 36-A, Johnson Co., (66) 52,010 cu.yd. Route 1, Sect. 37-A, Johnson Co., (67) 139,380 cu.yd. Route 1, Combination O, Johnson Co., (68) 285,685 cu.yd. Route 1, Combination P, Johnson Co., (69) 56,040 cu.yd. Route 3, Sect. 37-A, McDonough Co., (70) 67,020 cu.yd. Route 8, Sect. 32-A, Woodford Co., (71) 42,225 cu.yd. Route 8, Sect. 37-A, Tazewell Co., (72) 42,120 cu.yd. Route 9, Sect. 9-A, McLean Co., (73) 26,370 cu.yd. Route 9, Sect. 10-A, McLean Co., (74) 68,490 cu.yd. Route 9, Combination Q, McLean Co., (75) 37,340 cu.yd. Route 12, Sect. 15-A, Marion Co., (76) 36,865 cu.yd. Route 28, Sect. 4-A, Knox-Henry Co., (77) 31,550 cu.yd. Route 28, Sect. 5-A, Henry Co., (78) 98,415 cu.yd. Route 28, Combination R, Knox-Henry Co., (79) 25,797 cu.yd. Project 26, Sect. 20-A, Logan Co., (80) 60,930 cu.yd. Project 33, Sect. 43-A, Fulton Co., (81) 46,830 cu.yd. Project 38, Sect. 44-A, Schuyler Co., from

Thompson & Oren, St. Louis, Mo., (street address not available), (1) $125,798.

R. A. Baum, Paris, (1) $116,158.

O. Arnold, Casey, (1) $120,965.

Chicago Heights Coal Co., Chicago Heights, (2) $22,002.

J. Mack, Chicago, (street address not available), (2) $25,364.

J. L. Baumon, Joliet, (2) $24,684, (20) $116,972.

Illinois State Constr. Co., Chicago, (street address not available, (12) $109,258, (14) $70,215, (16) $178,000, (18) $136,981, (19) $104,427, (21) $17,688, (55) $19,151.

Mauts & Oren, Effingham, (5) $99,731, (7) $107,274, (9) $227,000.

List & Gifford, 415 Railway Exch. Bldg., Kansas City, Mo., (5) $113,502, (6) $140,000, (44) $123,938.

H. W. Horst, Horst Bldg., Rock Island, (3) $127,778, (4) $143,000.

Layton Constr. Co., Muscatine, Ia., (4) $145,000, (10) $19,499, (11) $45,909.

G. Sheldon Co., 312 Putnam Bldg., Davenport, Ia., (4) $148,168, (10) $17,859, (11) $41,110, (34) $122,148.

R. F. Conway, 133 West Washington St., Chicago, (3) $126,247, (17) $244,500, (40) $273,000.

Capitol Constr. Co., Des Moines, Ia., (street address not available), (3) $123,530.

Jensen & Schafer, Pekin, (17) $214,125, (51) $130,275, (52) $114,526, (53) $239,628.

L. D. Kuhn, Bloomington, (17) $229,647, (70) $23,597.

R. L. Williams, Wyatt, Mo., (12) $110,055, (14) $69,515, (16) $160,200, (26) $97,083, (27) $112,549, (28) $193,000, (36) $74,037, (37) $120,915, (40) $264,270, (42) $79,348, (43) $66,147, (44) $108,306, (45) $226,800, (47) $100,344, (49) $101,464, (50) $189,100.

L. D. Lane, Bloomington, (12) $109,637, (26) $99,155, (27) $112,226, (29) $125,705.

Hedges Constr. Co., 111 West Washington St., Chicago, (14) $69,250.

Alzina Constr. Co., Springfield, (18) $128,064, (22) $102,874, (23) $116,331, (24) $203,820, (28) $198,270, (35) $142,440, (47) $105,750, (49) $110,357, (50) $200,565.

Baker, Overton & Thompson, Indianapolis, Ind., (street address not available), (18) $124,113, (30) $93,061, (31) $123,715, (32) $52,893, (33) $266,666, (35) $136,923.

Powers-Thompson Constr. Co., Joliet, (20) $123,354.

Dunn Constr. Co., Chicago, (street address not available), (21) $17,743.

Warner Constr. Co., 106 North La Salle St., Chicago, (20) $132,794.

Doro & Jacobson, Waukegan, (19) $102,425.

Federal Paving Co., 133 West Washington St., Chicago, (19) $113,094.

Russell Condon Constr. Co., Chicago, (street address not available), (22) $101,513, (23) $115,376, (51) $122,105.

Indiana Road Paving Co., Rochester, Ind., (22) $99,393, (23) $112,691, (24) $190,700.

Eiff & Simons, Quincy, (24) $191,000.

Jaicks Bros., River Forest, (21) $15,695, (34) $131,188.

Nelson Bros., Jerseyville, (25) $114,764.

C. M. Haines, Jerseyville, Ill., (25) $118,119.

C. H. Degenhardt, Alton, (25) $117,699.

H. K. Rhodes, Lincoln, (28) $191,275.

Hoffman & Snell, Lincoln, (26) $96,964, (27) $109,852.

R. Loeb & Son, St. Louis, Mo., (street address not available), (29) $124,213.

D. A. Meyers, Peoria, (29) $124,503.

P. Erlinson, St. Joseph, Mo., (30) $98,385 (31) $126,521, (32) $54,200.

C. W. Clark, Clinton, Ind., (30) $99,608, (31) $132,956, (32) $56,935, (33) $273,000.

McMahon Constr. Co., Rochester, Ind., (33) $266,000.

Vanderboom & Sons, Chicago, (street address not available), (34) $109,059.

Wabash Constr. Co., Vincennes, Ind., (35) $147,565, (42) $8 080, (43) $72,239, (44) $119,472, (45) $2 3,902.

Rauth-Reilly Constr. Co., Goshen, Ind., (36) $69,681, (37) $118,239, (38) $85,395, (40) $264,270.

J. Morst & Son, Kankakee, (36) $71,264, (37) $113,451, (38) $86,806.

F. Lorenz, Oak Glen, (38) $84,066, (41) $288,000.

W. O'Neil Sons & Co., Fairbault, Mo., (42) $91,906, (43) $76,007, (45) $265,476.

Sutton & Moore, Canton, (46) $120,904.

Trompeter & Son, Peru, (47) $100,395, (49) $103,010.

G. W. Comstock, 221 Cooper St., Peoria, (55) $19,331.

Stocker Gravel & Constr. Co., Highland, (54) $8,761, (56) $13,446.

Buis & Olsen, St. Joseph, Mo., (street address not available), (62) $33,336, (63) $46,000, (64) $25,322, (65) $32,252, (66) $28,323, (67) $77,300, (68) $123,000, (72) $23,291, (73) $14,820, (74) $35,408, (76) $16,688, (77) $15,380, (78) $31,775, (80) $24,142, (81) $29,852.

Lamoreaux Bros., 805 Brandeis Theatre Bldg., Omaha, Neb., (61) $17,744, (63) $51,962, (67) $94,893, (72) $25,199, (73) $15,942, (74) $39,084, (76) $20,518, (77) $16,090.

Keating Bros., St. Louis, Mo., (street address not available), (57) $33,398, (60) $67,000.

Cameron, Joyce & Co., Keokuk, Ia., (69) $18,333, (74) $41,524, (77) $16,958, (78) $30,292.

H. Sweitzer, Marion, (58) $17,691, (59) $17,881, (61) $16,205, (62) $31,020, (64) $24,353, (65) $31,149, (66) $26,580, (68) $128,316.

L. Rich Constr. Co., Denny and Manchester Sts., St. Louis, Mo., (57) $27,628, (58) $15,605, (59) $15,453, (60) $56,500, (61) $14,835, (62) $28,954, (64) $23,887, (65) $32,299, (66) $26,728.

Frazier-Davis Constr. Co., Arcade Bldg., St. Louis, Mo., (63) $50,000.

L. Thomas, Mt. Vernon, (57) $29,897, (58) $16,240, (59) $16,917, (60) $60,053.

New Era Constr. Co., 3735 North Halsted St., Chicago, (70) $24,876, (71) $18,072, (72) $20,250, (73) $12,796, (80) $26,829.

J. O. McGowery, Chicago, (street address not available), (69) $15,824, (70) $21,933.

Crawley & Whitnell, St. Louis, Mo., (street address not available), (69) $16,652, (80) $28,562.

J. B. McArthur, Joliet, (71) $22,475.

Anderson Bros., Rockford, (71) $22,577.

W. C. Johnson, 512 South High St., Belleville, (75) $14,975.

M. Frazier, Louisville, (75) $16,405.

W. O. Whitsell, Mt. Vernon, (75) $14,196.

F. J. McCaughney, 4910 Winthrop Ave., Chicago, (78) $35,338, (79) $5,282.

C. Knox, Rock Island, (76) $15,049.

R. Plubene, Gillespie, (79) $6,791.

A. O. McCoy, Mt. Sterling, (79) $6,791, (81) $27,539.

M. D. Gates, Lincoln, (79) $6,782.

B. F. Harrison, Poor Farm Rd., Decatur, (81) $30,016. Noted Aug. 3.

Wis., Mellen—Paving Bennett and Main Sts., 11,700 sq.yd. rein.-con., 5,175 lin.ft. combined curb and gutter, 4,000 cu.yd. excav., etc., from Woodrich Constr. Co., 837 Metropolitan Life Bldg., Minneapolis, Minn., $38,471. Noted Aug. 10.

Minn., St. Paul—H. W. Austin, city purch. agt., opened bid Aug. 14, paving about 43 blocks, Crocus Hill Dist., 57,706 sq.yd. 4 in. cresoted wood blocks, from

Streets and Roads (Continued)

Fielding & Shepley, 216 University Ave., $256,900. Noted Aug. 10.

Tex., Beaumont—Jefferson Co., constructing and paving (1) 4.5 mi. Port Neches Rd., (a) concrete (b) 2 in. asphalt on concrete (2) 3 mi. Spindle Top Rd., (a) concrete (b) bituminous on concrete (3) 4.5 mi. Franklin St. Rd. (a) concrete (b) asphaltic macadam (4) 3 mi. 7th St. Rd. (a) concrete (b) 2 in. bituminous on concrete (5) 2 mi. 16th St. Rd. (a) concrete (b) bituminous on concrete from Smith Bros., Crockett, (1a) $144,208 (1b) $167,446 (2a) $91,809 (2b) $106,678 (3a) $181,325 (3b) $207,138 (4a) $122,169 (4b) $140,488 (5a) $71,923 (6b) $83,025. H. K. McCollum Constr. Co., Texas State Bank Bldg., (1a) $133,171 (1b) $169,075 (2a) $84,304 (3b) $107,598 ((3a) $154,935 (3b) $195,298 (4a) $114,419 (4b) $133,063 (5a) $64,376 (5b) $81,937. J. P. McElwrath, Corsicana, (1a) $120,274 (1b) $177,298 (2a) $77,262 (2b) $114,299 (3a) $143,922 (3b) $208,689 (4a) $102,591 (4b) $147,566 (5a) $60,082 (5b) $85,313. Noted July 27.

Tex., Halletsville—Lavaca Co., grading roadway and building steel and concrete bridges and structures on 11.07 mi. Highway 3-B, 64,023 cu.yd. excav., 26,498 cu.yd. borrow, 227,256 lb. reinforcing and 174,740 lb. structural steel, 1,521.6 cu.yd. Class A and 314.2 cu.yd. Class B concrete, from W. T. Hutto & Sons, Gonzales, $78,406; Wear & Ratcliff, Rogers, $84,432; R. G. Buckner & Sons, Cleburne, $89,334; drainage structures only from Gonzales Cement Wks., Gonzales, $55,480. Noted Aug. 3.

Tex., Seguin—Guadalupe Co., grading, gravel surfacing and building rein.-con. structures, on 3.39 mi. State Highway 3 between Scherts and Cibilo, 10,538 cu.yd. excav., 657 cu.yd. concrete, 86,240 lb. reinforcing, 9,157 cu.yd. gravel (at pits), from W. T. Hutto & Sons, Gonzales, $27,005; J. W. Goodrum, Seguin, $27,201; Ruby & Co., Blanco, $29,957. Noted Aug. 3.

Colo., Denver—Dept. Impvts. and Parks, concrete paving 12 blocks Alley Paving Dist. 85, from Stack Bros. Constr. Co., 338 South High St., $24,687; J. F. Roberts Constr. Co., Tramway Bldg., $24,983; Western Paving Co., 601—1st Natl Bank Bldg., $24,983. Engrs. est. $29,467. Noted Aug. 10.

Colo., Denver—Dept. Impvts. and Parks, asphalt paving 1.25 mi. Sante Fe Dr. Dist. 1, 36 ft., from Western Paving Co., 601—1st Natl. Bank Bldg., $54,717, Engrs. est. $60,300. Noted Aug. 10.

Calif., Oakland—Opened bids improving 14th St. from Poplar to Market Sts., (1) 127,792 sq.ft. grading, (2) 774 ft. concrete curb with steel guard, (3) 3,339 ft. concrete curb without steel guard, (4) 4,423 sq.ft. concrete gutter, (5) 117,369 sq.ft. asphaltic concrete pavement, from Oakland Paving Co., 5000 Bway., (1) $0.054 (2) $0.08 (3) $0.95 (4) $0.315 (5) $0.28; Hutchinson Co., 1706 Bway., (1) $0.05 (2) $1.32 (3) $1.20 (4) $0.33 (5) $0.32; Warren Constr. Co., Bacon Bldg., (1) $0.055 (2) $1.35 (3) $1.20 (4) $0.40 (5) $0.299.

Calif., Santa Rosa—Sonoma Co., opened bids improving 4.24 mi. Cazadero-Guerneville-Jenner Highway, Sects. B, and C, 23,200 cu.yd. unclassified excav., 1,336 lin. ft. corrugated metal pipe, from W. L. Proctor, 1000 Spring St., Santa Roca, $18,381, F. Bryant, West San Carlos St., San Jose, $23,595. Noted July 27.

Calif., Visalia—Improving Northeast 2nd, Northeast 3rd, Northwest 2nd Aves., et al., from Visalia Paving & Constr. Co., Visalia (street address not available), $81,295. Noted Aug. 10.

CONTRACTS AWARDED

Mass., Pittsfield—Concrete paving ¾-mi. section of West St., to D. J. Walsh, 107 Fenn St., $31,000; ¾-mi. section of Elm St., to Molloy & Niggard, North St., $36,500.

Rhode Island—State Bd. Pub. Wks., Providence, 0.7 mi. south of South Ferry Rd., and 1.5 mi. south from Bonnet Point Rd. on Shore Rd., to J. Bristow, Narragansett Pier, $86,675.

Conn., Westport—Paving about 7,000 ft. Morningside Drive, Greens Farms Sect., 16 ft., plain cement concrete on traprock, to Silliman & Godfrey Co., Admiral St., Bridgeport, $39,735.

N. Y., Buffalo—Paving and repaving Delaware Ave. from the Terrace to Mohawk St., asphalt, to Rock Asphalt Co., Morgan Bldg., $45,093.

N. Y., Buffalo—Repaving Hamburg Turnpike from Buffalo Creek R.R. viaduct to south city line, sandstone block on 8 in. concrete, to Rock Asphalt Constr. Co., Morgan Bldg., $175,998.

N. Y., New York—H. Bruckner, pres. Bronx Boro, paving East 178th St. and Weiher Court, etc., to C. D. Beckwith, Inc., 2875 Bway., $5,641 and $5,330 respectively; Rochambeau Ave., to M. Del Balso, 660 East 221st St., $18,924; sewers in Mayflower and Pierce Aves., to J. L. Sigretto, 1475 Woodhaven Ave., Woodhaven, $12,623 and $24,886 respectively; Guion Pl., Tyndall, Kingsland and Delafield Aves., etc., to McLaughlin & Buckley, 337 East 134th St., $1,965, $9,444, $6,100 and $8,681 respectively. Noted Aug. 24.

N. Y., Niagara Falls—To Read-Coddington Eng. Co., 238 Portage Rd., paving Macklem Ave. from Lewiston Rd. to north line of Lot 34, sheet asphalt, $17,095, engrs. est. $19,350, 21st St. from Ontario to Seneca Aves., sheet asphalt, $21,944, engrs. est. $24,900, Vanderbilt Ave. from Lewiston Rd. to Niagara Rapids Blvd., warrenite bitulithic, $24,612, engrs. est. $27,450, 15th St. from Ontario to North Aves., sheet asphalt, $5,647, engrs. est. $5,700, Clifton Ave. from Lewiston Rd. to Macklem Ave., sheet asphalt $9,325, engrs. est. $10,450, Chestnut Ave. from Whirlpool St. to Lewiston Rd., 3 in. vertical fibre brick block, $10,874, engrs. est. $12,750, Orchard Ave. from Main to Whirlpool Sts., warrenite bitulithic, $30,922, engrs. est. $32,100, 16th St. from Niagara St. to Ferry Ave. and from Ferry to Pine Aves., sheet asphalt, $47,370, engrs. est. $50,350; to J. F. McKenney Corp., Gluck Bldg., 22nd St. from Allen to Mackenna Aves., etc., 3 in. vertical fibre brick block, $33,044, engrs. est. $37,100, 24th St. from Niagara St. to Ferry Ave., 3½ in. vertical fibre brick block, $25,374, engrs. est. $27,350, 12th St. from Buffalo Ave. to tracks of New York Central R.R., 3 in. vertical fibre brick block, $12,466, engrs. est. $13,750, 19th St. from Niagara St. to Cudaback Ave., etc., 3 in. vertical fibre brick block, $29,756, engrs. est. $32,500. Noted Aug. 24.

N. Y., Rochester—Bd. Contract & Supply, paving between car tracks and 2 ft. outside North St., asphalt, to New York State Ry., Inc., 267 State St., $57,500; paving North St., asphalt, to T. Holohan, Rochester (street address not available), $29,959, North Union and Custer Sts., to Whitmore, Rauber & Vicinius, Rochester (street address not available), $20,661 and $14,147 respectively, Conklin St., asphalt, to Rochester Vulcanite Pavement Co., Rochester (street address not available), $7,381, Ravenwood Ave., asphalt, to Ribstein-Holter Co., Rochester (street address not available), $9,768, Harold St., asphalt, to J. Fredrich Co., Rochester (street address not available), $4,879; cement sidewalks on Britton Rd., to J. Petrossi Co., Rochester (street address not 'available), $17,029; chlorinator for Water Bureau, to Wallace Tierman Co., Rochester (street address not available), $1,550; laying water pipe, Group 291, to P. Petrossi, Rochester, (street address not available), $8,576.

N. Y., Saranac Lake—S. A. Miller, village clk., improving Park and Shepard Aves., South and Helen Sts., to R. B. Kennedy, Utica (street address not available), $52,000. Noted July 27.

N. Y., Upper Nyack—For 14,000 sq. yd. rein.-con. pavement to C. C. Job, Little Ferry, N. J., $42,917. Engrs. est., $43,000. Noted Aug. 10.

N. J., Elizabeth—Union Co. concrete paving 1 mi. Mountain Ave., Westfield and New Providence, to P. Cammilli Co., 335 Spring St., Westfield, $114,682.

N. J., Hackensack—Bergen Co., constructing Sect. 3, Route 10, Little Ferry to Ridgefield, 17,680 sq.yd. concrete on 8 in. rein.-con., to J. J. McGarry, Edgewater, $146,760; Route 10, Sect. 5, Hudson St., 3 in. sheet asphalt on concrete, to G. M. Brewster, Tenafly, $140,205; Route 10, Sect. 5A, Essex St. from 1st to Summit Aves., rein.-con. with relay trap rock block, to Upheil & Phelan, Hackensack (street address not available), $24,323. Noted July 20.

N. J., Lambertville—Paving Main St., etc., to Hudson Paving Co., 2875 Bway., New York City, $20,000. Noted July 27.

N. J., Long Branch—Bd. Comrs., paving Ocean Ave. from Sea View to Brighton Aves., incl. portions of driveways of intersecting streets or alleys, to Union Paving Co., 30th and Locust Sts., Phila., $218,000. Noted Aug. 10.

N. J., Princeton—Twp. Com., rein-con. pavement with cement concrete surface on old macadam foundation, to H. V. Oliver, 3 Elm Row, New Brunswick, $19,364. Noted Aug. 10.

N. J., Woodbury—Gloucestetr Co., paving Paulsboro-Gibbstown Rd., to M. Staub, Pitman, $92,084. Noted Aug. 3.

N. J., Woodbury—Gloucester Co. resurfacing Sect. 1 Glassboro-Westville Rd., concrete, to J. F. Burke, 309 Park Ave., Plainfield, $43,497.

Pa., Ebensburg — Supervs. East Taylor Twp., c/o Controller Cambria Co., to G. B. Nicholson, Johnstown, paving 3,700 ft. Park Hill Rd., $78,012 without brick, $88,596 with brick, also 4,700 ft. road between West and Mineral Points, $78,013 without brick, $88,596 with brick; to G. T. Morgan, Johnstown, 5,460 ft. Clapboard Run Rd., $70,959. Noted Aug. 3.

Pa., Greensburg — Westmoreland Co., repairing 2½ mi. Jeannette-Harrison City Rd., 8 in. concrete with 6 in. vitr. brick on sides, to McCrady Bros., Braddock, $79,311.

Pa., Sharon—W. M. Stewart, city clk., asphalt pavements on George St., to Union Paving Co., 34th and Spruce Sts., Phila., $17,126; to W. McIntyre & Sons Co., Sharon, sheet asphalt pavements on South Dock St., $7,127, Porter Way, $4,069, widening Heywood St., $4,162, also extending sewer 400 ft. in Union St. $1.20 per ft. for pipe and $1.35 per yd. excav. Noted Aug. 10.

Del., Wilmington—New Castle Co. constructing 2.4 mi. Baltimore Pike through Christiana and White Clay Creek Hundred, 16 ft., 6,000 ton broken stone, 22,850 sq.yd. bituminous macadam, etc., to Stewart & Donohue Co., 14th and Grants Sts., $55,765.

North Carolina—State Hy. Dept., Raleigh, clearing, grading and topsoiling 13.5 mi. State Project 131, Gates Co., to Bacon & Moore, Littleton, $90,000; grading and plain concrete paving 13.54 mi. State Project 183 A, Pitt Co., to S. J. Groves & Sons Co., 306 Globe Bldg., Minneapolis, Minn., $363,504. Noted Aug. 10.

N. C., Charlotte—Mecklenburg Co. paving 7 mi. Yorkville Rd., to Noll Constr. Co., 502 South Cedar St., $185,900. Noted July 13.

N. C., Greensboro—Comrs. Guilford Co. paving 2 mi. Kivett Rd. from High Point toward Hayworth Springs, to R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, $2.60 per sq.yd. Noted July 6.

N. C., Greenville—Pitt Co. Hy. Comn., rein.-con. paving 5 mi. highway, to Clayton Mitchell Co., Jacksonville, (street address not available), $2.52 per sq.yd. Noted July 13.

N. C., Henderson—For 60,000 sq.yd. 2 in. sheet asphalt on 5 in. concrete, to R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, $189,720. Noted July 27.

N. C., Lenoir—Hardsurfacing various streets to Atlantic Bitulithic Co., Virginia Ry. & Power Bldg., Richmond, Va., $173,000. Noted July 20.

N. C., Raeford — For 15,000 sq.yd. asphaltic concrete paving to Dawkins Constr. Co., Paul-Gale-Greenwood Bldg., Norfolk, Va., $48,085. Noted Aug. 1.

Fla., Bushnell — Sumter Co. clearing, grading and paving 14¾ mi. Linden-St. Catherine Rd., Spec. Rd. Dist. 5, 9 ft., limestone rock, to Barnes & Smith, Brooksville, $61,750.

Fla., Ft. Myers—Lee Co. paving 8.5 mi. New Prospect Short Cut, 15 ft., penetration macadam on rock, to Barnes, Smith & Mickler, Brooksville, $70,300.

Fla., Gainesville — Improving various streets, 84,312 sq.yd. asphalt paving, 50,398 lin.ft. granite or concrete curb, 21,378 cu.yd. excav., 14,000 cu.yd. rock material, to Hutton Eng. & Contg. Co., Kelly Bldg., Savannah, Ga.

Fla., Miami Beach — Improving various streets, 13,000 ft. curbing and gutters, 44,650 sq.yd. bituminous macadam, to Maul Paving Co., Ojus, $62,062. Engrs. est. $70,000.

Tenn., Nashville—To Moore Bros. and Carr Co., Capitol Blvd., paving Terrace Pl. from 20th to 21st Sts., $3,376, McMillan St. from Church to Cedar Sts., $5,556, 7th Ave. from Woodland to Foster Sts., $12,574, Foster St. from 1st to 7th Aves., $16,986, Shelby Ave. from 2nd to 10th Sts., $44,581, South 10th St. from Woodland to Shelby Sts., $9,310, Evander St. from Woodland to Holly Sts., $3,236, Montrose Ave. from 9th to 12th Sts., $12,423, Halcyon St. from 9th to 12th Sts., $12,928, Glenn Ave. from 9th to Bradford Sts., $12,272, Hayes St. from 15th St. to Louis Ave., $18,895, Russell St. from 19th to 20th Sts., $4,234, South 19th St. from Russell to Shelby Sts., $9,333, Ashworth Ave. from 18th St. to Shelby Park, $10,017, 2nd St. from Fatherland to Shelby Aves., $6,519, 19th Ave. $3,890, Highland Ave. from 25th to 28th Sts., $7,238, 20th Ave., $3,911, Villa St., $7,106, Hefferman St. from 18th to 21st Sts., $6,829, all foregoing rock asphalt; to Rodes Eller Co., 4th and 1st Natl. Bank, 6th Ave. S from Bway to Bell Ave., sheet asphalt, $4,890; to Clayton Paving Co., 44 Noel Blk., Buchanan St. from 8th to 9th Sts., granite block, $30,395, 2nd St. from Bridge to Shelby Aves., rock asphalt, $6,864. Noted Aug. 3.

Ohio, Cleveland—Paving East 30th St., from St. Clair to Chester Aves., Medina stone, to Bentley Bros., 1836 Euclid Ave., $70,201. Noted Aug. 24.

Indiana—State Hy. Comn., Indianapolis, surfacing 3.26 m. Dixie Bee Line, 16 ft., Sullivan Co., 34,432 sq.yd. concrete on concrete, 9,319 cu.yd. earth excav., to Carpenter Constr. Co., Terre Haute, $64,524. Engrs. est. $65,000. Noted Aug. 3.

Streets and Roads (Continued)

Michigan—State Hy. Dept., Lansing, paving 0.763 mi. State Trunk Line Rd. 29-5, Ingham Co., 3,359 cu.yd. excav., 8,723 sq.yd. asphalt, to Ingham Co. Rd. Comn., Mason, $26,062.

Wis., Superior—Paving 3,150 ft. Howard Ave. from North 3rd St. to north line of Bway.; bitulithic concrete on macadam, 4,800 lin.ft. concrete curb, also 1,750 ft. North 5th St. from Grand to Tower Aves., bitulithic on stone and concrete, 2,400 lin. ft. concrete curb, to E. Johnson & Sons, 572 West 5th St., $64,735 and $32,790 respectively.

Wis., Walworth—Paving North Main St., 8,700 sq.yd. rein.-con., 3,300 lin.ft. concrete curb and gutter, 4,400 cu.yd. excav., to Whitewater Bridge Co., Whitewater, $26,220. Noted July 20.

Wis., Waterloo — Paving 8,530 sq.yd. North Monroe and Washington Sts., concrete, to L. C. Christiansen, Cambridge, vibrolithic $30,077, rein.-con. $28,200. (Type of pavement not yet decided.) Noted Aug. 10.

Wis., White Fish Bay—To Clayton Constr. Co., 397 Farwell Ave., Milwaukee, grading and paving Oakland Ave., 9,400 sq.yd. concrete pavement $2.68 and 3,117 cu.yd. grading $0.70; Highland Ave. from Lake Drive to Fairmount Ave., 4,634 sq.yd. concrete pavement $2.68 and 2,150 cu.yd. grading $0.45. Noted Aug. 17.

Ia., Eldora—Hardin Co. gravel surfacing (1) Primary Rd. Project 88, (2) Eldora-Iowa Falls Rd., Primary Rd. Project 212, to M. O. Weaver, Bradgate, (1) 12,486 cu.yd. gravel 1 mi. haul, $0.375, 131,100 units additional ½ mi. haul at $0.09, 1,670 cu.yd. stripping pit $0.25, 2,340 cu.yd. gravel 1 mi. haul $0.445 and 33,500 units additional ½ mi. haul $0.09 (2) 5,710 cu.yd. gravel 1 mi. haul $0.445, 52,390 units additional ½ mi. haul $0.09 and stripping pit $0.25. Noted June 1.

Ia., Sioux City—For 35,000 sq.yd. vibrolithic concrete paving in Country Club Pl., to M. L. Flinn Paving Co., Grain Exch. Bldg., $2.68 per sq.yd.

Minnesota—State Hy. Dept., St. Paul, gravel surfacing 13 mi. State Project 44-21, 24 ft., Federal Aid Project 147-C, Houston Co., to Lahrer & McLaughlin, South Stillwater, $60,000. Noted July 13.

Tex., Pittsburg—Camp Co., grading and surfacing 16.16 mi. road, 16 ft., 200,360 cu.yd. earth excav., 156,388 sq. yd. bituminous macadam, 127,989 lb. reinforcing, 1,517.41 cu.yd. Class A concrete, etc., to Coke & Turner, Marshall, (street address not available), $246,187. Engrs. est. $276,459.

Tex., San Antonio—Bexar Co., improving 8.38 mi. Highway 2 toward Pearsall, 57,715 cu.yd. earth excav., 869.6 cu.yd. concrete, 108,648 lb. reinforcing, 17,959 cu.yd. gravel surfacing (to be furnished by county), (a) grading and gravel surfacing (b) rein.-con. drainage structures, to Bexar Co., c/o A. McCloskey, Gunter Bldg., (a) $46,553; W. T. Hutt & Sons, Gonzales, (b) $23,180.

Tex., Sonora—Sutton Co., clearing, grading, grubbing, gravel surfacing and rein.-con. bridges, etc., on 9.66 mi. Highway 4, Federal Aid Project 272, 18 ft., 22,129 cu. yd. earth excav. in roadway, 3,520 cu.yd. rock excav., (30,774 cu.yd. gravel surfacing to be furnished by county to cost $3,077), 71,338 lb. reinforcing, and 1,111.5 cu.yd. concrete, to Smith Bros., Crockett, or 313 Sumpter Bldg., Dallas, $86,970. Engrs. est. $99,051. Noted Aug. 3.

Wash., Seattle—Grading and paving Empire Way et al., 43,400 sq.yd. 7 in. concrete, 2,600 lin.ft. armor concrete curbing, 17,400 lin.ft. integral concrete curbing, 162,000 cu.yd earth excav., to J. L. Smith, Pioneer Bldg., $323,798. Engrs. est. $300,000. Noted Aug. 17.

Wash., Walla Walla—Walla Walla Co., grading and surfacing 4 mi. Weston-Elgin Mountain Rd., to Johnson Constr. Co., Lumber Exchange Bldg., Portland, Ore., $48,000.

Wash., Wenatchee—Chelan Co., grading and gravel surfacing 6.5 mi. Sunset Highway, from Peshastin Creek to Forest Boundary, 36,000 cu.yd. earth excav., 13,100 cu.yd. rock surfacing, to Burke, Sengfelder & Berry, Wenatchee, $49,300.

California—State Hy. Comn., Sacramento, to G. Pollock Co., Forum Bldg., Sacramento, grading 3.28 mi. highway between Hueneme Rd. and point 3¼ mi. southeast, Ventura Co., 66,900 cu.yd. excav. without classification, $0.40, 215 cu.yd. class A Portland cement (culverts and monuments), $30.00, etc., total $33,640; to Clark & Henery Constr. Co., 38 South Sutter St., Stockton, surfacing 4.34 mi. highway between Carnadero Creek and Southern boundary, Santa Clara Co., 6,500 ton asphaltic concrete surface, $4.36, total $28,340; to Isbell Constr. Co., Fresno, 11.31 mi. highway between Chester Grade and northeast quarter of Sect. 3 T. 28 N., R 9E., M.D.B. & M., $116,228. Noted July 27.

Calif., Berkeley—Paving, etc., Grove St. between Berkeley Way and Hopkins St., to Bates & Borland, Oakland Bank of Savings Bldg., Oakland, $46,150. Noted Aug. 24.

Calif., Marysville—To Warren Constr. Co., Bacon Bldg., Oakland, paving streets in Dist. 16, 1½ in. warrenite on 3½ in. bituminous $0.216, concrete curb $0.60, concrete gutter $0.38, grading $0.013; streets in Dist. 15, 1½ in. warrenite on 3½ in. bituminous $0.216, concrete curb $0.60, concrete gutter $0.38. Noted July 27.

Calif., Oakland—To Hutchinson Co., 1706 Bway, Oakland, improving 52nd Ave. between East 12th and East 14th Sts., 15,734 sq.ft. grading $0.055, 968 lin.ft. concrete curb at $0.67, 2,094 sq.ft. concrete gutter $0.26, 14,566 sq.ft. oil macadam pavement $0.125; 38th Ave. between Sutter and Hopkins Sts., 25,030 sq.ft. grading $0.04, 1,275 lin.ft. concrete curb $0.75, 2,670 sq.ft. concrete gutter $0.26; 15,040 sq.ft. oil macadam pavement $0.1646.

Calif., Yuba City—Concrete paving 306 ft. Hawthorne St. and 310 ft. Linden St., both 42 ft., 4 in. thick; 838 ft. Orange St., 367 ft. Walnut St., 367 ft. Olive St. and 367 ft. Chestnut St., all 44 ft. wide, 4 in. thick; Cooper Ave., 18 ft. and 42 ft. wide, and 2,422 ft. Bridge St., 80 ft. wide, both 5 in. thick, to Galbraith & Janes, Box 338 Yuba City, $80,188. Noted July 13.

Que., Montreal—To Sicily Asphaltum Paving Co., 60 St. Viateur St., asphalt pavements on Comte St. from Atwater to St. Marks Sts., 30 ft., $26,276, Van Horne Ave. from Deacon St. to limits of Outremont, 45 ft., $10,238; B. Brault, Ltd., Bleury St., asphalt pavements Rosemount Blvd. from Papineau to Frontenac Sts., 46 ft., $94,748; Duranceau & Duranceau, 152 Hamilton St., concrete sidewalks on Cote des Neiges Rd., from Queen Mary to Cote St. Catherine Rds., $6,809, Cote des Neiges Rd. from Cote St. Catherine Rd. to Namur St., $15,906, Mazarin St. from Jolicoeur to Allard Sts., $5,680, Mazarin St. from Jolicoeur to Bromby Sts., $2,840, Joques St. from Jacques Hertel to Allard Sts., $7,434, Joques St. from Jacques Hertel to Bromby Sts., $12,148, Wurtele St. from Ontario to Sherbrooke Sts., $11,716; Leger & Lamoureux, Letang St., concrete sidewalks on Letang St. from Dufour to Villeray Sts., $6,130; Rondou, Corlier & Co., 3227 Christophe Colombe St., concrete sidewalks on Henri Julien St. from Isabeau to Francois Coppee Sts., $9,554.

Que., Montreal—To Quinlan, Robertson & Janin Co., 50 Notre Dame St. W., asphalt pavements on Montclair Ave. from Sherbrooke to Monkland Sts., $7,872, Blvd de Carie from Ave. de Grau to Debrillion St., $12,916. Jolicoeur St. from Razilly to Jocques Sts., $39,991, St. Remi St. from St. Ambroise St. to River St. Pierre, $20,375, St. Zotique St. from Henri Julien to De La Roche Aves., $55,830, Marlowe St. from Sherbrooke to Cote St. Antoine Sts., $28,303, Mazarin St. from Jacques Hertel to Jolicoeur Sts., $13,973; concrete sidewalks on Montclair St. from Sherbrooke to Monkland Sts., $3,703; Sicily Asphaltum Paving Co., 60 St. Viateur St., asphalt pavements on Fort St. from Sherbrooke to Comte Sts., $4,581, Closse St. from Sherbrooke to St. Catherine Sts., $18,601, Rolland St. from Mountain to Aqueduct Sts., $4,206, Papineau Ave. from Beaubien to St. Zotique Sts., $55,590, Beaubien St. from Christophe Colombe to Papineau Aves., $55,590, concrete sidewalks on Rolland St. from Mountain to Aqueduct Sts., $2,045; B. Brault Co., Bleury St., asphalt pavements Christophe Colombe St. from Hanatoux to Everett Sts., $26,916, De Chateaubrian St. from St. Zotique to Belanger Sts., $16,363; F. Lapan, 601 Lacordaire St., concrete sidewalks on Charlemagne St. from Maissoneuve limits to Masson, $2,060, Montsabre St. from Souligny to Chauveau Sts., $26,351, Rue Des Belges from Jarry St. to Cremazie Blvd., $6,170; Leger & Lamoureaux, 78 Bernard St., concrete sidewalks Claude St. from Cote Des Neiges to Gatineau Aves., $1,440, Jolicouer Ave. from Razilly to Dumas Aves., $4,555, Hampton St. from Sherbrooke Ave. to Canadian Pacific Ry., $2,750, Apple St. from Maplewood to Tremblay Sts., $3,256, Northmount St. from Decelles St. to point 551 ft. northeast, $1,611, Deserey St., $5,052; Rondou, Corlier Co., 3227 Christophe Colombe St., concrete sidewalks 4th Ave. from Masson to St. Jerome Sts., $4,153,

Ont., Grimsby—For 15,000 sq.yd. asphaltic concrete pavements to Auto Road Constr. Co., 29 Erie Ave., Niagara Falls, $71,000. Engrs. est. $75,000.

Ont., Guelph—Will pave Kathleen St., et.al., 17,000 sq.yd. concrete and asphalt, by day labor. $68,000. F. McArthur, city engr.

Ont., Oakville—Paving 1,860 ft. Church and Chisolme Sts., 45 ft. wide, 8,500 sq.yd. concrete, to King Constr. Co., Oakville, 3,720 lin.ft. concrete curb and gutters on above to J. Gibson, Oakville. Total est. $50,000.

Ont., Orangville—For 7,500 sq.yd. concrete pavements with concrete curbs and gutters, to W. J. Symond, Wiarton. Engr. est. $30,000.

Ont., St. Catherine—For 15,000 sq.yd. concrete pavement, to Reid & Somers, 40 Adelaide St. W., Toronto, $31,225.

Ont., Thorold—For 13,000 sq.yd. concrete pavements, to Auto Road Constr. Co., Ltd., Erie Ave., Niagara Falls. Engrs. est. $38,000.

Ont., Trafalgar—Trafalgar Twp., concrete pavements, to Thornton & McNamara, Bronte, $25,800.

Industrial Works

PROPOSED WORK

Me., Portland—Confederated Home Abattoir Corp., having plans prepared by Gorman & Brown Eng. Co., engrs., 357 Westminster St., Providence, R. I., 4 story meat-packing and refrigerating plant, brick and concrete. $300,000. Noted June 8.

Mass., Attleboro—Hartley Clock Co., c/o Monks & Johnson, archts., 99 Chauncy St., Boston, having plans prepared 3 story, 60 x 240 ft. rein.-con. factory. $125,000.

Mass., Dorchester (Boston P. O.)—Tide Water Oil Co., 60 Cambridge St., Boston, plans 1 and 2 story, irregular shaped oil distribution and storage plant, brick and rein.-con., Dorchester Ave. $75,000. Private plans.

Mass., West Springfield (Springfield P. O.)—Wico Electric Co., c/o P. Brown, pres., 44 Avon Pl., Springfield, plans four 1 story, 90 x 400 ft., brick and steel factory buildings, being first unit of new plant. Architect not accounced.

R. I., Woonsocket—Evening Call Publishing Co., 75 Main St., plans 3 story, brick and fireproof mechanical building at plant. $45,000. Private plans.

Conn., Norwalk—E. M. Jennings Co., 27 Harrison St., Bridgeport, soon lets contract 1 story, 55 x 155 ft. brick, steel and concrete garage and service station, West Ave., here. $40,000. J. W. Northrop, 211 State St., Bridgeport, archt.

Conn., Plainville—Standard Steel Bearings, Inc., Railroad St., plans large 1 story, brick and steel addition to plant. Private plans.

N. Y., Albany—Electric Supply & Equipment Co., 103 Allyn St., Hartford, Conn., soon lets contract 4 story, 40 x 63 ft. brick and concrete factory, Bway., here. $50,000. Private plans.

Pa., Corry—Kurtz Brass & Wood Bed Co., preparing plans 2 story, 100 x 150 ft. plant. Private plans.

Md., Baltimore — Port Development Comn., City Hall, having plans prepared by Fay, Spofford & Thorndike, archts. and engrs., 200 Devonshire St., Boston, 6 story warehouse and piers. $3,000,000.

N. C., Gastonia—Art Cloth Mills plan weave mill, to be equipped with seventy-two 30 harness novelty looms. $195,000. H. D. Gayner, pres.

N. C., Granite Falls—A. A. Shuford Mill Co., Highland, plans cotton mill, here. $100,000.

O., Amherst—Hoynesite Powder Co., plans rebuilding portion of plant destroyed by explosion. To exceed $100,000. M. Freshwater, dir.

O., Dayton—Andrews Baking Co., 10 North Main St., plans 2 story, 60 x 140 ft., brick and rein.-con. plant, plain foundation. 3rd and Charter Sts. $100,000. Architect not selected.

O., Dayton—Miami Ice & Fuel Co., Ludlow Bldg., plans 4 story, 60 x 160 ft., cold storage plant, brick and rein.-con., concrete pile foundation. $150,000. Architect not selected.

O., Minerva—Owen China Co. plans 11 kiln addition to plant. To exceed $40,000. Private plans.

Mich., Detroit—City plans new 50 x 94 ft. steam heating plant at Herman Kiefer Hospitial, Byron Ave. A. Kahn, 1000 Marquette Bldg., engr.

Ill., Chicago—A. S. Alschuler, archt., 28 East Jackson Blvd., soon receives bids 3 story, 100 x 300 ft. candy factory, rein.-con., brick and steel. Cicero and Kinzie Sts., for Brach & Sons, 215 West Ohio St. $1,000,000. Work will be done in three units.

Ill., Chicago—A. L. Alschuler, archt., 28 East Jackson Blvd., soon receives bids 4 story, 110 x 275 ft., furniture factory, rein.-con., brick and steel, George St. and North Crawford Ave., for Valentine-Seaver Co., 1721 Sedgwick St., $1,000,000.

Ill., Chicago—E. C. Frazier, archt., 30 North Dearborn St., soon receives bids 1 story, 100 x 130 ft., rein.-con., brick and

Industrial Works (Continued)

steel garage, 1215-23 West Harrison St., for J. A. Hannah, 1045 Fulton Market. $50,000.

Ill., Chicago—Whitney & Williams, archts., 122 South Michigan Ave., soon receives bids 2 story, 75 x 150 ft., rein.-con., brick and steel, Bway. and Glanlake Ave., $50,000. Owner's name withheld.

Wis., Green Bay—Fort Howard Paper Co., South State St., plans 3 story, 100 x 140 ft. plant, rein.-con. and brick, $200.000. Private plans.

Wis., Ladysmith—City plans 1 story, 60 x 70 ft. central heating plant and auxiliary pumping station, rein.-con., brick and steel, plain foundation. $60,000. C. C. Kile, clk. Architect not selected.

Wis., Milwaukee—Milwaukee Electric Ry. & Light Co., 2nd and Sycamore Sts., plans boiler house at Lakeside, $1,000,000. J. Anderson, plant engr. R. H. Pinkley, c/o owner, engr. Will mature in spring.

Wis., Shawano—Shawano Co. Bd., c/o O. O. Wiegand, clk., Court House, plans 1 story, 60 x 90 ft. central heating plant. $50,000. Architect not selected.

Minn., Minneapolis—Northwestern Tire Co., 622 3rd Ave. S., having plans prepared by Lund & Lunt, archts., 224 Essex Bldg., 2 story, 48 x 120 ft., sales and service station, rein.-con. and steel. Harmon Pl. between 10th and 11th Sts. $50,000.

Minn., Minneapolis—State Bd. Control, St. Paul, having plans prepared by C. H. Johnston, archt., 715 Capitol Bank Bldg., St. Paul, 3 story, rein.-con., brick and tile storehouse, on State "U," here. $150,000. D. F. Mullen, sec'y.

S. D., Hot Springs—Hot Springs Water, Light & Power Co., plans 450 kw. power plant to replace one destroyed by flood. B. W. Wattles, genl. supt. Hollister Eng. Co., Bankers Life Bldg., Lincoln, Neb., engrs.

Tex., Stamford—Jay Cotton Oil Co. plans cotton oil mill, rein.-con. and brick, 125 ton daily capacity, also feeding pens for fattening cattle, 5,000 head capacity. To exceed $40,000.

Calif., Mountain View—Interstate Textile Mfg. Co., c/o W. Mooser, Archt., Wells Fargo Nevada Bank Bldg., San Francisco, having preliminary plans prepared, group of factory buildings, probably rein.-con.

Calif., Richmond—Luning Mineral Products Co. plans dry color plant, 21st St. $50,000. L. E. Brown, pres.

Calif., San Francisco—U. S. Metal Products Co., 330 10th St., plans 2 to 4 story brick manufacturing plant, 10th St.

Ont., Hamilton—Ontario Hydro Comn., London, soon lets contract new hydro station, also extending power lines along Beach Rd. $40,000.

Ont., Trout Mills—W. Milne & Sons, North Bay, plans to rebuild saw mill recently destroyed by fire. $100,000.

B. C., Vancouver—City Council appointed J. G. G. Kerry, engr., of Kerry & Chace Ltd., Confederation Life Bldg., Toronto, Ont., to investigate hydro-electric facilities here with view to ultimate establishment of hydro electric plant.

B. C., Vancouver—Canadian Pipe Co., Ltd., 550 Pacific St., plans factory, Pacific St. Cost between $40,000 and $50,000. Architect not announced.

BIDS DESIRED

N. Y., New York—J. Arfman, 439 East 90th St., 75 x 100 ft., brick, steel and concrete garage, plain foundation, Ave. A. $100,000. Work will be done by separate contracts. Private plans.

N. J., Trenton—Sept. 7, at office of Comr. of Educ., State House, 32 x 86 ft., brick, steel and timber power house, etc., for State Normal School, Model Ave. Guilbert & Betelle, 546 Broad St., Newark, engrs.

Pa., Glenshaw—L. B. Duff, engr., 712 Magee Bldg., Pittsburgh, taking bids 2 story, 64 x 113 ft., rein.-con. and tile warehouse and factory, Wittmer Sta., for Ball Chemical Co., c/o engineer. $50,000. Noted Aug. 24.

Pa., Oil City—W. H. Crosby, archt., Masonic Bldg., taking bids 3 story, 70 x 80 ft., rein.-con., brick and steel garage, for E. M. Bowen, Oil City. $40,000.

Pa., Phila.—Gaul, Derr & Shearer, 212 North Broad St., taking bids 2 story, 56 x 107 ft. brick and steel service station, plain foundation, 16th and Fairmont Aves. $100,000. Durham Bros., 1609 Sansom St., archts.

Pa., Phila.—Penwood Co., archts., 131 North 15th St., taking bids 5 story, 33 x 105 ft. rein.-con. factory, plain foundation, 926-928 Locust St., for Finkelstein Bros., 303 South St. $80,000.

Pa., Phila.—J. T. Hoekstra, archt., 1713 Sansom St., taking bids 1 story, 96 x 182 ft., rein-con. and brick plant, plain foundation, 10th and Windrim Sts., for Logan Ice Co., 10th and Windrim Sts. $150,000.

Pa., Phila.—Zerbey & Hollaway, 4713 North Broad St., taking bids 1 story, 100 x 147 ft. and 20 x 34 ft. garage, 15th and Wyoming Aves., $75,000. C. F. Parker, 5018 Schuyler St., archt.

Ill., Chicago—D. S. Klafter, archt., 64 West Randolph St., receiving bids 1 story, 100 x 125 ft., rein.-con., brick and steel factory addition, 2315-21 West Huron St., for Enterprise Parlor Furniture Co. $50,000.

Ill., Chicago—H. A. Mulder, archt., 140 South Dearborn St., receiving bids 1 story, 125 x 130 ft., rein.-con., brick and steel garage, Clark St. near Devon St., for D. R. Guthman, 6730 North Clark St. $60,000.

Ill., Granite City—Natl. Enameling & Stamping Co., Federal Reserve Bank Bldg., St. Louis, Mo., receiving bids 1 story, 84 x 788 ft. warehouse and plant, steel and concrete, here. United Eng. and Fdry. Co., Farmers Bank Bldg., Pittsburgh, Pa., engrs.

Wis., Beloit—J. Terwilliger, Clinton, receiving bids 2 story, 75 x 135 ft. brick and concrete garage, plain foundation, Broad St., here, $50,000. Private plans. Former contract rescinded. Noted May 4.

Wis., Burlington—J. Alby & Sons, receiving bids 1 story, 30 x 82 ft., rein.-con. garage, plain foundation, $40,000. M. F. White, c/o Wilbur Lumber Co., 908 Trust Co. Bldg., Milwaukee, archt.

Wis., Cazenovia—Cazenovia Creamery Co., receiving bids 1 story, 60 x 150 ft. dairy, rein.-con., brick and steel, plain foundation. $50,000. Private plans. Noted July 20.

Calif., Sacramento—Sept. 11, by State Dept. Pub. Wks., 2 story, 160 x 160 ft. rein.-con. printing plant, 11th and O sts. $140,000. G. B. McDougall, Forum Bldg., state archt. Noted April 27.

BIDS RECEIVED

N. Y., New York—G. A. Whalen, comr. Plant & Structures, Municipal Bldg., opened bids Aug. 25, clearing site, excavating, sheeting and bracing for foundation for proposed repair shop 16th St. and Ave. C, from Contractors Service Corp., 226 Jackson St., Brooklyn, $46,342; M. Del Balso, 660 East 221st St., $49,860; C. Goodman, $56,000. Noted Aug. 17.

CONTRACTS AWARDED

Mass., Boston—Druker & Rudnick, 18 Tremont St., will build 1 story, brick, steel and rein.-con. garage and service station, Harvard Ave., in Brookline Dist., by day labor. $75,000. Private plans.

Mass., East Lee—Mountain Mill Paper Co., Railroad St., 1 story, 40 x 150 ft. brick and steel factory addition with 40 x 50 ft. ell, to J. R. Hampson & Co., 14 Taylor St., Pittsfield. Archts. est. $40,000.

Mass., Holyoke—Farr Alpaca Co., Jackson St., 6 story, 100 x 500 ft. cotton warp plant, brick and rein.-con., to Daniel O'Connell's Sons Co., 480 Hampden St. Archts. est. $600,000. Noted July 27.

Mass., New Bedford—New Bedford Boiler & Machine Co., 42 Front St., will build 4 story, 60 x 167 ft., rein.-con. warehouse, by day labor. $150,000. Leary & Walker, 908 Purchase St., archts.

Mass., Watertown—Hood Rubber Co., 2 story, 96 x 208 ft., concrete factory addition, to W. H. Illiffe, 93 North Beacon St. Archts. est. $75,000.

Conn., Hartford—Automatic Refrigerating Co., 618 Capitol Ave., 3 story, 53 x 71 x 95 ft. brick and steel addition to plant, Capitol Ave., to M. A. Connor, 688 Broadview Terrace. Archts. est. $50,000.

N. Y., New York—H. Harjes, 408 West 76th St., 4 story, brick, steel and concrete garage, plain foundation, 403 West 76th St., to T. J. Murphy, 2 West 45th St. Archts. est. $200,000.

N. Y., New York—Kokem-Chisholm Co., 74 Center St., rein.-con. and steel factory, plain foundation, 134th St. and Willow Ave., to Barney-Ahlers, 110 West 40th St. Archts. est. $90,000.

Pa., Cambridge Springs—Blystone Mfg. Co., Cambridge Springs, 90 x 260 ft. concrete block and steel factory, to Austin Co., 16112 Euclid Ave., Cleveland, O. Noted June 29.

Pa., Charleroi—S. S. Jones, Belle Vernon, 2 story, 60 x 100 ft. garage, Donner and 9th Aves., to Austin Co., 16112 Euclid Ave., Cleveland, O. Engrs. est. $40,000.

Pa., Lancaster—E. A. Wilson, archt., 1208 Chestnut St., 3 story, 80 x 176 ft., rein.-con. and brick factory, plain foundation, to H. Wohlsen, Woolworth Bldg., for Bayuk Bros., 3rd and Spruce Sts. Noted Aug. 10.

Pa., Phila.—Fischers Dairy, Orthodox and Worth Sts. ,2 story, 52 x 54 ft. stable, 2 story, 40 x 61 ft. dairy and 16 x 31 ft. power house, Orthodox and Worth Sts., all brick and steel, plain foundations, to H. Gill, Jr., 2514 Germantown Ave.

Pa., Phila.—F. Pearson Co., 11th and Chestnut Sts., 5 story, 62 x 160 ft., rein.-con. and brick factory, plain foundation, Leverington and Wilde Sts., to H. H. Burrell, 206 South Quince St. Engrs. est. $300,000.

Pa., Phila.—Henderson Bros., 25th and Spruce Sts., 2 story, 40 x 118 ft. and 1 story, 30 x 115 ft. brick and steel garage, plain foundation, 27th and Bainbridge Sts., to J. H Hunkle Co., 25th and Delancey Sts. Engrs. est. $100,000.

Pa., Pittsburgh—Westinghouse Electric & Mfg. Co., Union Bldg., 4 story, and basement, 100 x 200 ft., rein.-con., brick, steel and stone plant and storage building, Susquehanna and Lang Aves., to W. F. Trimble & Sons, 1719 Penna. Ave.

Va., Richmond—News-Leader Publishing Co., 9 North 8th St., 4 story, 87 x 120 ft. plant, rein.-con., brick and steel, 4th and Grace Sts., to J. T. Wilson Co., Inc., Mutual Bldg. Archts. est. $200,000. Noted July 6.

S. C., Clover—Hampshire Spinning Co., 3 story, 133 x 294 ft., rein.-con. mill, to Gaston Constr. Co., Gastonia.

O., Cleveland—D. D. Wessels & Son, 1385 East 17th St., 2 story, 100 x 102 ft., brick and steel factory and warehouse, 2009 Oregon Ave., to G. A. Rutherford Co., 2725 Prospect Ave. Archts. est. $50,000. Noted Aug. 24.

O., Cleveland—G. S. Rider & Co., archts and engrs., Century Bldg., 1 story, 100 x 280 ft., brick and steel foundry, West 82nd St. and Almira Ave., to S. W. Emerson Co., 1900 Euclid Ave., for Crucible Steel Castings Co., Canal Rd. Archts. est. $100,000. Noted Aug. 17.

O., Cleveland—Templar Realty Co., c/o M. Marmorstein, 605 Ulmer Bldg., 1 story, 52 x 86 ft., brick and steel garage, East 69th St. and Euclid Ave., to Simon Constr. Co., 10211 Parkgate Ave. Archts. est. $40,000.

O., Youngstown—Youngstown Boiler & Tank Co., Foot of Mahoning Ave., 1 story, steel boiler and tank factory, Mahoning Ave., to Niles Forge and Machine Co., Niles. Engrs. est. $50,000.

Mich., Detroit — J. R. Wood, 616 East High St., 1 story, 90 x 120 ft., brick and steel garage, plain foundation, West Warren Ave., to F. H. Davis, 1838 Penobscot Bldg. Engrs. est. $40,000.

Mich., Grand Rapids—Grand Rapids Tire & Rubber Co., Fuller St., will build 3 story, 44 x 226 ft. brick and steel factory, Fuller St., by day labor. $250,000.

Wis., Appleton—G. R. & S. Motor Co., 738 Washington Ave., 1 and 2 story 30 x 75 ft. rein.-con. brick and steel garage, plain foundation, to E. F. Miller, 726 College Ave. Archts. est. $50,000. Noted Aug. 17.

Wis., Appleton—Valley Dairy Products Co., 2 story, 60 x 80 ft. dairy, rein.-con., brick and steel, to Hogman Constr. Co., 1087 Gneida St. Archts. est. $50,000. Noted Aug. 10.

Wis., Cudahy—Federal Rubber Co., Cudahy, 4 story, 120 x 250 ft., brick and timber factory, to T. Siderits Constr. Co., 1591 2nd St., Milwaukee. Archts. est. $250,000.

Wis., Kewaunee—Kewaunee Mfg. Co., 2 story, 30 x 140 ft. addition to factory, to F. Borkovetz, Kewaunee. Archts. est. $45,000.

Wis., Lake Geneva—J. Nutini, 1 story, 50 x 90 ice cream factory, rein.-con., brick and steel, to H. Huntress, Lake Geneva. Archts. est. $40,000.

Wis., Madison—J. Feldman Paper Box Co., 515 Regent St., 1 story, 60 x 120 ft. factory, rein.-con., brick and steel factory, Charter St., to W. H. Kuhlman, Madison (street address not available). Archts. est. $50,000. Noted Aug. 24.

Wis., Milwaukee — Milwaukee Electric Ry. & Light Co., 2nd and Sycamore Sts., will build 40 x 50 ft. substation addition, Oakland Ave:, by day labor. R. H. Pinkley, c/o owner, engr. Equipment to General Electric Co.

Wis., Milwaukee—Seaman Body Corp., 1732 Richards St., 5 story, 100 x 225 ft. and 100 x 420 ft. plant, brick and timber, to T. Stark & Co., 130 Muskego Ave. Archts. est. $350,000. Noted Aug. 17.

Wis., Milwaukee—Walsh Harness Co., 137 Keefe Ave., 3 story, 48 x 50 ft., brick and timber warehouse, plain foundation, to Byrne Bros. Co., 3112 Burleigh St. Archts. est. $40,000.

Wis., Neenah—Jaeger-Dowling Co., 214 South Commercial St., 1 story, 75 x 120 ft. concrete and brick garage, plain foundation, North Commercial St., to E. F. Miller, 1st Natl. Bank Bldg., Appleton. Archts. est. $40,000. Noted Aug. 10.

Wis., Spooner—Chicago, St. Paul, Minneapolis & Omaha Ry. Co., 275 East 4th St., St. Paul, Minn., brick and concrete roundhouse, here, to J. E. Donlin, 1271 Ashland Ave., St. Paul, Minn., $50,000.

Wis., West Allis—Allis-Chalmers Mfg. Co., National Ave., general contract, 1 story, 176 x 406 ft., concrete, brick and steel carpenter shop, plain foundation, to Klug & Smith, 69 Wisconsin St., Milwaukee; structural steel to Milwaukee Bridge Co., 1400 34th St., Milwaukee.

Industrial Works (Continued)

Minn., St. Paul—North St. Paul Casket Co., North St. Paul, 4 story, 95 x 150 ft. rein.-con., brick, stone and tile factory and office, University Ave. and Griggs St., here, general contract to F. C. Norlander, 409 Metropolitan Bank Bldg., $92,750.

Tex., Dallas—Otis Elevator Co., Young and Akard Sts., 2 story, 75 x 150 ft., warehouse and shop, brick and steel, plain foundation, to Inge Constr. Co., Southwestern Life Bldg. Archts. est. $75,000-$100,000.

Calif., Stockton—Xclusive Laundry, 427 East Lafayette St., 1 story, 92 x 150 ft. brick and concrete laundry, Lafayette and California Sts., to Davis-Hellar-Pearce Co., Delta Bldg., $50,000. Noted July 27.

B. C., Kimberly—Consolidated Mining & Smelting Co., Ltd., Trail, will build 1,500 ton concentrator plant, by day labor. $1,250,000 to $1,500,000. S. G. Blaylock, genl. mgr. Noted July 20.

B. C., Vancouver—Dominion Government, Ottawa, Ont., 30 x 60 ft. grain drying plant, 90 ft. high, 1 story, 30 x 75 ft. boiler house at government elevator here, to Barnet, McQueen & Co., Ltd., Fort William, Ont., $85,000.

Buildings

PROPOSED WORK

Mass., Athol—Hospital—Athol Memorial Hospital, Newton St., having plans prepared by Kendall, Taylor & Co., archts., 142 Berkeley St., Boston, 3 story, brick and concrete, Newton St. $200,000.

N. Y., Rochester—Apartment—S. Tandler, 461 Clifford Ave., plans razing present frame house and constructing 3 story, 60 x 184 ft., brick, South Union St. $200,000. Architect not announced.

N. Y., Syracuse — Apartment — James Apartment Corp. plans brick, James St. $250,000. Architects name withheld.

N. J., New Brunswick—School—Bd. Educ. plans 3 story, 150 x 250 ft., brick and steel. $170,000. Architect not selected.

N. J., Princeton—Hotel—Princeton Inn Co. plans hotel, Alexander St. $350,000. C. Browne, pres. Engineer not selected.

Pa., Dormont—Church—O. M. Topp, archt., Jenkins Arcade, Pittsburgh, soon lets contract 1 story, balcony and basement, 66 x 75 ft., Potomac and Espy Sts., for Presbyterian Church. $175,000.

Pa., Monaca—High School—Bd. Educ. soon takes bids 16 room, with gymnasium and auditorium, Indiana and 10th Sts. $150,000. J. H. Phillips, Fulton Bldg., Pittsburgh, archt.

Pa., Phila.—Apartment—J. F. Clark, archt., 23 South 16th St., soon takes bids 4 story, 40 x 125 ft., brick, steel and stone, plain foundation, 18th and Vine Sts. $200,000. Owner's name withheld.

Pa., Pittsburgh—Hospital—Homeopathic Hospital, Center Ave., plans additions. $1,000,000. Architect not selected.

Va., Roanoke—High School—Bd. Educ. soon takes bids 2 story. $200,000. H. C. Richards, 618 Chestnut St., Phila., archt. Noted May 18.

La., New Orleans—University—Loyola University, 6363 St. Charles St., having plans prepared by P. Torre, Jr., archt., Canal Commercial Bldg., first unit, 4 story, 60 x 200 ft. concrete, brick, steel and terra cotta, $300,000. Ultimate cost $1,000,000.

Tenn., Morristown—Dining Room and Dormitories—Methodist Episcopal Church of America having plans prepared by Barber & McMurry, archts. and engrs., Burwell Bldg., Knoxville, 1 dining room and 2 dormitories, each 3 story, 40 x 150 ft., at Morristown Normal and Industrial College. $150,000.

Tenn., Nashville—Memorial and Capitol Annex—Tennessee Memorial Comn., takes bids within 30 or 60 days for memorial and capitol annex, Capitol Blvd. $1,250,000. A. A. Taylor, chn. McKim, Mead & White, 101 Park Ave., New York City, archts. E. Dougherty, Stahlman Bldg., associated archt.

O., Cincinnati—Office and Lodge — Brotherhood of Railway & Steamship Clerks, Freight Handlers, Express and Station Employees, having plans prepared by Rendigs, Panzer & Martin, archts., 609 Lincoln Inn Court Bldg., 7 story, 90 x 120 ft., brick, plain foundation, Court and Vine Sts. $500,000. E. H. Fitzgerald, 2nd. Natl. Bank, grand pres.

O., Cleveland—Apartments—B. Koslen, 10612 Olivet Ave., plans two 4 story, brick and steel, East 85th St. near Euclid Ave. $250,000. M. Wies, Union Bldg., archt.

O., Cleveland — Commercial-Premier Building Co., c/o W. L. Flory of Thompson, Hine & Flory, Williamson Bldg., plans 6 story, brick and concrete, East 18th St. and Chester Ave. $200,000. Private plans.

O., Cleveland—Commercial and Hotel—S. Kaplan, 1418 Prospect Ave., having plans prepared by R. H. Hinsdale, archt., Bangor Bldg., 4 story, 62 x 90 ft., brick and steel, 1428 Prospect Ave. $150,000.

O., Cleveland—Medical Library—Cleveland Medical Library Assn., c/o G. E. Follansbee, 9615 Miles Ave., having plans prepared by Walker & Weeks, archts., 1900 Euclid Ave., 3 story, brick, steel and concrete, 2318 Prospect Ave. $400,000.

O., Cleveland—Memorial—Cleveland Memorial Entombment Co., c/o W. H. Allen, Hickox Bldg., plans 1 story, marble and granite, Euclid Ave. near Chardon Rd. $150,000. A. W. Harris, Cleveland Discount Bldg., archt.

O., Cleveland — School—St. Ladislaus Slovenian Catholic Church, 2813 East 95th St., having plans prepared by W. C. Jansen, archt., Electric Bldg., 3 story, 16 room, brick, steel and concrete, East 95th St. and Holton Ave. $150,000.

O., Dayton—Bank—Amer. Natl. Bank, 16 South Main St., having plans prepared by Pretzinger & Musselman, archts., 1155 Reibold Bldg., 2 or 3 story, 50 x 200 ft., rein.-con. and stone, concrete pile foundation, South Main St. $175,000.

O., Dover—Theatre and Lodge—Dover Pythian Castle Co. having plans prepared by G. A. Ebeling, archt., Newman-Stern Bldg., Cleveland, 4 story, 50 x 150 ft., brick, steel and concrete. $150,000.

O., Findlay—School—Plans $325,000 bond issue for modern centralized school.

O., Rocky River—Commercial and Theatre—N. T. Teshera, c/o W. S. Ferguson Co., archts. and engrs., 1900 Euclid Ave., Cleveland, having plans prepared 1 and 2 story, brick, steel and concrete, Detroit Rd. and Blount St. $200,000.

O., St. Marys—High School—Bd. Educ. had plans prepared 2 story, 100 x 146 ft. high school. $160,000. Noted July 13.

Mich., Detroit—Apartment—J. I. Weinberg, archt., 401 Congress Bldg., prepared plans for 4 story, 80 x 140 ft. brick and steel, plain foundation, Van Dyke and Agnes Aves. $175,000. Owner's name withheld.

Mich., Grand Rapids—Mercantile—P. Steketee & Sons, Monroe St., having plans prepared by Robinson & Campau, archts., Michigan Trust Bldg., 8 story, 50 x 135 ft. rein.-con., steel and terra cotta, Monroe Ave. $250,000.

Ill., Chicago—Church—Bethany Evangelical Lutheran Congregation, c/o W. C. Jones, archt., 105 South La Salle St., plans rein.-con., brick and steel, Cullom Ave. and North Paulina St. $150,000.

Wis., De Pere—School—Bd. Educ. plans 2 story vocational school. $150,000. W. R. Mathews, clk. Architect not selected.

Wis., Hayward—High-Grade School—Bd. Educ. voted $150,000 bonds, 2 story, 50 x 150 ft., brick, rein.-con. and steel, plain foundation. Architect not selected.

Wis., Kenosha—Court House, Administration and Jail—Kenosha Co. having revised plans prepared by Lindl, Lesser & Schutte, archts., 82 Wisconsin St., Milwaukee and Wisconsin Sts., Kenosha, 3 story, 126 x 226 ft. and 67 x 138 ft., rein.-con., and stone, plain foundation, Sheridan Rd., $650,000. Noted April 6.

Wis., Kenosha—School—School Bd. having preliminary plans prepared by J. D. Chubb, archt., 109 North Dearborn St., Chicago, 3 story, brick, concrete and tile, plain foundation. $300,000.

Wis., Milwaukee — Apartment-Hotel — Juneau Park Surf Co., c/o E. B. Woolf & Co., 79 West Madison St., Chicago, having plans prepared by Hetherington & Krieg, archts., 80 West Washington St., Chicago, 8 story, concrete, brick and tile, plain foundation, Juneau Pl., here. $1,500,000.

Wis., Milwaukee—Club and Business—P. & P. Order of Stags, c/o R. Smith, (exalted ruler) 848 3rd St., having preliminary plans prepared by J. K. Lamboy, archt., 848 3rd St., 2 story, 100 x 200 ft., rein.-con., brick and concrete, plain foundation. $150,000.

Wis., Milwaukee—Depot—Chicago, North Shore & Milwaukee R.R., 72 West Adams St., Chicago, plans 1 story, rein.-con. and brick addition, 6th and Cylbourn Sts., here. $150,000. A. W. Gerber, c/o owner, archt.

Wis., Milwaukee—High School—Our Lady of Mercy Academy, 705 National Ave., having preliminary plans prepared by Brust & Philipp, archts., 405 Bway., 3 story, 100 x 150 ft., brick and concrete, plain foundation, 15th Ave. and Mineral St. $250,000.

Neb., Omaha—Club and Office—A. Sears, 448 Brandis Bldg., had preliminary plans prepared by McDonald & McDonald, archts., 204 Standard Oil Bldg., 10 story, rein.-con., brick, stone and steel, 18th and Dodge Sts. $1,500,000.

Wash., Seattle—Lodge—B.P.O.E., 4th and Spring Sts., plans 300 room hotel with auditorium, (3,500 seating capacity), 4th and Madison Sts., adjoining present building. $1,000,000. J. C. Slater, chn. building com. Architect not selected.

Calif., Fresno—Administration—Central Union High School Dist., c/o Co. Supt. of Schools, plans 1 story. $150,000. Architect not selected.

Calif., Mountain View—High School—Mountain View High School Dist. having plans prepared by W. H. Weeks, archt., 369 Pine St., San Francisco, group of high school buildings. $197,000.

Calif., San Francisco—Home—City and San Francisco Co. plan election to vote on $2,000,000 bonds for new relief home. J. Reid, Jr., city archt., 1st Natl. Bank Bldg., will probably be commissioned to draw plans.

Calif., San Jose—Temple—San Jose Masonic Temple Assn., South 1st St., having plans prepared by C. Werner, archt., Humboldt Bank Bldg., San Francisco, 3 story, rein.-con., 3rd and James Sts. $250,000.

Que., Montreal—Church—Fabrique St. Philomene, 34 St. Sulpice St., plans church, Masson St. and 6th Ave., Rosemont. $150,000.

Ont., Hamilton—Collegiate—Bd. Educ. plans 16 room brick, Main St. $160,000. W. Parke, chn. building com.

B. C., Vancouver—Office—J. J. Coughlan, 738 Granville St., having plans prepared by M. Helyer, archt., c/o owners, 4 or 5 story, 50 x 120 ft., steel, terra cotta and brick, Granville St. near Robson. $150,000.

BIDS DESIRED

Mass., Worcester—High School—Sept. 2 (change of date), by School Comn., 3 story, 181 x 268 ft. brick, concrete and steel, Arthur, Grafton and Dorchester Sts. $700,000. J. D. Leland Co., 41 Mt. Vernon St., Boston, archts. Noted Aug. 10.

N. Y., Buffalo—School—Sept. 11, by Bd. Educ., 1401 Telephone Bldg., School 69, 3 story, 175 x 250 ft., rein.-con., brick and tile, Clinton St. $400,000. Associated Buffalo Architects, 232 Delaware Ave., archts.

N. Y., Glens Falls—School—Sept. 18, by Bd. Educ., brick, steel and stone, plain foundation. $250,000. Tooker & Marsh, 101 Park Ave., New York, archts. and engrs. Noted May 11.

N. Y., New York—Museum—Sept. 7, by Park Bd., Municipal Bldg., new wing to be known as southeast wing and court building known as Hall of Ocean Life, incl. passage to connect court building to southeast wing, for Amer. Museum of Natural History, Manhattan Sq. Bids will also be received for plumbing work, ventilating and humidifying apparatus, steam heating, and fume removal apparatus, etc. Noted Aug. 10.

N. Y., Port Jervis—High School—Sept. 12, by Bd. Educ., brick, steel and stone, plain foundation, $400,000. Tooker & Marsh, 101 Park Ave., New York, archts. and engrs. Noted June 1.

N. Y., Rochester—Bank—J. F. Warner, archt., Granite Bldg., taking bids 5 story, 85 x 85 ft., State and Corinthian Sts., for Natl. Bank of Commerce, State St. $500,000. Noted March 30.

N. Y., Saratoga Springs—High School—Sept. 18, by Bd. Educ., new high school, Lake Ave. $400,000. Coffin & Coffin, 522 5th Ave., New York, archts. and engrs. Noted April 20.

Pa., Johnstown—Auditorium and Gymnasium—Sept. 11, by J. D. Rutledge, pres. School Dist., 601 Swank Bldg., 3 story, 100 x 160 ft. brick and stone auditorium and gymnasium in high school. $350,000. Former contract rescinded. Noted Aug. 24.

Pa., Phila.—Apartment—S. Cohn, 411 South 62nd St., taking bids 3 story and basement, 84 x 94 ft. brick and steel, plain foundation, 46th St. and Osage Ave. $200,000. H. L. During, 1309 Locust St., archt.

Pa., Phila.—School—Sept. 7, by Bd. Educ., 3 story, brick, steel and stone, plain foundation, Palmetto and Bleigh Sts. $500,000. Private plans.

Pa., Pittsburgh—Temple—Sept. 11, by Syria Improvement Assn., Syria Temple, 4 story, 51 x 206 ft., brick and terra cotta, Lytton Ave. and Bayard St. $150,000. R. G. Schmidt & Co., 154 West Randolph St., Chicago, Ill., archts. Noted June 29.

Pa., Williamsport—Church—J. C. Winter and H. J. Wilson, 1001 Market St., taking bids 2 story, and basement, 100 x 110 ft., brick and stone, plain foundation, Bennett and Packer Sts., for First United Evangelical Church, Packer and Bennett Sts. $150,000. Noted April 6.

N. C., Raleigh—School—Sept. 8, by School Bd., for Thompson School, 2 story, 120 x 162 ft., brick and stone, Hargett St. $150,000. C. G. Sayre, Raleigh (street address not available), archt. Noted July 27.

Buildings (Continued)

O., Cleveland—High School—Sept. 18, by Bd. Educ., East 6th St. and Rockwell Ave., 3 story, 250 x 300 ft., brick, steel and concrete, East 152nd St. and St. Clair Ave. $2,000,000. F. G. Hogen, dir. W. R. McCornack, East 6th St. and Rockwell Ave., archt. Noted Oct. 27.

O., Cleveland—Parcel Post Station—Lehman & Schmitt, archts., Electric Bldg., taking bids and opens same about Sept. 1, 3 story, brick and concrete, 131 West St. Clair Ave., for G. Keller, 2230 Superior Ave. $150,000. Noted July 13.

Mich., Ann Arbor—School—Sept. 5, by Bd. Educ., Lincoln School, 2 story, 134 x 156 ft., rein.-con., and brick. $200,000.

Mich., Dearborn—Hotel—Sept. 20, by Kohner & Seeler, archts., 1402 Kresge Bldg., Detroit, 4 story and basement, 100 x 160 ft., brick, terra cotta and steel, plain foundation, Michigan Ave., for Dearborn Hotel Co., c/o architects. $150,000. Noted Aug. 10.

Mich., Ramsey—Housing—Castile Mining Co., Ramsey, taking bids 85 five and six room modern houses, one clubhouse and one community house. $350,000.

Ill., Chicago—Apartment—A. G. Lund, archt., 453 West 63rd St., receiving bids 3 story, 125 x 177 ft., rein.-con., brick and steel, 67th and Merrill Sts., for J. S. Smith, 6720 Clyde Ave. $250,000.

Ill., Chicago—Church—H. K. Holsman, archt., 304 South Wabash St., receiving bids 60 x 100 ft. rein.-con., brick and steel, 57th St. and University Ave., for University Church of Disciples, c/o architect. $200,000.

Wis., Milwaukee—Apartment—R. Razall, archt., 330 Caswell Blk., receiving bids and opens same about Sept. 4, 3 story, 2 units each, 50 x 110 ft., concrete and brick, plain foundation, East Side, for Hotel Investors, Inc., 330 Caswell Blk. $250,000.

Wis., Racine—Hotel—Sept. 15, by New Racine Hotel Co., 6th and Main Sts., and W. E. Perry and Fugard & Knapp, archts., 212 East Superior St., Chicago, 1st unit, 7 and 8 story, 100 x 120 ft., rein.-con., brick and steel, plain foundation. $600,000. Noted April 13.

Ia., Cedar Rapids—High School—Bd. Educ., c/o J. A. Motejl, secy., 705 1st Ave., receiving bids and opens same about Sept. 20, 3 story, 160 x 200 ft., rein.-con., brick, tile and stone. $475,000. F. Tustison Co., 322 Auditorium Bldg., Minneapolis, Minn., engrs. B. Rugh, 811 Security Bldg., archt. Noted Aug. 17.

Ia., Cedar Rapids—Hospital—Mercy Hospital Assn., c/o Sister Sephias, receiving bids and opens same about Sept. 10, 6 story, 80 x 120 ft. addition, rein.-con., brick, tile and stone, 6th Ave. between 8th and Division Sts. $250,000. W. L. Steele, 502 United Bank Bldg., Sioux City, archt. Noted Aug. 10.

Kan., Atchison—Academy—Sept. 15, by E. Brielmaier & Sons Co., archts., 432 Bway., Milwaukee, Wis., 4 story, rein.-con. and brick, plain foundation, for St. Scholastica Academy, 8th and Eccher Sts. $500,000. Noted Aug. 10.

Calif., San Francisco—Church and School—C. Fantoni, archt., 550 Montgomery St., receiving bids 3 story, rein.-con. and steel, Filbert St. near Powell St., for Roman Catholic Archbishop of San Francisco, 1100 Franklin St. $200,000.

BIDS RECEIVED

Me., Belfast—High School—Bd. Educ. opened bids 3 story, 130 x 153 ft., brick and steel, Church St., from Forgione & Romano, Fidelity Bldg., Portland, $195,920; O. Nelson Co., 194 Exchange St., Bangor, $255,829; H. Purinton Co., 61 Temple St., Waterville, $264,500. Noted July 13.

Md., Baltimore—Hospital—E. H. Glidden, archt., 1210 Amer. Bldg., opened bids Aug. 16, group of 9 buildings, incl. administration, 3 pavilions, nurses home, kitchen building, laundry, power house, etc., also grading, sewers, etc., Baltimore City Hospital for Communicable Diseases, Hillen Rd., (a) primary bid, (b) secondary bid, from Price Constr. Co., Maryland Trust Bldg., (a) $674,500 (b) $645,900, R. B. Mason, 308 West Madison St., (a) $680,000 (b) $653,000, M. A. Long Constr. Co., 2016 West North Ave., (a) $707,230 (b) $671,987.

Minn., Mankato—Administration—State Bd. Control, State Capitol, St. Paul, opened revised bids Aug. 17, 3 story, irregular shaped, rein.-con., brick and tile, State Teachers College, here, (a) main bid (b) alternate for unfinished int., from J. C. Nelson Constr. Co., Mankato, (a) $247,120, (b) $89,900, Madsen Constr. Co., Builders Exchange Bldg., Minneapolis, (a) $249,322, (b) $86,966, Fleisher Constr. Co., 1000 Builders Exchange Bldg., (a) $250,000, (b) $84,360. Contract awarded to lowest bidder. Noted Aug. 17.

CONTRACTS AWARDED

Mass., Brighton (Boston P. O.)—Apartment—D. Cerussi, 15 Exchange St., Boston, 5 story, 100 x 100 ft., brick, here, to F. J. Van Etten Co., 80 Boyleston St., Boston. Archts. est. $500,000.

R. I., Cranston—Library—Elmwood Library Assn., 2 story, 60 x 110 ft. brick, marble and fireproof construction, Elmwood and Princeton Aves., to J. W. Bishop Co., 109 Foster St., Worcester, Mass. Archts. est. $300,000.

N. Y., Brooklyn—Apartment—Zol Cla Constr. Co., c/o C. B. Meyers, archt. and engr., 31 Union Sq., New York, 9 story, 120 x 150 ft., brick, steel and stone, plain foundation, Ocean Ave., here, by day labor. $700,000.

N. Y., New York—Apartment—One Fifty East 73rd St. Corp., 403 Madson Ave., 11 story, brick, steel and stone, plain foundation, East 73rd St., to J. Lowry, Jr., 171 Madison Ave. Archts. est. $1,250,000.

N. Y., New York—High School—Bd. Educ., 500 Park Ave., addition to Julia Richman High School, brick, steel and stone, plain foundation, 67th and 68th Sts. near 2nd Ave., to Frymier & Hanna, 25 West 45th St., $1,864,000. Archts. est. $1,900,000. Noted Aug. 10.

N. Y., New York—Hotel—Forty One West 81st St. Corp., 345 Madison Ave., 15 story, brick, steel and stone, plain foundation, 41 West 81st St., to J. G. Siegel, 343 Madison Ave. Archts. est. $750,000.

N. Y., New York—Loft—C. Glazer, Inc., 175-5th Ave., 9 story, brick, steel and stone, plain foundation, 146 West 26th St., to V. Lynch & Co., 270 West 19th St. Archts. est. $350,000.

N. Y., New York—Office—Forty Nine West 45th St. Corp., c/o Sommerfeld & Steckler, archts. and engrs., 31 Union Sq., brick, steel and stone, plain foundation, 49 West 45th St., to G. Backer Constr. Co., 285-5th Ave. Archts est. $300,000. This corrects report in Aug. 17th issue.

N. Y., New York—Office—Prudence Bond Corp., 31 Nassau St., 14 story, 66 x 100 ft., Madison Ave. and 43rd St., to Realty Association, 162 Remsen St., Brooklyn. Noted Feb. 9.

Pa., Dunlo—High School—Bd. Educ., c/o M. L. Smith, secy., 2 story and basement, 130 x 150 ft., to L. F. Swinter, Ebensburg. Archts. est. $150,000.

Pa., Phila.—Apartment—M. E. LaDow, Oak Lane, 3 story, 40 x 121 ft. brick, steel and stone, plain foundation, 13th St. and Oak Lane, to W. P. Cameron Eng. Co., Witherspoon Bldg. Archts. est. $150,000.

Pa., Phila.—Loft—33rd and Arch Sts. Realty Co., c/o C. E. Wunder, archt., 1415 Locust St., 2 story and basement, 70 x 133 ft. rein.-con. and brick, plain foundation, 33rd and Arch Sts., to J. S. Rogers & Co., Drexel Bldg. Archts. est. $150,000.

Pa., Phila.—Office—E. Hummel, c/o Martin & Kilpatrick, archts., Otis Bldg., 8 story, 22 x 153 ft. brick, steel and stone, 20th and Chestnut Sts., to W. R. Dougherty, 1610 Sansom St. Archts. est. $500,000.

Pa., Phila.—Office and Sales—Westinghouse Electric Co., Weidner Bldg., 10 story, 95 x 111 ft. rein.-con. and brick, plain foundation, 30th and Walnut Sts., to Hughes-Foulkrod Co., Commonwealth Bldg. Noted June 29.

Pa., Phila.—Theatre and Stores—R. Hill, 304 Sommerset St., 2 story, 58 x 104 ft., brick and steel, plain foundation, Front and Huntington Sts., to C. A. Booth Co., 4355 Frankford Ave. Archts. est. $200,000.

Pa., Pittsburgh — Gymnasium, etc. — Duquesne University, Bluff St., 3 story and basement, 80 x 125 ft., gymnasium and power house, Colber and Locust Sts., to Rose & Fisher, 819 Penna. Ave. Archts. est. $150,000.

Pa., Pittsburgh — School — Bd. Educ., Fulton Bldg., 2 story addition, Hazelwood Ave., general contract, to Pittsburgh Eng. & Constr. Co., Homewood Ave., $151,805. Noted July 27.

Pa., Pittsburgh—Store—Kaufmans Dept. Store, 5th Ave. and Smithfield St., 1 story, 93 x 118 ft. top addition, Smithfield and Diamond Sts., to J. F. Love, Arrot Bldg. Archts. est. $150,000. Noted July 13.

Pa., Pittston—Office—Newrose Building Co., Pittston, 48 room brick and steel, South Main and Spring Sts., to Alimo Bros., Pittston. Archts. est. $150,000.

Pa., State College—Dormitory—Day & Klauder, archts., Franklin Bank Bldg., Phila., 4 story, 42 x 106 ft. brick, steel and stone, plain foundation, to F. B. Boyer, Tyrone, for Pennsylvania State College, here. Noted July 27.

Fla., West Palm Beach—Theatre, etc.—C. Kettler and associates, 5 story, theatre, store and office building, steel, stucco and terra cotta, to Foundation Co., 3rd Natl. Bank Bldg., Atlanta, Ga., $300,000.

O., Orient—Cottages—Dept. Public Welfare, 9th and Oak Sts., Columbus, two 65 x 135 ft. and four 30 x 110 ft. cottages, all brick and concrete, at Institution for feeble minded, here, to D. W. McGrath & Sons, 255 East Broad St., Columbus, $639,836. Noted July 20.

Mich., Detroit—Schools—Bd. Educ., 1354 Bway. Ave., 2 story, 85 x 135 ft. and 78 x 90 ft. rein.-con., brick and steel addition, Congress St., to G. Worswick, 3280 Whitney Ave., $209,726; 2 story and basement, 105 x 145 ft. rein.-con., brick and steel, Kerwin Ave. to Martin & Krausmann, 606 Woodward Ave., $202,492; 3 story, 168 x 334 ft. rein.-con., brick and steel, Selden and Hamilton Aves., to A. A. Albrecht, 540 Penobscot Bldg., $748,250. Noted July 27 and Aug. 3.

Ill., Chicago—Apartment-Hotel—Judson Hotel Co., c/o H. L. Stevens Co., archts., 30 North Michigan Ave., 10 story, 100 x 136 ft., rein.-con., brick and steel, 5032 Sheridan Rd., to B. W. Constr. Co., 726 Cass St. Archts. est. $1,250,000.

Wis., Green Bay—Lodge—Independent Order of Odd Fellows Lodge, 822 Grigman St., 3 story, 36 x 112 ft., rein.-con., brick and steel, plain foundation, to E. H. Regal, 134 South Adams St. Archts. est. $150,000.

Wis., Wausau—Hospital—Wausau Memorial Hospital c/o O. C. Lemke, Cleveland Ave. and St. Thomas St., 4 story, rein.-con. and brick, plain foundation, to Wisconsin Eng. and Constr. Co., 512 3rd St. Archts. est. $250,000.

Minn., Albert Lea—Bank and Office—Albert Lea State Bank, 4 story, 44 x 122 ft. rein.-con., brick and tile, general contract to C. M. Tapager, Faribault, $113,500. Noted July 6.

Minn., Carlton—Court House—Carlton Co., 3 story, 78 x 125 ft., rein.-con., brick and stone, to J. J. Niebuhr, 2822 Penn Ave., Minneapolis, $218,187. Noted Aug. 10.

Minn., Crookston—School—St. Benedicts Academy, c/o Benedictine Sisters, general contract 3 story, 50 x 220 ft., rein.-con., brick and tile, to Schwartz & Co., Rochester, on percentage basis. Total about $22 000. Noted Jan. 13, 1921.

Minn., Minneapolis—Apartment—Burton Investment Co., 733 1st Natl.-Soo Line Bldg., 3 story, 110 x 192 ft., rein.-con., brick and tile, 25½ St. and Humboldt Ave. S., general contract, incl. mechanical equipment to Fleisher Constr. Co., 1000 Builders Exchange Bldg. Cost complete $250,000.

Minn., St. Cloud—School, etc.—Roman Catholic Diocese of St. Cloud, orphanage group, incl. 2 story school and chapel, both brick, concrete and tile, 6 cottages, general contract to E. Hurt & Son, St. Cloud. $219,300.

Minn., St. Paul—Apartment—A. H. Heimbach, 1610 University Ave., will build 3 story, 110 x 134 ft. brick, concrete and tile, Portland Ave. between Albert and Pascal Sts., by day labor. $150,000.

Kan., Emporia—Hotel—S. M. Parker, Wichita, will build 3 story, 130 x 150 ft. rein.-con., brick and stone, here, by day labor. $200,000. G. H. Siedhoff Constr. Co., 126 East 1st St., Wichita, archts.

Tex., Cisco—High School—Bd. Educ., 3 story, 133 x 175 ft., rein.-con., steel, brick and stone, to Johnson Constr. Co., Cisco, $160,000.

Calif., Berkeley — Hall — University of California, 2 story, rein.-con., to K. E. Parker, Clunie Bldg., San Francisco, $337,400. Noted Aug. 17.

Calif., Gilroy—Schools—Gilroy School Dist., 6 room high school and 14 room elementary school, general contracts, to E. Nommensen, South 5th St., San Jose, $75,564 and $38,704 respectively. Noted Aug. 24.

Calif., Oakland—High School—Bd. Educ., 2 story, brick, 26th, 28th, Myrtle and Linden Sts., general contract to R. W. Littlefield, Everson Bldg., $179,700; heating and ventilating to Scott Co., 243 Minna St., San Francisco, $28,578; brick work to M. B. McGowan, 180 Jessie St., San Francisco, $33,987; electric work to F. E. Mewbery Electric Co., 359 Sutter St., San Francisco, $44,850. Noted July 20.

Calif., San Francisco—Apartment—Crest View Apartments, Inc., c/o J. L. Stewart, archt., Spreckels Bldg., 8 story, rein.-con., Gough and Washington Sts, to Monson Bros., 251 Kearny St., $400,000.

Que., Marieville—Hospital—Les Soeurs Grised de St. Hyacinthe, St. Hyacinthe, 3 story, 60 x 150 ft., rein.-con., brick and stone, here, to A. and D. Boileau, 546 Fabre St., Montreal, $153,000.

B. C., Prince Rupert—Court House—Provincial Government, Parliament Bldgs., Victoria, 2 story and basement, 56 x 159 ft. rein.-con. and brick, plain foundation, to McDougall & McNeill, Prince Rupert, (street address not available). Archts. est. $400,000.

Federal Government Work

PROPOSED WORK

Pa., Phila.—Dredging Plant—U. S. Engineer, 815 Witherspoon Bldg., soon takes bids for hire of dredging plant.

Pa., Phila.—Painting Radio Towers—Spec. 4704—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans painting radio towers, here.

Mich., Battle Creek—Hospital—U. S. War Veterans' Bureau, 1044 Arlington Bldg., Wash., D. C., plans 15-20 buildings, 2 and 3 story, concrete and steel, plain foundations, for U. S. Veterans' Hospital, Camp Custer, here. C. R. Forbes, dir.

Calif., Mare Island—Storage Plant—Spec. 4703—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans fuel oil storage plant, here.

Cuba, Guantanamo — Chimney — Spec. 4705—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans rein.-con. chimney, here.

BIDS DESIRED

N. Y., Buffalo—Dredging—Sept. 28, at office U. S. Engineer, Buffalo, dredging and rock excavation in Sandusky Harbor, O.; adv. this issue.

N. Y., Chelsea—Brick—Sept. 5, by Treas. Dept., Wash., D. C., furnishing and delivering 5,000,000 brick at site of proposed U. S. Veterans' Hospital, here. J. A. Wetmore, acting superv. archt.

D. C., Anacostia—Hangar—Spec. 4691—Sept. 13, by Bureau Yards & Docks, Navy Dept., Wash., D. C., for hangar, here.

Va., Langley Field—Quarters—Sept. 20, by Constructing Quartermaster, labor and material for 2 officers' quarters. Noted May 4.

Ga., Savannah—Repairing Walls—Sept. 26, at office U. S. Engineer, repairing retaining walls in harbor; adv. this issue.

Colo., Fitzsimons—Cast Iron Mains, etc.—Sept. 22, by Constructing Quartermaster, Fitzsimons General Hospital, for approximately 2½ mi. 12-in. c.i. mains, etc.; adv. this issue.

N. M., Ft. Bayard—Quarters—Sept. 27, by Treas. Dept., Wash., D. C., officers and employees quarters at U. S. Veterans' Hospital, here; adv. this issue.

H. T., Honolulu—Dredging—Oct. 31, at office U. S. Engineer, Honolulu, dredging in harbor; adv. this issue.

BIDS RECEIVED

Va., Quantico—Retaining Walls—Spec. 4647—Bureau Yards & Docks, Navy Dept., Wash., D. C., retaining walls at Marine Flying Field, here, from E. G. Heflin, Fredericksburg, $5,200; Concrete Steel Building Co., 710 14th St., Wash., D. C., $5,944 (75 days). Noted July 27.

Ala., Tuskegee — Roads and Walks — Treas. Dept., Wash., D. C., roads and walks at U. S. Veterans' Hospital, here, from A. Blair, 11 South Lawrence St., Montgomery, $124,050; Jamison & Hallowell, 835 North Court St., Montgomery, $131,823; Noland-Clifford Co., 322 28th St., Newport News, Va., $132,240.

Calif., San Diego—Wards and Service Building—Spec. 4636—Bureau Yards & Docks, Navy Dept., Wash., D. C., wards and service building for hospital reservation at Naval Base, here (1) work complete, from Lange & Bergstrom, 819 Timkin Bldg., (1) $400,000 (300 days), (2) $3,000 telegraphic modification add $84,500 to Item (1) deduct $1,000 from Item (2); W. Simpson Constr. Co., 526 Morris Strong Bldg., Los Angeles, (1) $500,000 (300 days) (2) $1,300 telegraphic modification (1) add $14,783 (2) add $600; W. E. Kerr Constr. Co., 1st Natl. Bank Bldg., (1) $500,000 (2) $2,000 telegraphic modification (1) add $17,511 (2) add $500.

H. T., Pearl Harbor—Quaywalls, etc.—Spec. 4591—Bureau Yards & Docks, Navy Dept., Wash., D. C., quaywalls and pier at Naval Operating Base, here, (1) work complete, from Hawaiian Dredging Co., 854 Kaumana St., Honolulu, (1) $1,000,000 (450 days) (5a) add $23,000 deduct $21,000 (7) add $5 deduct $3 (8) add $1.50 deduct $1 (10) $0.90 telegraphic modification (1) deduct $188,257 (5) deduct $4,715 and $6,396 (7) deduct $1 and $1 (8) deduct $1 deduct $0.70 (10 deduct $0.15; J. Lloyd, Mc Kansas Bldg., Honolulu, (1) $1,104,736 (450 days) (2) $1,200,860 (450 days) (3) $785,000 (5) $18,400 (6) $5,120 (7) $3 (8) $1 (9) $3 (10) $1.10. Noted July 20.

CONTRACTS AWARDED

N. J., Camden—Dredging—U. S. Engineer, 815 Witherspoon Bldg., Phila., dredging in Delaware River, here, to Amer. Dredging Co., 310 Mariner & Merchant Bldg., Phila., 174,000 cu.yd. scow measurement $0.34, total $59,160. Noted Aug. 17.

La., New Orleans—Earthwork—U. S. Engineer, 140 Decatur St., earthwork in Lower Tensas, Atchafalaya, Lafource, Barataria, Ponchartrain, and Lake Borgne Levee Dists., to E. W. Fravolet, Point a la Hache, Walzer Levee, 18,000 cu.yd. $0.2975 per cu.yd.; Kellar Co., Inc., Baton Rouge, (street address not available), 96,000 cu.-yd. $0.2387; Grounds & Laiche, Shreveport, Lucy Levee, 65,000 cu.yd. $0.264; Roach, Stansell & Lawrence Bros., North Memphis Savings Bank Bldg., Memphis, Tenn., Wecama Levee, 370,000 cu.yd., $0.289; Ogden-Lewis, Baton Rouge, Bennett Levee, 250,000 cu.yd. $0.234, also Sims Levee, 250,000 cu.yd., $68,750. Noted Aug. 3.

Calif., San Diego—Wire Partitions—Spec. 4696—Bureau Yards & Docks, Navy Dept., Wash., D. C., wire partitions at Naval Supply Base, here, to Standard Fence Co., 245 Market St., San Francisco, $3,999. Noted Aug. 24.

Miscellaneous

PROPOSED WORK

Swimming Pools—Elmira, N. Y.—Bd. Pub. Wks., plans 3 or 4 swimming pools. $25,000 each.

Transmission Line—Hornell, N. Y.—Hornell Electric Co., 30 Canisteo St., plans 5 mi. high power transmission line from here to Arkport. $25,000.

Memorial—Rochester, N. Y.—Edgerton Memorial Assn., plans memorial in park. $25,000. J. Gregory, c/o Central Bank, chn.

Athletic Field — Bethlehem, Pa. — Bd. Educ. plans athletic field to include baseball diamond, football field, tennis court, volley ball court, field track, etc., on Liberty High School grounds. $75,000.

Swimming Pool—Taylor, Pa.—See "Streets & Roads."

Generating Units — York, Pa. — York Haven Water & Power Co., plans 20 or more generating units during 5 years. First unit to be installed will cost $60,000, total estimated cost $1,500,000.

Ornamental Lighting System—Muskegon Heights (Muskegon P. O.), Mich.—Plans 2 mi. ornamental lighting system, incl. 190 posts. $35,000. C. S. Gamble, city engr.

Air Compressor, etc.—Ft. Atkinson, Wis.—City plans to purchase air compressor, air lift pump and auto truck pumper, etc. $38,000. W. G. Kirchoffer, Vroman Blk., Madison, engr.

Transmission Line, etc.—Glidden, Wis.—Glidden Telephone Co., plans transmission line and other improvements. Cost not to exceed $36,000. Engineer not selected.

Electric Lights—Clifton, Tex.—Attorney Generals Dept., Austin, approved $35,000 bond issue for electric light improvements, here.

Rockfill or Bulkhead—San Francisco, Calif.—City and San Francisco Co. having plans prepared constructing rockfill or bulkhead along Marina Blvd. from Steiner St. to Presidio. $45,000. M. M. O'Shaughnessy, city engr.

Asphalt Paving Plant—Santa Rosa, Calif.—Plans to vote on $50,000 bonds for asphalt plant. L. L. Mills, city engr.

Harbor Improvements—Collingwood, Ont.—Dept. Pub. Wks., Ottawa, plans harbor improvements and channel. $50,000. A. Craig, Royal Bank Bldg., London, engr.

Electric Light and Power System—St. Thomas, Ont.—Tarmouth Twp. plans electric lighting and power distribution system and substation. $28,000. W. C. Caughell, 386 Talbot St., twp. clk.

River Protection—Chilliwack, B. C.—Provincial Government, Parliament Bldgs., Victoria, had plans prepared river protection and improvements in channel of Vedder River. $75,000. P. Philip, Dept. Pub. Wks., Victoria, engr.

BIDS DESIRED

Sub-structure and Foundations—Everett, Mass.—Sept. 2, by Boston Elevated Ry., 108 Massachusetts Ave., Boston, sub-structure and foundations for two 160 x 300 ft. and two 53 x 56 ft. car repair shops, and 80 x 731 ft. transfer yard, etc., all rein.-con. $3,000,000. D. P. Robinson & Co., 61 Bway., New York, engrs.

Dumping Platforms—New York, N. Y.—Sept. 8, by J. H. Delaney, comr. Docks, Piers "A" foot of Battery Pl., improving Brooklyn Bridge, Manhattan Boro, incl. rein.-con. dumping platform and water supply, Contr. 1742.

Crane—Coraopolis, Pa.—Standard Steel Spring Co. taking bids special crane equipped with long hoisting drums and 2 hooks on 12 ft. centers.

Dump Truck—Fassett, Pa.—H. W. Horst, Fassett, taking bids 3 to 5½ ton hydraulic dump truck. $1,000.

Railer and Crane—Cleveland, O.—Taking bids one 10 ton drop frame roller, to carry road roller, and one 10 ton gasoline driven locomotive crane.

Flusher, etc.—La Crosse, Wis.—City receiving bids for combined power flusher and sweeper, for streets. W. J. Fries, clk.

Foundation—Des Moines, Ia.—Sept. 12, by Equitable Insurance Co. of Iowa, Bankers Trust Bldg., foundation for 18 story, 132 x 133 ft., rein.-con., brick, steel, tile and stone office building, 6th and Locust Sts. Proudfoot, Bird & Rawson, 810 Hubbell Bldg., archts.

Portland Cement, etc.—St. Paul, Minn.—Sept. 5, by H. W. Austin, city purch. agt., 3,000 bbl. Amer. Portland cement, 250 bbl. Atlas white non-staining Portland cement, 1,400 cu.yd. 2 in. ring gravel and 700 cu.yd. washed sand. O. Claussen, city engr.

Railroad Ties—Toronto, Ont.—Sept. 16, by W. H. Grant, genl. tie agt., Room 231 New Union Sta., 350,000 ties delivered on Canadian Natl. lines between Armstrong and Hervey Junction, 200,000 ties delivered on Canadian Natl. lines between Hawkesbury, Quebec City and St. Felicien, 100,000 ties delivered on Old Central Ontario lines 850,000 ties delivered on Canadian Natl. lines between Ruel and Port Arthur, $1,250,000, also 250,000 ties delivered on lines in Nova Scotia, 800,000 ties delivered on lines in New Brunswick, and 450,000 ties delivered on lines in Quebec on south shore of St. Lawrence, for Canadian Natl. Ry., Wellington St.

BIDS RECEIVED

Fine Gravel—New York, N. Y.—Bd. Purch., Municipal Bldg., opened bids Aug. 23, furnishing and delivering fine gravel to Dept. Parks, Manhattan Boro, from Rosoff Sand & Gravel Co., $2.65 per cu.yd. G. J. Wolfe, 17 Battery Pl., $2.95. Noted Aug. 17.

Paving Sand—New York, N. Y.—J. Miller, pres. Manhattan Boro, Municipal Bldg., opened bids Aug. 21, furnishing and delivering 3,000 cu.yd. paving sand, from G. A. Colgan, Jr., 90 William St., $1.50 per cu. yr.; Gallagher-Shand, Inc., 420 East 105th St., $1.60. Noted Aug. 17.

CONTRACTS AWARDED

Power Plant and Canal — Robertsville (Colebrook P. O.) Conn.—Winsted Gas Co., Winsted, stone and rein.-con. power plant, at Robertsville Falls, also concrete canal, 300 ft. long, 15 ft. deep, etc., to J. M. Swan & Son, Inc., St. Johnsbury, Vt., two 300 hp. water wheels complete, to L. B. Dow & Son, Ayer, Mass. Engrs. est. $30,000.

Paving Blocks—Farrell Pa. — J. W. Kozar, boro. secy., 125,000 vitr. brick blocks to Metropolitan Brick Co., Bessemer, $31.25 per M. Noted July 20.

Paving Brick—Youngstown, O.—Bd. Control furnishing 250,000 paving brick, to Metropolitan Brick Co., Youngstown (street address not available), $7,688.

Car Barn—Oshkosh, Wis.—Eastern Wisconsin Electric Co., 58 Main St., 1 story, 60 x 100 ft., brick and wood, plain foundation to Fluor Bros. Constr. Co., 52 State St. Archts. est. $55,000.

Reinforcing Rods—St. Paul, Minn.—Deformed medium steel reinforcing rods, for Water Dept., to C. A. P. Turner, 627 1st Ave. N., Minneapolis, $3,400. Noted Aug. 10.

Oil Reservoirs—Martinez, Calif.—Shell Co. of California, 343 Sansome St., San Francisco, two 500,000 bbl. rein.-con. oil reservoir, here, to Bent Bros., 1714 Eagle Ave., Los Angeles, $350,000.

Transformers, Etc.—San Francisco, Calif.—City and San Francisco Co., transformers, switchboards and accessory equipment, for Moccasin Creek Power Plant under Contr. 81, Hetch Hetchy Project (Propositions A1 and D1 accepted), to Westinghouse Electric & Mfg. Co., 1st Natl. Bank Bldg., $379,585. Noted Aug. 17.

Conduits — Montreal, Que. — Electrical Comn., laying 2½ in. steel conduits in Dist. 9, bounded by Craig, Bleury and St. Catherine Sts., also in Dist. 5, bounded by Craig, Berri, Commission and St. Lawrence Sts., to G. M. Gest, Ltd., Power Bldg., $99,296 and $175,980 respectively. Noted June 29.

Breakwater—Port Burwell, Ont.—R. C. Desrochers, secy. Dept. Pub. Wks., Ottawa, repairing breakwater and dredging harbor, to W. Birmingham, Center St., Kingston, $38,500. Noted June 15.

Breakwater—Port Colborne, Ont.—R. C. Desrochers, secy. Dept. Pub. Wks., Ottawa, rebuilding breakwater, to M. J. Hogan, Port Colborne, $54,480.

Oil Heating System—Toronto, Ont.—Oil heating system for new civic arena at Exhibition Park, to Purdy-Mansell, Ltd., 63 Albert St. Engrs. est. $130,000.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Sept. 23.

Sewers

Bloomington, Ill.

Sealed bids will be received by the Trustees of the Bloomington and Normal Sanitary District, at 404 Unity Building, Bloomington, Illinois, up to 10 o'clock a.m., September 23, 1922, for the construction of the following work of the District.

Division Street Sewer Extension, consisting of:

820 feet of 18 inch Vitrified Pipe Sewer.
12 feet of 18 inch Cast Iron Pipe Sewer.
2 Manholes.
1 Overflow Chamber.
1 Headwall.

And the Valley Sewer Overflow Chamber, requiring 37 cubic yards of reinforced concrete.

All bids must be on forms prescribed by the Trustees, and bidding blanks may be obtained from Taylor & Woltmann, 428 Unity Building, Bloomington, Illinois, engineers for the District.

Plans, profiles and specifications for the work may be obtained from the engineers.

All bids must be accompanied by a check for 10 per cent of the amount of the bid certified by a responsible bank, payable to John W. Harber, president of the Board of Trustees.

The Trustees reserve the right to reject any and all bids.

Dated Bloomington, Illinois, August 22, 1922.

JOHN W. HARBER,
FRED D. BARBER,
JOHN J. CONDON,
Trustees, Bloomington and Normal Sanitary District.

Bids: Sept. 14.

Water Main Extensions

Mineola, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Mineola of the Town of North Hempstead, Nassau County, New York, at the Village Hall, Main St., Mineola, N. Y., until 8 o'clock p.m. (daylight saving time), September 14, 1922, and then publicly opened and read for furnishing and installing water mains in accordance with plans and specifications prepared by S. B. Bowne, Village Engineer.

Plans and specifications are on file at the office of the Engineer, Post Office Building, Mineola, N. Y.

All inquiries must be addressed to the Engineer.

Each bidder must accompany his proposal with a certified check or its equivalent in the amount of Three Thousand Dollars, which deposit to be forfeited to the Village of Mineola in case such bidder shall refuse to enter into a contract in accordance with his proposal, which deposit will be returned to the unsuccessful bidder immediately following the award of the Contract.

The successful bidder will be required to enter a contract for the performance of the work as may be awarded to him or them accompanied by a bond of an approved Surety Company for not less than one half (½) the total amount of the Contract Price.

The right is reserved to reject any or all bids, or accept any bid, or bids, or any portion of any bid.

BOARD OF TRUSTEES,
Village of Mineola.
CHARLES F. QUINN,
Clerk.

OFFICIAL PROPOSALS

Bids: Sept. 11.

Sanitary Sewers

Madisonville, Ky.

Sealed proposals will be received by the Board of Public Works of the City of Madisonville, at the office of the City Clerk for constructing a system of Sanitary Sewers in and for the City of Madisonville, Ky., until one o'clock P.M., September 11, 1922, at which time they will be opened and publicly read.

The work consists of furnishing all labor, material and equipment of all kinds necessary for the construction of approximately 9.2 miles of sanitary sewers, in sizes from 8 in. to 12 in. with all necessary appurtenances complete in accordance with the plans and specifications on file, at the office of the Engineers and the City Clerk.

Each bill must be accompanied by a certified check in the amount of $3,000.00 or an acceptable bidder's bond and drawn in favor of the City Treasurer of Madisonville, Ky.

A bond in the amount of fifty (50) per cent of the contract price will be required for the faithful performance of the work.

Copies of plans and specifications may be seen at the office of the City Clerk of Madisonville, or may be obtained from the Engineers on deposit of ten ($10.00) dollars which will be returned if a bona fide bid is made.

The City reserves the right to reject and and all bids.

F. P. STUM,
Chairman Board of Public Works.
W. J. DUHN,
Secretary Board of Public Works.
HOWERTON-TIRSWAY CO.,
Engineers,
Asheville, N. C.

Bids: Sept. 9.

Concrete Reservoir and Laying of Pipe

Voorheesville, N. Y.

Notice is hereby given that sealed proposals will be received by the Board of Trustees of the Village of Voorheesville, N. Y., at their office in the "Hose House," in the village of Voorheesville, N. Y., until three (3:00) o'clock P.M. (daylight saving time), on the ninth (9th) day of September, 1922, for the construction of a concrete reservoir and hauling and laying of about three and one-half (3½) miles of eight (8 in.) inch Class "B" cast iron water pipe and appurtenances.

All proposals must be made upon printed forms, to be obtained from the engineer; and the unit prices written in words and figures, and accompanied by cash or a certified check, made payable to the Village of Voorheesville, N. Y., for one thousand ($1,000.00), Dollars.

All proposals must be enclosed in a sealed envelope, directed to the Board of Trustees, Village of Voorheesville, N. Y., and endorsed upon the outside of the envelope "Proposal for Water System."

The Board of Trustees reserves the right to reject any or all proposals.

By order of the Board of Trustees of the Village of Voorheesville, New York.

GILBERT H. DARING,
Village Clerk,
Voorheesville, N. Y.

W. W. CHADSEY,
Civil and Sanitary Engineer,
434 State Street,
Schenectady, N. Y.

OFFICIAL PROPOSALS

Bids: Sept. 12.

Storm Water Sewer

Wichita, Kan.

Notice is hereby given that bids will be received at the office of the City Clerk up to 4:00 p.m. Tuesday, September 12, 1922, for the construction of Storm Water Sewer No. 15.

7,070 ft. 72" sewer.
800 ft. 66" sewer.
980 ft. 60" sewer.
700 ft. 57" sewer.
1,700 ft. 54" sewer.
1,670 ft. 48" sewer.
1,350 ft. 45" sewer.
1,165 ft. 42" sewer.
650 ft. 39" sewer.
660 ft. 36" sewer.
360 ft. 33" sewer.
675 ft. 27" sewer.
440 ft. 24" sewer.
375 ft. 21" sewer.
165 ft. 18" sewer.
1,190 ft. 15" sewer.
1,325 ft. 12" sewer.
1,350 ft. 10" sewer.
500 ft. 8" sewer.
44 manholes.
153 sewer inlets.
1,100 sq.yds. pavement.
3 outlet protections.
2 special X-ings.
1 junction manhole.
right of way.

All work to be done under the direction and supervision of the City Manager and according to plans and specifications on file in the office of the City Engineer.

Bidders will be required to enclose certified check in the amount of $5,000.00 with each bid as a guarantee of good faith.

Plans and specifications may be procured from P. L. Brockway, City Engineer, upon a deposit of $10.00 being made.

Commissioners reserve the right to reject any and all bids.

E. S. WORRELL,
City Clerk.

Bids: Sept. 11.

Submerged Intake Crib

Monroe, Mich.

Sealed proposals will be received by the City Clerk of Monroe, Mich., up to 7:30 o'clock p.m., eastern standard time, of the 11th day of September, 1922, for the construction and placing of a new submerged water intake crib to be located in Lake Erie near the existing waterworks intake crib.

The crib will be approximately 28 feet square, constructed of timber, floated to the site, sunk into position, and anchored by concrete deposited under water.

The plans and specifications under which the work is to be done may be examined at the office of the City Clerk, Monroe, Michigan, or at the office of Hoad, Decker, Shoecraft and Drury, Consulting Engineers, Ann Arbor, Michigan. Copies of the plans and specifications may be obtained by making a deposit of five dollars which will be refunded upon their return in good condition or their use in a submitted proposal.

A certified check for a sum not less than five per cent of the amount of the proposal will be required with each proposal.

The right to accept any proposal, to reject any or all proposals, and to waive defects in proposals is reserved by the City.

J. H. GILMORE, Mayor.
F. M. KRESSBACH, City Clerk.
HOAD, DECKER, SHOECRAFT & DRURY,
Consulting Engineers, Ann Arbor, Mich.

Bids: Sept. 5.

Repairs to Dam No. 537

Beacon, N. Y.

Sealed proposals will be received by the City Council at its office No. 525 Main Street, Beacon, N. Y., on or before eight (8) o'clock P. M., Daylight Saving Time, Tuesday, September Fifth (5th), 1922, for repairs to Dam No. 537, South Mountain, Mt. Beacon Reservoir, Beacon, N. Y., which proposals will be opened by the Mayor or presiding officer on that day and time or on such subsequent day as the council may adjourn for that purpose.

No proposal shall be considered unless accompanied by the written consent of two sureties, conditioned that if the proposal be accepted, they will execute and deliver a bond with the bidder in a penalty to be fixed by the council conditioned for the construction of the work at the price and upon the terms proposed, according to the plans and specifications therefor, within such reasonable time as the council may limit, and subject to the supervision and approval of the commissioner of public works as the specifications shall provide.

Prospective bidders are requested to visit the site of the proposed work in order to satisfy themselves as to the scope and hazards of the work.

Plans and specifications, form of proposal, bond and contract may be obtained at the office of the city, No. 525 Main Street, Beacon, New York, or at the office of George W. Krieger, Jr., Consulting Engineer, Poughkeepsie, N. Y. upon the deposit of $15.00, which amount will be refunded upon the return of the plans and specifications in good condition.

Quantities of work to be done are approximately as follows:

PROPOSAL TO THE
CITY COUNCIL OF THE CITY OF
BEACON, DUTCHESS COUNTY, N. Y.

Quantity	Unit of Measure	Item
900	Cubic Yds.	Concrete 1:2:4
3,400	Pounds	Reinforcing bars 1½ in.
3,700	Pounds	Reinforcing bars 1 in.
5,200	Pounds	Reinforcing bars ½ in.
1,100	Lin. Ft.	Drains, Wrought Iron Pipe, 4 in. or smaller
250	Lin. Ft.	2 in. holes drilled in rock
80	Lin. Ft.	1½ in. holes drilled in rock
1,000	Lin. Ft.	1½ in. holes in old masonry
350	Cubic Yds.	Rock Excavation

SEPARATE BID FOR UPSTREAM WORK
(This work may or may not be required)

6,000 Gunite
3,900 Triangular wire mesh 0.65 lb. sq.ft.

The proposal shall be accompanied by a certified check drawn upon an incorporated State or National Bank or Trust Company in good credit, within this State, payable to the order of the City of Beacon for five per cent of the amount of the bid. The successful bidder will be required to give a satisfactory bond for the faithful performance of the agreement in amount equal to fifty per cent of the value of the contract.

The City Council of the City of Beacon reserves the right to reject any or all bids.

By order of the City Council of the City of Beacon.

MARCUS G. MAC LAUGHLIN ,
Commissioner of Public Works.

Bids: Sept. 7.

Sewerage Pumping Station

Philadelphia, Pa.

Sealed proposals will be received at Room 216, City Hall, until 12 o'clock noon on Thursday, September 7, 1922 and opened at that time in Room 216, City Hall, for Southwest Sewage Pumping Station—40th Ward Lowland Drainage:

Contract No. 1—Sub-Structure and Superstructure.

Contract No. 2—Mechanical Equipment.

Contract No. 3—Electrical Equipment.

Contract No. 4—Plumbing System.

Contract No., 5—Heating and Ventilating Systems.

Inquire at Room 416, City Hall.

FRANK H. CAVEN,
Director.

Bids: Sept. 28.

Sewage Treatment Plants and Appurtenances

Lake Forest, Ill.

Sealed proposals endorsed "Proposal for Sewage Treatment Plants and Appurtenances" will be received by the Board of Trustees of the North Shore Sanitary District of Lake County, Ill., at its office at Room 295, Anderson Building, Lake Forest, Illinois, until 10 o'clock a.m. (daylight time) on the 28th day of September, 1922, and will then be publicly opened and read.

The work for which proposals are invited includes the construction of two sewage treatment plants comprising pumping stations, settling tanks, sludge beds, sprinkling filters, earth-work and all appurtenances in accordance with plans and specifications on file in the offices of the Board of Trustees in Lake Forest, Ill., and of the Consulting Engineers, Pearse, Greeley & Hansen, 39 W. Adams Street, Chicago, Illinois.

The plants to be built are located at the Lake in Highland Park in Deerfield Township at the foot of Park Avenue and in Lake Bluff in Shields Township at the foot of Prospect Avenue, Lake County, Illinois. Each proposal must contain the full name of every person or company interested in the same, and must be accompanied by cash or a certified check on a State or National Bank in good standing, made payable to the order of the President of the Board of Trustees of the North Shore Sanitary District of Lake County, Illinois, in amount as follows:

Division A	$2,500
Division B	2,000
Both divisions	4,000

The amove sums shall be a guarantee that if a proposal is accepted a contract will be entered into and its performance secured.

All proposals must be made upon blank forms furnished by the Sanitary District and in accordance with the "Requirements for Bidding and Instructions to Bidders" attached thereto.

The Board of Trustees of the Sanitary District reserves the right to reject any or all bids waive or not waive any informality in the bids received and to accept or reject such items and divisions of the work as it deems most favorable to the Sanitary District.

Requirements for bidding, instructions to bidders, form of proposal, contract, specifications, form of bond and plans may be obtained from the Clerk of the Sanitary District at Lake Forest or at the offices of the Consulting Engineers in Chicago upon deposit of fifteen dollars ($15), which sum so deposited will be refunded if said plans, specifications, etc., are returned in good condition within thirty (30) days after the opening of bids.

Dated this 15th day of August, A. D. 1922.

NORTH SHORE SANITARY DISTRICT,
LAKE COUNTY.
BY JOHN OLIVER, President
Its Board of Trustees.
ATTEST: A. F. BEAUBIEN, Clerk.

Bids: Sept. 25.

Sewage Pumping Equipment

Hackensack, N. J.

The Hackensack Improvement Commission, the governing body of the City of Hackensack, Bergen County, New Jersey, requests proposals for the following, to wit:

Contract No. 3—For furnishing pumping equipment, consisting of A. B. Wood patent trash pumps; motors and switchboards to be installed in the structures to be built for the City of Hackensack under another contract, which contract is known as Contract No. 1.

The foregoing equipment is more completely described and set forth in the plans and specifications on file with Lemuel Lozier, Engineer of the Commission, and with the clerk of the Commission.

The plans and specifications, information for bidders, forms of proposals and contracts, forms of bonds required and other information can be seen at the office of Lemuel Lozier, Engineer of the Commission, Room 3, Bank Building, Main and Mercer Streets, Hackensack, New Jersey; copies of such plans and specifications may be obtained by bidders on making a deposit of $100.00, which deposit will be refunded upon the return of the plans and specifications in good condition.

The contract will be let to the lowest responsible bidder, subject to the right of the Commission to reject any and all bids.

All bids must be made on the form of proposal to be obtained from the Engineer of the Commission, and must give the prices both in writing and in figures, and must give such other information and be signed in the manner indicated on the form of proposal. Each bid submitted for Contract No. 3 must be accompanied by a certified check for $1,000, payable to the "Hackensack Improvement Commission."

Checks of the unsuccessful bidders will be returned immediately upon the award of the contract. The check of the successful bidder will be returned to the bidder upon the execution of the contract and the furnishing of the bonds required, within ten days after the date of the award thereof, or within such extended time as may be determined by the Commission. In case of failure to execute the required contract, and furnish the required bonds within such time, such check shall be forfeited to the Hackensack Improvement Commission as liquidated damages.

The proposals herein required for Contract 3 shall be presented to the Hackensack Improvement Commission, at the Municipal Building, 346 State Street, Hackensack, Bergen County, New Jersey, on Monday, the twenty-fifth (25) day of September, 1922, at 8 P.M. daylight saving time, 7 P.M. standard time.

No bids will be received prior to said hour and none thereafter. The proposals shall be submitted in sealed envelopes or packages.

The proposals shall be endorsed as follows:

"Proposals for pumping equipment Contract No. 3."

THE HACKENSACK IMPROVEMENT
COMMISSION,
By SPENCER D. BALDWIN, Mayor.
WILLIAM SCHAFF, Clerk.

Bids: Sept. 6.

Concrete Spillway and Flume

Waterville, N. Y.

Sealed proposals will be received by the Board of Water Commissioners, Waterville, N. Y., until 8 p.m., Wednesday, Sept. 6, 1922, Eastern Standard Time, for the construction of a concrete spillway and reinforced concrete flume. Plans may be seen at the office of the Clerk of the Board, Waterville, N. Y., or at the office of the Engineer, James P. Lawyer, 712 Washington St., Utica, N. Y., or will be mailed upon deposit of $5, which will be refunded on return of the plans. Proposals must be made upon blanks furnished by the Board. A certified check of 5 per cent of the bid must accompany each bid as a guarantee of good faith. The work must be completed on or before the first day of November, 1922. The Board reserves the right to reject any or all bids. Proposals must be sealed and addressed to Earl J. Conger, Clerk, Board of Water Commissioners, Waterville, N. Y., and marked on the outside of envelope enclosing them "Proposal for Concrete Spillway and Flume."

EARL J. CONGER, Clerk
P. NEWELL LEWIS,
M. L. CONDON,
PATRICK WELCH,
Board of Water Commissioners.

Bids: Sept. 14.

Paving, Curbing, Storm Sewers, etc.

Mobile, Ala.

Sealed bids will be received until noon Thursday, Sept. 14, 1922, by the City Commission of the City of Mobile, Alabama, for the following:

One course Concrete Paving six inches in thickness—29,756 square yards. Concrete Curbing eighteen inches deep by five inches wide—14,512 lin.ft. Double strength storm sewers 12 inch—1,334 ft. 15 inch—1,160 ft. 18 inch—2,405 ft. 21 inch—522 ft.

Standard Storm sewers, 6 inch—3,036 ft. 10 inch—1,872 ft. 12 inch—1,340 ft. 15 inch—315 ft. 24 Standard Manholes—83 Standard Inlets and 19 Standard Special Basins. A deposit of one thousand dollars will be required to accompany each bid. 1—For Paving and Curbing. 2—For Storm Sewers. Plans and specifications are on file in the City Engineer's office and can be seen on application. The right is reserved to reject any or all bids.

R. V. TAYLOR,
Commissioner of Streets.,
WRIGHT SMITH,
City Engineer.

Bids: Nov. 4.

Tenders for Plant

Melbourne, Australia.

Tenders are hereby invited for the supply, delivery, etc., of the following for the Morwell Power Scheme.

Copies of Tender Form and Specification will be available upon application to:
Office of the Bureau of Foreign & Domestic Commerce,
United States Department of Commerce,
First National Bank Building,
CHICAGO.

and
Office of the Bureau of Foreign & Domestic Commerce,
United States Department of Commerce,
734 Customs House,
NEW YORK CITY.

SPECIFICATION NO. 293. TRANSFORMERS, INDUCTION REGULATORS AND SWITCH-GEAR.

CHARGE:—£2: 2: 0 for the first 3 copies of Tender Form, Conditions of Contract, and specification complete. These charges will be returned on receipt of a bona-fide tender. A fourth copy and any further copies will be supplied for the sum of 10/6 each.

PRELIMINARY DEPOSIT: A Preliminary Deposit of £100: 0: 0 is to be lodged with Tender.

The Specification may be inspected at the above mentioned offices, and also at the office of:
The Commissioner for Australia in U. S. A.,
Room 3012,
61 Broadway,
NEW YORK.

The Commission does not bind itself to accept the lowest or any tender.

Tenders on prescribed form, properly endorsed and addressed, must be delivered to the undersigned in Melbourne not later than NOON, 4th November, 1922.

R. LIDDELOW,
Secretary,
STATE ELECTRICITY COMMISSION OF VICTORIA,
22-32 William Street,
MELBOURNE,
VICTORIA,
AUSTRALIA.

Bids: Sept. 13.

Highway Work

Baltimore, Md.

Sealed proposals for building four sections of State Highway, as follows:

HOWARD COUNTY, Contract No. HO-23 —One section of state highway from end of Folly Quarter Road to Triadelphia Pike, a distance of 1.5 miles (concrete).

HARFORD COUNTY, Contract No. H-29 —One section of state highway from Whiteford toward Dublin, for a distance of 1.0 mile (concrete).

PRINCE GEORGE COUNTY, Contract No. P-37 —One section of state highway from Forestville toward Ritchie, for a distance of 2.0 miles (gravel).

CALVERT COUNTY, Contract No. C-14 —One section of state highway from Prince Frederick toward Hollowing Point, for a distance of 4.0 miles (gravel).

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., Standard Time, on the 13th day of September, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 25th day of August, 1922.

JOHN N. MACKALL, Chairman.
L. H. STEUART, Secretary

Bids: Sept. 6.

State Highway Work

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the County of Monmouth for the following:

Construction of State Highway Route No. 4, Section No. 5A, Maple Avenue, Red Bank, estimated amount of sheet asphalt surface on a portland cement concrete foundation is 27,307 square yards.

Work is to be performed under County Reimbursement Act, Chapter 183, laws of 1918, and amended by Chapter 317, laws of 1920.

Bids will be received at the Court House at Freehold, N. J., on Wednesday, September 6th, 1922, at 11:00 M. Daylight Saving Time.

Drawings, specifications and form of contract and bond for the proposed work are on file in the office of George K. Allen, Jr., County Engineer, at Red Bank, N. J., and in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of ten dollars ($10.00) upon application to George K. Allen, Jr., County Engineer. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, enclosed in sealed envelopes, addressed to the Board Chosen Freeholders of the County of Monmouth and bearing the name and address of the bidder and the name and section of the route on the outside. Bid must be accompanied by a certified check drawn to the order of C. Asa Francis, County Treasurer, for not less than ten per cent (10 per cent) of amount of the bid, provided that said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form will be furnished on application to George K. Allen, County Engineer.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a statement of equipment properly filled out.

By order of a resolution of the Board of Chosen Freeholders of the County of Monmouth passed at a meeting held on Wednesday, May 24th, 1922.

WILLIAM A. STEVENS.
Clerk.

Bids: Sept. 18.

Road Work

Charleston, Miss.

Bids will be opened at one o'clock P.M. September 18, 1922, at the Court House, Charleston, Miss., for grading and graveling about 18½ miles of road between Philipp and Cowart, Road Districts, Nos. 4 and 5, Tallahatchie County, Miss. Bids must be accompanied by check or Bidder's Bond for $10,000.00.

Approximating Quantities—

Grading	115,000 Cu.Yds.
Gravel Surfacing	33,000 Cu.Yds.
Bituminous Material	130,000 Sq.Yds.

Information, Plans and Specifications may be secured from
ELLIOTT & HARMAN ENGINEERING CO., Bank of Commerce and Trust Co. Bldg., Memphis, Tenn.

Bids: October.

Sewer Tunnel

Tulsa, Okla.

The Board of Commissioners of the City of Tulsa, Oklahoma, contemplates receiving proposals about the middle of October for the construction of the Eleventh Street Relief Sewer, in tunnel cut.

This sewer to be 5,100 ft. long and 15¼ ft. x 14 ft. in size, Bond Issue $900,000.00.

Formal notice to contractors to appear later.

CHARLES SCHULTZ,
City Engineer.

W. W. HORNER,
Consulting Engineer,
St. Louis, Mo.

Bids: Sept. 8.

Highway Route No. 16
Section No. 4

Somerville, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the County of Somerset for the following: The construction of State Highway Route No. 16, Section No. 4, from Pluckamin to Somerville, consisting of 67,749 Square Yards "Surface Type C," one course Reinforced Cement Concrete Pavement, with Drains and Appurtenances.

Work is to be performed under County Reimbursement Act, Chapter 183, laws of 1918, and amended by Chapter 317, laws of 1920.

Bids will be received at the Court House at Somerville, on
FRIDAY, SEPTEMBER 8th, 1922,
at 11:00 a.m., Daylight Saving Time (10 A.M. Eastern Standard Time).

Drawings, specifications and form of contract and bond for the proposed work are on file in the office of H. C. Van Emburgh, County Engineer, at the Court House, Somerville, and in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of ten dollars ($10.00) upon application to H. C. Van Emburgh, County Engineer. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, enclosed in sealed envelopes, addressed to the Board of Chosen Freeholders of the County of Somerset, and bearing the name and address of the bidder and the name and section of the route on the outside. Bids must be accompanied by a certified check drawn to the order of Edwin Garretson, County Treasurer, for not less than ten per cent (10 per cent) of amount of the bid, provided that said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form will be furnished on application to H. C. Van Emburgh, County Engineer.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a statement of equipment properly filled out.

By order of a resolution of the Board of Chosen Freeholders of the County of Somerset, passed at a meeting held on Friday, August 4, 1922.

WM. S. WOODRUFF,
Clerk.

Bids: Sept. 8.

Highway Work

Stratford, Conn.

Notice is hereby given that sealed bids will be received by the Town of Stratford up to September 8, 1922, at 3 p.m., for the construction of a Telford road on West Broad Street between Barnum Avenue and Linden Avenue, as more particularly shown on plans on file in the office of the Director of Public Works at Stratford, Connecticut.

Plans and specifications will be furnished upon deposit of $5. Bids are to be for the job complete and are to be in sealed envelopes addressed to the Town Manager, Town Hall, Stratford, Connecticut. The bidders name must appear on the outside of the envelope, and the bid must be accompanied by a certified check of 10 per cent of the amount of the bid, drawn to the order of Mr. J. C. Wilcoxson, Director of Finance, Town of Stratford.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in accordance with provisions of specifications.

The Town reserves the right to reject any or all bids or to accept one not the lowest if it is deemed for the best interests of the Town to do so.

R. H. HUNTER,
Town Manager.

OFFICIAL PROPOSALS

Bids: : Sept. 25.

Spavinaw Water Supply Project

Tulsa, Okla.

Sealed proposals for the construction of the major portion of the Spavinaw Water Supply Project for the City of Tulsa, Oklahoma, will be received by the Water Commission of the City of Tulsa, and may be filed at the office of the City Auditor, City Hall, Tulsa, Oklahoma, until 3:00 p.m. Monday, September 25th, 1922, and will be opened and publicly read immediately thereafter at a regular meeting of the Water Commission of the City of Tulsa at 3:00 p.m., Monday, September 25, 1922. Proposals will be received on the following contracts:

Contract No. 1 Telephone Line.
Contract No. 2 Clearing Site of Spavinaw Lake.
Contract N. 3 Spavinaw Dam.
Contract No. 4 60 in. Reinforced Concrete Pipe.
Contract No. 5 Tunnel and Approaches.
Contract No. 6 54 in. Reinforced Concrete Pipe.
Contract No. 7 Mohawk Reservoir.
Contract No. 8 Furnishing Cast Iron or Steel Pipe and Specials.
Contract No. 9 Furnishing Gate Valves.
Contract No. 10 Laying Cast Iron or Steel Pipe.
Contract No. 11 High Pressure Reservoir.

After the reading of the bids on these contracts they will be immediately considered, but in no event will any contract or contracts be awarded earlier than forty-eight (48) hours thereafter.

The principal quantities are approximately as follows:

DAM: Concrete, 79,000 cubic yards.
Earth embankment, 182,000 cubic yards.
PIPE: 28 miles of 60 in. and 25 miles of 54 in. pre-cast reinforced concrete pipe.
Earth Excavation in trench, 310,000 cubic yards.
Rock Excavation in trench, 26,000 cubic yards.
TUNNEL: 7,000 ft. 84 in. Tunnel.
3,050 ft. 84 in. monolithic concrete conduit.
MOHAWK RESERVOIR: 300,000 cubic yards earth embankment.
REINFORCED CONCRETE HIGH PRESSURE RESERVOIR OR RESERVOIRS: 10,000,000 gal. aggregate capacity; 10,000 ft. 36 in. Cast Iron or Steel Pipe; 6,000 ft. 30 in. Cast Iron or Steel Pipe; 8,000 ft. 20 in. Cast Iron Pipe. Specials and Valves.

Each proposal must be accompanied by a certified check on any reputable bank or trust company, payable without reserve to the City of Tulsa, Oklahoma, for five per cent (5%) of the amount of the bid.

All proposals must be made on blank forms furnished by the City of Tulsa and in accordance with the "Requirements for Bidding and Instructions to Bidders."

Proposals may be tendered on one or more contracts or on all of the contracts, but any proposal must include all items under the contract or contracts for which bid is tendered.

Plans, Specifications and Requirements for Bidding and Instructions to Bidders are on file at the Office of the Water Commission at the City Hall and may be seen at the office of Trammell and Holway, Engineers on the Spavinaw Water Supply Project, 329 Kennedy Building, Tulsa, Oklahoma, or at the office of Dabney H. Maury, Consulting Engineer for the said Project, 1445 Monadnock Block, Chicago, Illinois. Complete plans and specifications will be furnished by the Engineers or by the Consulting Engineer, upon the deposit of $50.00 by check payable to Trammell and Holway. Upon return of the plans and specifications in good condition within a reasonable time after the awarding of the contracts, $30.00 will be refunded. Proportionate deposit and refund may be arranged for if bidder desires only parts of the plans.

The Water Commission reserves the right to reject any bid or bids, or all bids, and to waive any informalities.

WATER COMMISSION OF THE
CITY OF TULSA.
A. J. RUDD, Chairman,
G. R. McCULLOUGH,
C. S. AVERY,
H. L. STANDEVEN,
A. L. FARMER,
ROY GARBETT,
City Auditor.
TRAMMELL and HOLWAY, Engineers,
329 Kennedy Building,
Tulsa, Oklahoma.
DABNEY H. MAURY,
Consulting Engineer,
Chicago, Ill.

OFFICIAL PROPOSALS

Bids: Sept. 5.

Street Paving and Storm Sewer

Highland Park, N. J.

Sealed proposals will be received by the Mayor and Borough Council of the Borough of Highland Park at the Borough Council Chambers, No. 10 North Second Avenue, Highland Park, New Jersey, on Tuesday, September 5, 1922, at 8 o'clock p.m., ordinance time (7 p.m. Eastern Standard Time) for the construction of pavements on the following streets, to wit: Montgomery Street, Johnson Street, Cedar Avenue, Adelaide Avenue, South Sixth Avenue. And for the construction of a storm sewer on Cedar Avenue.

The work will in general consist of about

5,890	Cu.Yds. of Excavation.
15,962	Sq.Yds. of One Course Reinforced Cement Concrete Pavement, 6″ in depth at the sides, and 8″ in depth at the center.
8,612	Lin.Ft. of Concrete Curbing, set integral with the pavement.
755	Lin.Ft. of 15″ Vitrified Pipe Storm Sewer.

All of said work to be done in accordance with the plans, profiles and specifications prepared by Raymond P. Wilson, Civil Engr., 46 Paterson Street, New Brunswick, N. J., which said plans, profiles and specifications have been adopted by the Borough Council of the Borough of Highland Park and are now on file at the office of the Borough Clerk, 10 North Second Avenue, Highland Park, N. J., where they may be seen by bidders or a set of the said plans, profiles and specifications can be secured from Raymond P. Wilson, Civil Engr., by depositing Five dollars ($5.00) which will be refunded upon the return of the plans, profiles and specifications in good condition within seven (7) days after the award of the contract. All bids must be on the form of proposal to be obtained from the said Raymond P. Wilson.

Each bidder must accompany his bid with a certified check for Four thousand dollars ($4,000.00) payable unconditionally to the Collector of the Borough of Highland Park, which said check must be presented with the bid as a guarantee that the bidder will within ten (10) days after receiving the award enter into and execute a contract for the faithful performance of the work to be done under said contract, and said bid must be in a sealed envelope and marked "Proposal for Concrete Pavement."

The successful bidder will also be required to furnish a Surety Company bond to the Borough of Highland Park in the full amount of the contract price for the faithful performance of the work to be done under said contract, said bond to be approved as to sufficiency and form by the Borough Attorney.

In case of failure to execute the contract and furnish the required bond within ten (10) days after due notice that the contract has been awarded to him, the successful bidder shall forfeit his deposit to the Borough of Highland Park as liquidated damages.

The right to reject any or all bids is reserved by the Mayor and Borough Council.

All of said work must be completed within sixty (60) working days.

Bids: Sept. 14.

Steel Super-structure

Nashville, Tenn.

Sealed bids will be received by the Department of Highways State of Tennessee, at Nashville, Tennessee, until ten o'clock a.m., Thursday, September 14, 1922, and opened publicly at that place and hour for the construction of the steel super-structure of Federal Aid Project 16, being a bridge over Cumberland River near Clarkesville, having 3 steel spans aggregating approximately 640 feet of span.

Plans and specifications are on file in the office of the Chief Engineer, Department of Highways, Nashville, Tennessee, in the office of the Division Engineer, Department of Highways, Nashville, Tennessee, and in the office of the Resident Engineer, Department of Highways, Clarksville, Tennessee.

D. Q. McCOMB,
Chief Engineer.

OFFICIAL PROPOSALS

Bids: Sept. 5.

State Highway Work

Trenton, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commission of New Jersey for the construction of the following:

Route No. 7, Section No. 1, Corlies Avenue, Neptune Township, Monmouth County, estimated amount of Warrenite Bitulithic surface on a Portland cement concrete foundation is 18,765 square yards.

Bids will be received at the office of the State Highway Commission at the Broad Street Bank Building, Trenton, New Jersey, on Tuesday, September 5th, 1922, at 11 A. M. STANDARD TIME, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars ($10.00) upon application to the State Highway Department, 9th floor, Broad Street Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated therein and as required by the 1922 specifications, same to be inclosed in sealed special addressed envelopes bearing the name and address of bidder and the name and section of the route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that said certified check shall not be less than $500,00 or more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelope will be furnished on application. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this state, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: Sept. 20.

Outfall Sewer

Manchester, N. H.

Sealed proposals, on blank forms attached to the specifications and furnished by the Surveyor of the Department of Highways, Manchester, N. H., addressed to the Surveyor, Department of Highways, Manchester, N. H., will be received until 4 o'clock P.M. (Daylight Saving Time), September 20, 1922, for furnishing all material and labor for the construction of an Outfall Sewer, together with connections, dry weather outfall, head wall, etc., as shown upon the plans and specified in the specifications adopted by the City of Manchester, through the Surveyor.

The bids must be accompanied by a certified check to the amount of 5% of the total amount of the bid, made payable to the Treasurer of the City of Manchester and said check must be submitted and inclosed with the Sealed Proposal.

Contract, Drawings, Specifications and other data are on file for inspection at the Surveyor's Office, City Hall, Manchester, N. H., and specifications and plans can be had by making a payment of $10 to the Surveyor.

The right is reserved to reject any and all bids and to waive any informality in the bids.

E. R. CONANT, Surveyor,
Department of Highways,
Manchester, N. H.
Manchester, N. H., August 30, 1922.

Bids: Sept. 6.

Cast Iron Main Sewer

Rye, N. Y.

Sealed proposals will be publicly opened by the Trustees of the Village of Rye, N. Y., at the Village Municipal Hall, at 8.15 p.m., September 6, 1922.

Said proposals to cover the construction (both materials and labor) of a cast-iron main sewer according to plans and specifications filed with the Village Clerk.

Copies of the plans and specifications may be obtained from him, or from the engineer, G. Everett Hill, 45 Seventh Avenue, New York City, upon payment of $15, of which amount $10 will be refunded upon return of all papers, in good condition, on or before September 10th, 1922.

Approximately the work consists of:

About 2,000 feet of 16-inch and about 1,540 feet of 18-inch cast-iron pipe (with manholes and fittings) laid partly on piles and partly on concrete piers.

Each bid must be accompanied by a certified check for $5,000, as a guarantee that the bidder, if his bid be accepted, will enter into contract and execute the required bond.

Each bid must be made on blank forms to be obtained from the Village Clerk or the Engineer.

The Village reserves the right to reject any or all bids.

The Board of Village Trustees.
WILLIAM H. SELZER,
Village Clerk.

G. EVERETT HILL, Engineer.
45 Seventh Ave., New York.

Bids: Sept. 9.

Storm Relief Trunk Sewers and Lateral Relief Sewers

Lima, Ohio.

Sealed proposals for the construction of Relief Trunk Sewers, Contracts No. 9 and 11, will be received at the office of the City Manager, Lima, Ohio, until 12 o'clock noon, Central Standard Time, Sept. 9th, 1922, and then will be publicly opened and read. The City reserves fifteen (15) days thereafter in which to act on the bids.

The work included under these contracts consists of construction, with all appurtenances, of Relief Trunk Sewers as mentioned above, a general summary of quantities follows:

Contract No. 9.

Total length of Sewer about 12,500 lineal feet, varying in size from 15 to 78 inches, all of Circular Section.

Contract No. 11.

Total length of Sewer about 27,000 lineal feet, varying in size from 12 to 78 inches, for Circular Sections, also two rectangular Sections 6 by 8 feet, and 8 by 9 feet, and a total length of 2,750 lineal feet, with all necessary appurtenances, special structures and manholes.

Copy of Plans, form of proposal, contract, bond and specifications, may be inspected at any of the following offices: Fuller & McClintock, 319 Summit Cherry Building, Toledo, Ohio, Fuller & McClintock, 170 Broadway, New York City; and B. F. Darling, Supervising Engineer, City Hall, Lima, Ohio.

Copies of plans and specifications with form of proposal, contract and bonds, may be obtained at the office of the Supervising Engineer, City Hall, Lima, Ohio. The following charge will be made for each set of plans and specifications:

Contract No. 9—Six Dollars ($6.00).
Contract No. 11—Seven Dollars ($7.00).

No charge will be made for proposal blanks, the above mentioned charge for Plans and Specifications, is a sale and not a deposit, no refund will be made, nor will plans and specifications be delivered unless the order is accompanied by a remittance.

The City Manager reserves the right to reject any or all bids, to waive any informalities in the bids and to accept any bid which is deemed most favorable to the interest of the City of Lima, Ohio.

C. A. BINGHAM,
City Manager.
B. F. DARLING,
Supervising Engineer.
Dated: August 19th, 1922.

Bids: Sept. 9.

Cast Iron Water Pipe and Appurtenances

Voorheesville, N. Y.

Notice is hereby given that sealed proposals will be received by the Board of Trustees of the Village of Voorheesville, N. Y., at their office in the "Hose House" in the Village of Voorheesville, N. Y., until three (3:00) o'clock p.m. (daylight saving time), on the ninth (9th) day of September, 1922, for the furnishing of about four hundred and fifty (450) tons of eight (8") inch Class "B" cast iron water pipe and appurtenances.

All proposals must be made upon printed forms, to be obtained of the engineer; and the unit prices written in words and figures, and accompanied by cash or a certified check, made payable to the Village of Voorheesville, N. Y., for five (5%) per cent of the amount of the proposal.

All proposals must be enclosed in a sealed envelope, directed to the Board of Trustees, Village of Voorheesville, N. Y., and endorsed upon the outside of the envelope "Proposal for Water Pipe or Appurtenances."

The Board of Trustees reserves the right to reject any or all proposals.

By order of the Board of Trustees of the Village of Voorheesville, N. Y.

GILBERT H. DARING,
Village Clerk,
Voorheesville, N. Y.

W. W. CHADSEY,
Civil and sanitary engineer,
434 State Street,
Schenectady, N. Y.

Bids: Sept. 6.

Canal Water Power Development

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Wednesday, September 6th, 1922, at which place and hour they will be publicly opened and read, for the development of canal water power, pursuant to the provisions of Chapter 532 of the Laws of 1922, as follows:

A-3

CRESCENT POWER HOUSE,
COHOES, N. Y.

For constructing a power house and work incidental thereto, at Crescent Dam, Cohoes, N. Y.

Sheets 1 to 10 inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantity, proposal blanks forms of contract and bonds required, and other information for proposers, may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Eastern Division, Wedgeway building, Schenectady, N. Y.; at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division, at Rochester, N. Y.; at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposit of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provde suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE,
Superintendent of Public Works.

Bids: Sept. 11.

Reinforced Concrete Pavement

White Plains, N. Y.

Sealed bids or proposals for the improvement of Mamaroneck Avenue from Washington Square northerly to County Highway No. 1581 with reinforced concrete pavement, a distance of 1.24 miles in the Village of Mamaroneck, Westchester County, New York, will be received at the office of the Clerk of the Board of Supervisors, Court House, White Plains, N. Y., until 10 a.m., September 11, 1922 (Standard Time.)

Specifications, proposal sheets and all information relative to same may be procured at the office of the County Superintendent of Highways, Court House, White Plains, N. Y., upon making a deposit of Five Dollars ($5.00).

August 21, 1922.

BOARD OF SUPERVISORS.
FRED L. MERRITT, Clerk.

Bids: Sept. 11.

Street Improvement

White Plains, N. Y.

Sealed bids or proposals for the improvement of Palmer Avenue from Central Avenue westerly to Miles Square Road, a distance of 0.57 miles in the City of Yonkers, Westchester County, New York, will be received at the office of the Clerk of the Board of Supervisors, Court House, White Plains, N. Y., until 10 a.m., September 11, 1922 (Standard Time).

Specifications, proposal sheets and all information relative to same may be procured at the office of the County Superintendent of Highways, Court House, White Plains, N. Y., upon making a deposit of Three Dollars ($3.00).

BOARD OF SUPERVISORS.
FRED L. MERRITT, Clerk.
August 26, 1922.

Swart Service Really Serves
A Thought Worth a Second Reading
HARMON V. SWART
Contract Bonds
Compensation Insurance
92 William St., New York

OFFICIAL PROPOSALS

Bids: Sept. 11.

Sewage Disposal Plant

Cadillac, Mich.

Sealed proposals will be received by the City Clerk of the City of Cadillac up to 7:30 p.m., Central Standard Time, of the 11th day of September, 1922, for the construction of a sewage disposal plant of 1,000,000 gallons daily capacity, and consisting of six septic tank units, six contact filter units and other minor structures and appurtenances. The plans and specifications according to which the work is to be done may be examined at the office of the City Clerk, or at the office of the Engineers; and copies may be obtained for bidding purposes by making a deposit of Five Dollars, which will be refunded upon the return of the plans and specifications in good condition.

A certified check in the sum of Fifteen Hundred Dollars will be required with each proposal.

The right to accept any proposal or to reject any or all proposals, and the right to waive defects in proposals are reserved by the City.

H. L. WORDEN,
City Clerk.
GEORGE JOHNSTON,
General Manager.
HOAD, DECKER, SHOECRAFT
and DRURY,
Consulting Engineers,
Ann Arbor, Michigan.

Bids: Sept. 19.

Sanitary Sewers

Hagerstown, Md.

Sealed proposals for building sanitary sewers in certain streets, alleys, rights-of-way secured and to be secured, and other localities in North and Central Hagerstown, will be received at the offices of The Sewerage Commission in Police Headquarters Building, until 7.30 p.m., Tuesday, September 19th, 1922, at which time and place, during the session of the Sewerage Commission, the proposals will be publicly opened and read.

The work to be done embraces the building of approximately 25,000 lineal feet of sanitary sewers, ranging in size from 18 inches to 8 inches with all manholes, foundations and appurtenances, also approximately 9,500 lineal feet 6-inch house connections and approximately 400 lineal feet 66-inch storm water sewer.

On and after September 2nd, 1922, specifications and blank forms of proposals can be obtained, and detailed plans examined at the offices of the Sewerage Commission, and a full set of plans will be sent to any contractor, on the receipt of $10.00, the same to be returned upon the surrender of the plans in good condition.

The Sewerage Commission of the city of Hagerstown reserves the right to reject any and all bids.

E. LEROY HEARD,
Countersigned: Secretary.
JOHN CARMICHAEL, Chairman.

Bids: Sept. 12.

Sewage Treatment Plant

Sebring, Ohio.

Sealed bids for the construction of a Sewage Treatment Plant will be received by the Village Clerk until 12 o'clock noon, on Sept. 12, 1922.

Plans and specifications may be seen at the office of the Clerk or may be obtained from Burgess and Niple, Engineers, 223 East Broad St., Columbus, Ohio, on deposit of ten dollars of which five dollars will be refunded on return of plans and specifications within ten days of receiving bids.

A bond or certified check in the sum of five per cent of the amount of the bid shall accompany the proposal.

The Village reserves the right to reject any and all bids, and to waive informalities.

The Village of Sebring, Ohio.
JAMES G. EARDLEY, Clerk.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, Buffalo, N. Y. —Sealed proposals will be received here until 11 a.m. (Eastern Standard Time), September 28, 1922, and then opened, for dredging and rock excavation in Sandusky Harbor, Ohio. Further information on application.

OFFICIAL PROPOSALS

Bids: Oct. 10.

Steam Turbine and Accessories

New Orleans, La.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans up to 12 o'clock, noon, Tuesday, October 10th, 1922, for furnishing one 6,000 kw. STEAM turbine and accessories.

Specifications and blank forms of proposals may be obtained at Room 303, No. 526 Carondelet Street, New Orleans.

The right is reserved to reject any or all bids.

A. G. MOFFAT,
Secretary.
GEO. G. EARL,
General Superintendent.
Aug. 10th, 1922.

**South Nyack,
New York
Saved $2,642.20**

Through advertising for bids on a paving contract in *Engineering News-Record*.

This publicity in these Official Proposal Columns is a mighty profitable investment for any community.

It Costs so little, too.

U. S. GOVERNMENT

PROPOSALS FOR STONE.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9:00 a.m., Sept. 7, 1922, and then opened, for furnishing and delivering stone for Southwest Pass, Head of Passes, and South Pass, Mississippi River. Further information on application.

U. S. ENGINEER OFFICE, FLORENCE, ALA.—Sealed proposals will be received here until 11 a.m., September 18, 1922, and then opened, for the construction and delivery of two steel barges. Further information on application.

U. S. ENGINEER OFFICE, JACKSONVILLE, FLA.—Sealed proposals will be received here until 12 m., Sept. 21, 1922, and then opened, for jetty repairs at the entrance to St. Johns River, Fla. Further information on application.

U. S. ENGINEER OFFICE, FLORENCE, ALA.—Sealed proposals will be received here until 11 a.m., September 18, 1922, and then opened, for furnishing and delivering one hydraulic turbine of 1,000 horsepower capacity, with governor. Further information on application.

..U. S. ENGINEER OFFICE, Nashville, Tenn.—Sealed proposals will be received here until 11 a. m., Sept. 5, 1922, and then opened, for steel gates for Lock F, Cumberland River. Further information on application.

U. S. ENGINEER OFFICE, Mobile, Ala. —Sealed proposals will be received here until 11 o'clock a.m., September 5, 1922, and then opened, for dredge pontoons and discharge pipe for the U. S. 20-inch hydraulic pipe-line dredge Wahalak. Further information on application.

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in Hudson River, N. Y., will be received here until 12 M., September 5, 1922, (daylight saving time) and then opened. Further information on application.

PROPOSALS FOR STEEL OIL BARGES.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9:00 a.m., Sept. 15, 1922, and then opened, for construction and delivery of two 4,000-barrel steel oil barges in the Mississippi River, at New Orleans, La. Further information on application.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, 815 Witherspoon Bldg., Philadelphia, Pa. Bids are wanted until September 6, 1922, for dredging in Delaware River on Bellevue, Cherry Island and Liston ranges. Further information on application.

UNITED STATES ENGINEER OFFICE, Norfolk, Va.—Sealed proposals will be received here until 12 m., September 14, 1922, and then opened, for dredging in Pagan River, Va. Further information on application.

U. S. ENGINEER OFFICE, HONOLULU, T. H., August 10, 1922.—Sealed proposals will be received here until 11 a.m., October 31, 1922, and then opened, for dredging in Honolulu Harbor, T. H. Further information on application here or to U. S. Engineer Office, 401 Customhouse, San Francisco, Calif.

U. S. ENGINEER OFFICE, SAVANNAH, Ga.—Sealed proposals will be received here until 12 noon, September 26, 1922, and then opened, for repairing training walls in Savannah Harbor, Ga. Further information on application.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., August 23, 1922.—SEALED PROPOSALS will be opened in this office at 3 p.m., September 27, 1922, for construction of Officers' and Employees' Quarters for the United States Veterans' Hospital at Fort Bayard, N. M. Drawings and specifications may be obtained at this office in the discretion of the Supervising Architect. Proposals will be considered only from individuals, firms or corporations possessing satisfactory financial and technical ability, equipment and organization to insure speedy completion of the contract, and who have and who have established a record for expedition on contracts of similar character and magnitude. The fact that any concern obtains a set of the plans and specifications from any source whatever and submits a bid shall not constitute a waiver of the foregoing stipulations. Jas. A. Wetmore, Acting Supervising Architect.

SEALED PROPOSALS will be received and publicly opened by the Director of the U. S. Veterans' Bureau in the office of the Quartermaster General, Room 2306 Munitions Building, Washington, D. C., at 11 a.m., September 12, 1922, for the construction of a Veterans' Bureau Hospital at Northampton, Mass. Work includes construction of twenty-four (24) buildings, built of reinforced concrete and brick, complete with sewer, water and lighting systems, roads and walks (footings for nine buildings now under contract). Plans and specifications may be obtained after August 15th, upon deposit of $100, from the office of the Quartermaster General, Room 2312 Munitions Building, Washington, D. C., or from the office of the Constructing Quartermaster, Chamber of Commerce Building, Northampton, Mass. One set of plans and specifications will be on exhibition at the following stations: Office Constructing Quartermaster, 39 Whitehall Bldg., New York City; Office Constructing Quartermaster, Army Supply Base, Boston, Mass.; Office Quartermaster Supply Officer, Chicago, Ill.; Intermediate Depot, 1819 West Pershing Road, Chicago, Ill.; and Office Constructing Quartermaster, Scott Field, Belleville, Ill.

CONSTRUCTION OF TWELVE INCH FEED MAIN WATER LINE from Denver city limits to Fitzsimons General Hospital. —Proposals will be received by the Constructing Quartermaster, Fitzsimons General Hospital, Fitzsimons, Colorado, until 10 a.m., Sept. 22, 1922, and then opened for the construction of approximately two and one-eighth miles of twelve inch cast iron water main and appurtenances. Plans and specifications are on record at the Construction Service, Quartermaster Corps, Munitions Building, Washington, D. C., and may be obtained from the Constructing Quartermaster, Fitzsimons General Hospital, Fitzsimons, Colorado, upon deposit of $10.

U. S. ENGINEER OFFICE, Providence, R. I. Sealed Proposals will be received here until 11 o'clock a.m., standard eastern time, September 15, 1922, and then opened, for repairing of east jetty at entrance to Nantucket Harbor, Mass. Further information on application.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Sept. 11	Monroe, Mich. Adv. Aug. 31 and Sept. 7.	Aug. 31
Sept. 12	Thief River Falls, Minn.	Aug. 31
Sept. 12	Phila., Pa.	Sept. 7
Sept. 13	West Park (Cleveland P. O.), O.	Sept. 7
Sept. 14	Mineola, N. Y.	Aug. 31
Sept. 15	Grants Pass, Ore.	July 27
Sept. 15	Hillsboro, O.	Sept. 7
Sept. 15	Plaquemine, La.	Aug. 3
Sept. 18	East Grand Forks, Minn.	Sept. 7
Sept. 18	Steubenville, O.	Sept. 7
Sept. 22	Duluth, Minn.	Sept. 7
Sept. 25	Tulsa, Okla. Adv. Aug. 24 to Sept. 7.	Aug. 24
Sept. 29	Cleveland, O. Adv. Sept. 7.	Sept. 7
Oct. 1	Ponchatoula, La.	Aug. 3
Oct. 3	Haines City, Fla. Adv. Sept. 7.	Sept. 7
Oct. 19	Newark, N. J.	Sept. 7

SEWERS

Sept. 8	Long Island City, N. Y.	Sept. 7
Sept. 11	Madisonville, Ky. Adv. Aug. 31 and Sept. 7.	Aug. 31
Sept. 12	Sebring, O.	Aug. 31
Sept. 12	Wichita, Kan.	Aug. 31
Sept. 12	Rice Lake, Wis.	Sept. 7
Sept. 12	New York, N. Y.	Sept. 7
Sept. 13	West Park (Cleveland P. O.), O.	Sept. 7
Sept. 14	Jacksonville, Fla.	Aug. 31
Sept. 15	Hazard, Ky.	Sept. 7
Sept. 15	Eveleth, Minn.	Aug. 17
Sept. 19	Newark, N. J.	Aug. 24
Sept. 19	Hagerstown, Md. Adv. Aug. 31 and Sept. 7.	Sept. 7
Sept. 20	Manchester N. H. Adv. Aug. 31 and Sept. 7.	Sept. 7
Sept. 20	Denver, Colo.	Sept. 7
Sept. 21	Jacksonville, Fla.	Aug. 31
Sept. 21	Louisville, Ky. Adv. Sept. 7.	Sept. 7
Sept. 23	Bloomington, Ill. Adv. Aug. 31 and Sept. 7.	Aug. 31
Sept. 25	Hackensack, N. J. Adv. Aug. 31 and Sept. 7.	Aug. 31
Sept. 26	Ft. Worth, Tex. Adv. Sept. 7.	Sept. 7
Sept. 28	Lake Forest, Ill.	Aug. 31
Oct. 3	Toronto, Ont.	Sept. 7
Oct. 10	Syracuse, N. Y.	Sept. 7

WASTE DISPOSAL

Sept. 22	Trenton, N. J. Adv. Sept. 7.	Sept. 7

BRIDGES

Sept. 11	California	Aug. 24
Sept. 11	Hillman, Mich.	Sept. 7
Sept. 13	Providence, R. I. Adv. Sept. 7.	Sept. 7
Sept. 14	Tennessee	Aug. 24
Sept. 18	Ft. Worth, Tex.	Sept. 7
Sept. 18	Cambridge, Mass.	Sept. 7
Sept. 18	Indiana	Sept. 7
Sept. 20	South Norwalk, Conn. Adv. Sept. 7.	Sept. 7
Sept. 26	Alabama	Aug. 31
Sept. 26	Toledo, O. Adv. Sept. 7.	Sept. 7
Oct. 1	Siam	July 13
Oct. 6	Seattle, Wash.	Sept. 7
Oct. 31	Sydney, Australia	Jan. 12
Sept. 1,	1923, Sydney, New South Wales, Australia Adv. Sept. 7.	Aug. 3

RAILWAYS

Sept. 15	New York	Sept. 7

EXCAVATION, DREDGING, IRRIGATION

Sept. 16	Ordway, Colo.	Sept. 7
Sept. 18	Plainfield, N. J. Adv. Sept. 7.	Sept. 7
Sept. 21	St. James, Minn.	Sept. 7
Sept. 22	Wynne, Ark. Adv. Sept. 7.	Sept. 7

STREETS AND ROADS

Bids Close		See Eng. News-Record
Sept. 9	Cleveland, O.	Sept. 7
Sept. 9	Paris, Ont.	Sept. 7
Sept. 9	Toronto, Ont.	Sept. 7
Sept. 11	Barrie, Ont.	Sept. 7
Sept. 11	Terrell, Tex.	Sept. 7
Sept. 11	Crescent City, Calif.	Aug. 17
Sept. 11	Michigan	Aug. 31
Sept. 11	Ebensburg, Pa.	Aug. 31
Sept. 11	Washington	Aug. 31
Sept. 11	Yonkers, N. Y. Adv. Aug. 31 and Sept. 7.	Aug. 31
Sept. 11	Mamaroneck, N. Y.	Aug. 31
Sept. 12	Michigan	Aug. 31
Sept. 12	Mound City, Kan.	Aug. 24
Sept. 12	Bridgeton, N. J.	Aug. 24
Sept. 12	Hillsboro, N. C.	Sept. 7
Sept. 12	Mason, Tex.	Sept. 7
Sept. 12	South Dakota	Sept. 7
Sept. 12	New York, N. Y.	Sept. 7
Sept. 13	Bellaire, O.	Sept. 7
Sept. 13	Brooklyn, N. Y.	Sept. 7
Sept. 13	New Hampshire	Sept. 7
Sept. 13	Maryland Adv. Aug. 31 and Sept. 7.	Aug. 31
Sept. 13	West Park (Cleveland P. O.), O.	Sept. 7
Sept. 14	Mobile, Ala. Adv. Aug. 24 to Sept. 7.	Aug. 24
Sept. 14	Tennessee	Aug. 24
Sept. 14	Ft. Worth, Tex.	Sept. 7
Sept. 14	Ontario	Sept. 7
Sept. 15	St. George, N. Y.	Sept. 7
Sept. 16	Palo Pinto, Tex.	Sept. 7
Sept. 17	Ohio	Sept. 7
Sept. 18	Steubenville, O.	Sept. 7
Sept. 18	Charleston, Miss.	Aug. 24
Sept. 18	Minnesota	Aug. 31
Sept. 19	New Orleans, La.	July 6
Sept. 19	Quebec	Sept. 7
Sept. 19	Woodbury, N. J. Adv. Sept. 7.	Sept. 7
Sept. 19	Maryland Adv. Sept. 7.	Sept. 7
Sept. 19	Virginia Adv. Sept. 7.	Sept. 7
Sept. 20	Denver, Colo.	Sept. 7
Sept. 20	New York Adv. Sept. 7.	Sept. 7
Sept. 22	Duluth, Minn.	Sept. 7
Sept. 25	California	Sept. 7
Sept. 25	Lindsay, Calif.	Sept. 7
Sept. 26	Alabama	Aug. 31
Sept. 27	Wellington, Kan.	Sept. 7
Sept. 28	New Mexico	Sept. 7
Sept. 29	Tulsa, Okla.	Aug. 24
Sept. 29	Iola, Kan.	Sept. 7
Oct. 3	Anderson, S. C.	Aug. 31
Oct. 3	Washington	Aug. 31

INDUSTRIAL WORK

Sept. 9	Rochester, N. Y.	Sept. 7
Sept. 10	Wash., D. C.	Sept. 7
Sept. 11	Sacramento, Calif.	Aug. 31
Sept. 19	Detroit, Mich.	Sept. 7

BUILDINGS

Sept. 9	Phila., Pa.	Sept. 7
Sept. 11	Chicago, Ill.	Sept. 7
Sept. 11	Oakland, Calif.	Aug. 10
Sept. 11	Johnstown, Pa.	Aug. 31
Sept. 11	Pittsburgh, Pa.	Aug. 31
Sept. 11	Buffalo, N. Y.	Aug. 31
Sept. 12	Port Jervis, N. Y.	Aug. 31
Sept. 12	Tarboro, N. C.	Sept. 7
Sept. 12	New York, N. Y.	Sept. 7
Sept. 13	Detroit, Mich.	Sept. 7
Sept. 14	Nashua, N. H.	Sept. 7
Sept. 14	Piercetown, Ind.	Sept. 7
Sept. 15	Carbondale, Pa.	Sept. 7
Sept. 15	Atchinson, Kan.	Aug. 31
Sept. 15	Racine, Wis.	Aug. 31
Sept. 16	St. Thomas, Ont.	Aug. 24
Sept. 16	Galt, Ont.	Sept. 7
Sept. 18	Glens Falls, N. Y.	Aug. 31
Sept. 18	Cleveland, O.	Aug. 31
Sept. 18	Saratoga Springs, N. Y.	Aug. 31
Sept. 18	San Antonio, Tex.	Sept. 7
Sept. 19	Detroit, Mich.	Sept. 7
Sept. 20	Dearborn, Mich.	Aug. 31
Sept. 23	Port Huron, Mich.	Sept. 7
Sept. 27	Wash., D. C.	Sept. 7
Sept. 28	Ithaca, N. Y. Adv. Sept. 7.	Sept. 7
Sept. 30	Duluth, Minn.	July 13
Oct. 1	Duluth, Minn.	Aug. 3
Oct. 3	Sacramento, Calif.	Sept. 7

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Sept. 8	Stone and Breakwater — Phila., Pa.	Sept. 7
Sept. 10	Isolation Building — Wash., D. C.	Sept. 7
Sept. 12	Road—California	Sept. 7
Sept. 12	Hospital — Northampton, Mass.	Aug. 24
Sept. 13	Guard House, etc.—San Diego, Calif.	Aug. 24
Sept. 13	Hangar—Anacostia, D. C.	Aug. 31
Sept. 14	Dredging—Norfolk, Va.	Aug. 17
Sept. 15	Repairing Jetty—Providence, R. I. Adv. Aug. 24 to Sept. 7.	Aug. 24
Sept. 15	Barges—New Orleans, La. Adv. Aug. 24 to Sept. 7.	Aug. 24
Sept. 16	Roads—Fitzsimons, Colo.	Sept. 7
Sept. 18	Barges—Florence, Ala. Adv. Aug. 24 to Sept. 7.	Aug. 24
Sept. 18	Turbine—Florence, Ala. Adv. Aug. 24 to Sept. 7.	Aug. 24
Sept. 20	Quarters — Langley Field, Va.	Aug. 31
Sept. 21	Jetty Repairs—Jacksonville, Fla. Adv. Aug. 24 to Sept. 7.	Aug. 24
Sept. 22	Cast Iron Mains, etc. — Fitzsimons, Colo.	Aug. 31
Sept. 26	Repairing Walls—Savannah, Ga. Adv. Aug. 31 and Sept. 7.	Aug. 31
Sept. 27	Quarters — Ft. Bayard, N. M.	Aug. 31
Sept. 28	Dredging—Buffalo, N. Y. Adv. Aug. 31 and Sept. 7.	Aug. 31
Sept. 28	Extension, etc.—Alexandria, La. Adv. Sept. 7.	Sept. 7
Sept. 29	Post Office—Eureka, Utah Adv. Sept. 7.	Sept. 7
Oct. 5	Dredging — New York, N. Y. Adv. Sept. 7.	Sept. 7
Oct. 6	Dredging — Wilmington, Del. Adv. Sept. 7.	Sept. 7
Oct. 31	Dredging—Honolulu, H. T. Adv. Aug. 31 and Sept. 7.	Aug. 31

MISCELLANEOUS

Sept. 12	Foundation — Des Moines, Ia.	Aug. 31
Sept. 12	Boardwalk — Long Branch, N. J. Adv. Sept. 7.	Sept. 7
Sept. 13	Bulkhead—Chicago, Ill. Adv. Sept. 7.	Sept. 7
Sept. 14	Piers—Stillwater, N. Y. Adv. Sept. 7.	Sept. 7
Sept. 15	Foundation — Denver, Colo.	Sept. 7
Sept. 15	Piping, etc. — Hammond, Ind.	Aug. 24
Sept. 15	Portland Cement, etc.—New York, N. Y.	Sept. 7
Sept. 16	Strain & Pin Type Insulators —Melbourne, Australia	July 27
Sept. 16	Railroad Ties — Toronto, Ont.	Aug. 31
Sept. 23	Crane—Aberdeen, Wash. Adv. Sept. 7.	Sept. 7
Oct. 2	Pier—Vancouver, B. C.	Sept. 7
Oct. 10	Steam Turbine, etc.—New Orleans, La. Adv. Aug. 17 to Sept. 7.	Aug. 17
Nov. 4	Transformers, etc. — Melbourne, Australia	Aug. 17

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., New York—Bd. Purch., Municipal Bldg., received no bids Aug. 23, furnishing, delivering, unloading, stacking and storing high pressure c.i. pipe and special castings, for Dept. Water Supply, Gas & Electricity. Will readvertise. Noted Aug. 17.

N. C., Fayetteville—City retained W. C. Olsen, consult. engr., Kinston, to design and supervise construction of improvements and extensions to waterworks and sewerage systems. $250,000. Engineer will also report on advisability of construction of power plant. Noted June 8.

Mich., Eloise—Wayne Co. Poor Bd. plans 30,000 ft. 12 in. c.i. mains, etc., $90,000, also 500,000 gal. rein.-con. water storage

Waterworks (Continued)

reservoir, 80 ft. square, 13 ft. water depth, $15,000. Head, Decker Shoecraft & Drury, Eng. Bldg., Ann Arbor, engrs.

O., Martins Ferry — See "Industrial Works."

Minn., Kenyon—Having plans prepared concrete reservoir, 300,000 gal. capacity, also high service pump. $15,000. O. B. Strand, village recdr. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engr.

S. D., Watertown—City Auditor rejected bids received Aug. 14, extending mains incl. 5,000 lin.ft. 4 in., 3,870 lin.ft. 6 in., 1,970 lin.ft. 8 in. c.i. pipe, also 1,540 lin.ft. 10 in. vitr. sewer. $20,000. W. T. Cochrane, city engr. Noted Aug. 10.

Mo., Pilot Grove—Making plans complete new waterworks. E. T. Archer & Co., 609 New England Bldg., Kansas City, engrs.

Tex., Shamrock — Attorney-Generals Dept., Austin, approved 100,000 bond issue for waterworks improvement, here.

Calif., Watsonville — Plans to vote on $200,000 bonds to purchase system of Watsonville Water Co.; plant improvements and extensions to exceed $50,000. H. B. Kitchen, city engr.

Ont., Ford—Plans to extend mains. $50,000. Prices wanted on pipe. W. Code, city engr.

Ont., Forest—Plans waterworks. $35,000. Chipman & Power, Mail Bldg., Toronto, engrs. Prices wanted on all materials.

Ont., London—Utilities Bd. plans extending waterworks to suburb of Broughdale. $40,000. E. V. Buchanan, Hydro Offices, engr.

BIDS DESIRED

N. J., Newark—Oct. 19, by North Jersey Dist. Water Supply Comn., 20 Clinton St., great notch tunnel and approaches.

Pa., Phila.—Sept. 12, by F. H. Caven, dir. pub. wks., perforated radial brick chimney, $20,000, also furnishing and installing 3 vacuum manual solution feed chlorinators, 75 to 300 lb. per day. C. E. Davis, City Hall, engr.

Fla., Haines City—Oct. 3, by Mayor and Council, waterworks and sanitary sewerage systems. J. R. Yale, clk. P. H. Norcross, 1404 Candler Bldg., Atlanta, Ga., consult. engrs.; adv. this issue.

O., Cleveland—Sept. 29, at office of Commissioner Purchases and Supplies, 219 City Hall, furnishing and laying about 10,400 lin.ft. 60 in. pipe, and other miscellaneous work. Alternate bids on c.i. pipe and steel pipe; A. V. Ruggles, Comr. Water; adv. this issue.

O., Hillsboro — Sept. 15, by J. Winegardner, clk. Bld. Trustees of Pub. Affairs, addition to waterworks including rein.-con. storage reservoir, 500,000 gal. capacity, drilling 1 new water well, equipping and connecting 3 water wells to compressor, pump and reservoir, etc. G. Champe, 610 Nasby Bldg., Toledo, civil engr.

O., Steubenville—Sept. 18, by R. P. Price, dir. Pub. Serv., furnishing 127 ton Class "C" c.i. pipe, f.o.b. Steubenville. B. M. Smith, clk.

O., West Park (Cleveland P. O.)—Sept. 13, c.i. watermains in Munn Rd., West 146th, West 147th, West 148th, West 149th and West 150th Sts., Yale and Orchardhurst Aves. To exceed $25,000. J. Reitz, City Hall, engr.

Minn., Duluth — Sept. 22, by W. H. Borgen, aud. St. Louis Co., laying 6 in. drain tile, 5.1 mi. State Job 2111, State Rd. 35 between Chisholm and Hibbing; 5.09 mi. State Job 2006, on State Rd. 35 between Chisholm and Buhl; 1 mi. Federal Aid Project 182, on State Rd. 35 between Mountain Iron and Virginia; 1.62 mi. State Job 2004 Div. 1, on State Rd. 35 between Mountain Iron and Virginia; 6.92 mi. State Job 2002, on State Rd. 35 between Gilbert and Biwabik; 2.08 mi. Federal Aid Project 202, on State Rd. 35 between Biwabik and Aurora; 2.71 mi. State Job 2102, on State Rd. 35 between Biwabik and Aurora; 3.78 mi. State Job 2103, on State Rd. 2 between Duluth and Carlton Co. line; 1.02 mi. Federal Aid Project 171, on State Rd. 2, between Duluth and Carlton Co. line; 6.89 mi. State Job 2101, on State Rd. 3 between Duluth and Lake Co. line; 1.03 mi. Federal Aid Project 201, on State Rd. 3 between Duluth and Lake Co. line. $70,000. R. W. Acton, Court House, co. engr.

Minn., East Grand Forks—Sept. 18, by city, 1 raw water and 1 clear water motor-driven centrifugal pump. A. N. Briggs, clk. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engr.

Colo., Boulder — City Council receiving bids and opens same about Oct. 1, for earth and concrete reservoir, 8,000,000 gal. capacity, near present Chautauqua Reservoir. $100,000. J. Randolph, Boulder, engr.

Que., Iberville—O. Beaudouin, 71a St. James St., taking bids for mechanical gravity filtration plant, 500,000 gal. capacity; one steel hemispherical tank, 100,000 gal. capacity; four centrifugal pumps.

Ont., Toronto—See "Streets and Roads."

BIDS RECEIVED

R. I., Scituate — Water Supply Bd., Providence, opened bids building tunnel portion of Scituate Aqueduct, from Keystone Constr. Co., 210 South 13th St., Phila., $1,318,340, Winston & Co., 240 Fair St., Kingston, N. Y., $1,489,190; Patrick McGovern, Inc., 50 East 42nd St., New York City, $1,535,573.

N. Y., Brooklyn — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, opened bids Aug. 29, mains in Ocean Parkway, Concourse Dr. and Surf Ave., here, from C. DeBlasio, 339 7th Ave., Mt. Vernon, $22,919; Beaver Eng. Co., 51 Chambers St., New York, $23,887. Noted Aug. 24.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., opened bids Aug. 29, mains in Marginal St. west of New York Central R.R., Manhattan Boro, Astor, Birchall, Bronxwood, Fish, Grand, Mace, Morgan, Needham, Tyndall, Walcon and Young Aves. West 180th and Sagamore Sts., Rodman Pl., Unionport Rd. and Pelham Parkway, north, Bronx Boro, from J. A. Gregory, 351 East 124th St., $107,603; Knight & Demicco, 448 East Tremont Ave., $111,788; Beaver Eng. Co., 51 Chambers St., $114,527. Noted Aug. 24.

N. Y., St. George—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, opened bids Aug. 29, mains in Chelsea Rd., Bloomfield, Cannon, Drake, Hughes, Meredith, Merrill and South Aves., here, from N. DeStefano, 257 Glenn Ave., Tomkinsville, $66,669; Beaver Eng. Co., Chambers St., New York, $68,782. Noted Aug. 24.

O., Cleveland—Underpinning filter basin by placing 18,690 lin.ft. pre-molded sectional concrete piling, from Stange & Walsh, Sixth-St. Clair Bldg., $66,879; Lake Erie Constr. Co., Hickox Bldg., $67,754. Noted Aug. 17.

O., Lyndhurst (near Cleveland)—Laying 10,077 ft. 12-16 in. c.i. mains, from Martin & McDace, 1452 West 98th St., Cleveland, $51,754; B. J. Whittaker, 345 The Arcade, Cleveland, $54,201. Noted Aug. 17.

Calif., Sacramento—Rapid sand filtration plant and appurtenances, Contr. 24, from Mathews Constr. Co., Forum Bldg., $771,957; R. McLeran & Co., Hearst Bldg., San Francisco, $843,318; K. E. Parker Co., 519 California St. and Healy-Tibbitts Co., 9 Main St., San Francisco, $860,000. Engrs. est. $839,847. Noted July 27.

CONTRACTS AWARDED

N. C., Charlotte—Excavating and erecting filtration plant to Tucker & Laxton, Realty Bldg., $201,426; gate valves to Grinnell Co., Charlotte, (street address not available), $15,303; structural steel to Southern Eng. Co., Realty Bldg., $26,680; 2 venturi meters, to Builders Iron Fdry., 9 Codding St., Providence, R. I., $3,234; operating tables, wash troughs, dry chemical feed machines, effluent controllers, to Roberts Filter Co., Darby, Pa., $11,872; tank, tower, surge tank and wash water tank, to R. D. Cole Mfg. Co., Newnan, Ga., $45,500. Noted Aug. 10.

Fla., West Palm Beach—Installing pipe line for high pressure water system, to I. C. Mishler, West Palm Beach (street address not available), $15,700. Noted June 1.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving Akron-Wooster Rd., Wayne Co., monolithic brick, to Kavavaugh-De Niro Constr. Co., Youngstown, (street address not available), $58,307. Noted Aug. 3.

S. D., Emery—Waterworks system incl. 13,208 lin.ft. 5-8 in. c.i. pipe to O. N. Gjellefald, Forest City, Ia., $22,824, $60,000 gal. steel tank on 100 ft. tower to Pittsburgh-Des Moines Steel Co., 10th and Tuttle Sts., Des Moines, Ia., $5,766. Noted July 20.

S. D., Murdo—Waterworks system incl. 12,740 lin.ft. mains, pumping station, elevated tank, earth dam, hydrants, etc., to W. D. Lovell, 1415 8th St. S. E., Minneapolis, Minn., $27,000. Noted July 13.

Wyo., Saratoga—Waterworks, to J. E. Grum, Cheyenne, $27,118.

Tex., Halletsville—Lavaca Co., (a) clearing and grading, (b) steel and concrete bridges and draining, 11.07 mi. Highway 3-B, 16 ft., to W. T. Hutto & Sons, Gonzales, (a) $18,894; Gonzales Cement Wks., Gonzales, (b) $55,480. Noted August 31.

Ont., Port Dover—Waterworks system incl. 150,000 gal. tank, to Horton Steel Wks., Bridgeburg; 6 and 8 in. pipe to Natl. Iron Corp., Cherry St., Toronto, $0.97 and $1.37 per ft., hydrants and valves, to Dominion Steel Products, Brantford. Noted Aug. 24.

Ont., Timmins—For 3,800 lin.ft. 6 in. c.i. watermains and 3,300 lin.ft. 9 in. tile sewers, to L. Mascioli, Timmins. $40,000. Engr. est. $42,000.

Ont., Woodbridge — Watermains and pumping plant, to Standard Constr. Co., Mimico. Engrs. est. $30,000. Noted June 8.

Sewers

PROPOSED WORK

N. Y., Rochester—Plans series of sewage disposal plants, Maplewood Dist., to serve about 2,936 acres, $100,000; also sewage disposal plant, 3,000,000 gal. capacity, near Feldspar Company's factory. C. A. Poole, city engr.

W. Va., Williamstown—See "Streets and Roads."

O., Port Clinton—Sold $40,000 bonds for additional sewers throughout city. Engineer not announced.

O., Struthers—Plans election to vote on $36,644 bonds, grading and sewering Elm and Sexton Sts.; also sewering and sidewalking small streets. Engineer not announced.

Colo., Arvada—Had plans prepared and takes bids in October for 8-15 in. vitr. sewer, and septic tank 5,000 cu.ft. capacity. $63,276. Brew & Sydow, Kittridge Bldg., Denver, engrs.

Calif., Lodi — Having plans prepared 2,136 lin.ft. 20 in., 1,237 lin.ft. 24 in. and 6,027 lin.ft. 30 in. rein.-con. sewers. L. F. Barzellotti, city engr.

BIDS DESIRED

N. H., Manchester—Sept. 20, by E. R. Conant, Surv., Dept. Highways, outfall sewer and connections, etc.; adv. this issue.

N. Y., Long Island City—Sept. 8, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Brown Pl. from Grand St. to Whitlock Ave., Whitlock Ave. from Brown Pl. to Bittman St., Juniper Ave. from Whitlock to Caldwell Aves., Firth Ave. from Grand St. to Whitlock Ave., Bittman St. from Grand St. to Caldwell Ave., Caldwell Ave. from Juniper Ave. to Bittman St., with temporary connections to sewers in Juniper Ave. and Bittman St., 2nd Ward; Howland St. from Ditmars to Woolsey Aves., 1st Ward; repair to outlet flume from Jamaica sewage disposal plant to creek flowing into Jamaica Bay. Noted Aug. 10.

N. Y., New York—Sept. 12, by H. Bruckner, pres. Bronx Boro, sewers in West Kingsbridge Rd. between Reservoir and University Aves., Philip Ave. between Throggs Neck Blvd. and Logan Ave., Hollywood Ave. between Philip and Lafayette Aves., Lafayette Ave. between Edison and East Tremont Aves., East Tremont Ave. between Lafayette and Barkley Aves., Logan Ave. between Lafayette and Barkley Aves., Hollywood Ave. between Lafayette and Barkley Aves., Somner Pl. between Edison and East Tremont Aves., Liebig Ave. from end of existing sewer at north line of former Foster Estate about 225 ft. north of West 261st St. to city line, White Plains Ave. between Bear Swamp Rd. and Pelham Parkway S.

N. Y., Syracuse — Oct. 10, at office of Syracuse Intercepting Sewer Bd., 104 City Hall, machinery and equipment for sewage pumping station and grit chamber. H. J. Hamlin, secy.; adv. this issue.

Md., Hagerstown—Sept. 19, at offices of Sewerage Comn. in Police Headquarters Bldg., 25,000 lin.ft. 8-18 in. sewers, 9,500 lin.ft. 6 in. house connections and 400 lin.ft. 66 in. storm water sewer. E. L. Heard, secy.; adv. this issue.

Fla., Haines City—See "Waterworks."

Ky., Hazard—Sept. 15, by A. G. Taylor, clk., sanitary sewerage system. $50,000. J. N. Chester Engineers, Union Bank Bldg., Pittsburgh, engrs. Noted Aug. 31.

Ky., Louisville—Sept. 21, by Comrs. of Sewerage, for Bardstown Rd. Dist. Trunk sewer and drain, Sects. B and C, Spring Dr. West, sewer and drain. J. B. F. Breed, ch. engr.; adv. this issue.

O., West Park (Cleveland, P. O.)—Sept. 13, by W. Dahm, dir. Pub. Serv., City Hall, storm and sanitary sewers in West 120th St. from Lynn to Cloverdale Aves., Melbourne Ave. from Lorain Ave. to West 159th St., Munn Rd. from Warren to Triskett Rds., West 140th St. from Lorain to San Diego Aves., Oak St. from West

Sewers (Continued)

140th to West 143rd Sts., Midland Ave. from West 120th to West 122nd Sts., West 159th St. from Melbourne Ave. to West Park Rd. To exceed $25,000. J. Reitz, City Hall, engr.

Wis., Rice Lake—Sept. 12, by O. G. Jensen, city clk., 15,740 ft. vitr. pipe sewer in Northwest Side Sewer Dist., incl. 4,100 ft. 10 in. vitr. pipe with 10-10 in. wyes, 9,300 ft. 8 in. vitr. pipe with 212-8 in. wyes, 1,945 ft. 12 in. vitr. pipe with 33-12 in. wyes, 385 ft. 15 in. vitr. pipe, 51 ft. manholes. J. H. A. Brahtz, 409 Metropolitan Opera House Bldg., St. Paul, Minn., engr.

Colo., Denver—Sept. 20, by Dept. Impvts. and Parks, 2 mi. 10-78 in. sewer Washington Park Storm Sewer Dist. 2, $481,810. Alternate bids on vitr. pipe and brick, concrete pipe, and segment block. A. K. Vickery, City Hall, engr. Noted Aug. 17.

Tex., Ft. Worth—Sept. 26, by Mayor and Bd. Comrs. at office of C. S. Snow, city secy., for sewage disposal plant. D. L. Lewis, city engr.; adv. this issue. Noted Aug. 31.

Ont., Toronto—Oct. 3, by C. A. Maguire, chn. Bd. Control, two 2,880,000 gal. centrifugal sewage pumps with motors. R. C. Harris, city engr.

Ont., Paris—See "Streets & Roads"

BIDS RECEIVED

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, opened bids Aug. 30, relief sewer in (1) Pitkin Ave., (2) New York Ave., (3) East 39th St., (4) 18th Ave., (5) East 13th St., (6) 55th St., (7) Creamer St., (8) New York Ave., (9) Ridge Blvd., sewer basins on (10) southwest corner Foster Ave. and East 26th St., (11) northeast corner Ave. K and East 8th St., from D. Bonnacci, 672 Degraw St., (1) $20,047, (2) $14,246, (3) $9,029, (4) $6,894, (5) $5,873, (6) $4,609, (8) $2,613, (9) $2,536, (10) $536, (11) $417; Murphy Bros., 262 Bay 43rd St., (1) $27,471, (6) $4,609, (7) $3,793; G. L. Schrade, (1) $26,439, (2) $14,821, (3) $10,950, (4) $7,526, (8) $3,048; Tomassetti & Co., Inc., 1133 60th St., (2) $15,965, (7) $4,356; S. Ambrosio 1016 60th St., (5) $6,037, (6) $4,565, (9) $2,696, (10) $401, (11) $326; Nazzaro & Quierriero, 6712 11th Ave., (3) $10,029, (5) $5,863, (6) $4,798, (9) $2,904; J. Jennings, Belle Harbor, (7) $4,229; Manville Constr. Co., 1020 45th St., (8) $2,613; C. W. Buerher, (10) $428, (11) $333. Noted Aug. 24.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., opened bids Aug. 28, for sewers and appurtenances in (1) Newton Rd. from 12th to 13th Aves., (2) Homans Ave. from Van Horn St. to Queens Blvd., (3) Hosack St. from Morton to Weisse Aves., (4) Lewis Ave. from Wool to Van Horn Sts., (5) Proctor St. from Central to Myrtle Aves., (6) Atfield Ave. from Jerome to Liberty Sts., (7) 89th Ave. from Woodhaven Ave. to a point 160 ft. west of 92nd St. from Spinella & Muccini, 6102 18th Ave., Brooklyn, (1) $1,321, (2) $5,665, (4) $3,730, (5) $5,127, (6) $4,386, (7) $3365; E. J. Kelley, Jr., 1137 50th St. Brooklyn, (1) $1,343; Kennedy & Smith, 93 Amity St., Flushing, (1) $1,420, (3) $57,638 Type B; M. Paino, (2) $5,692, (5) $5,637; J. F. Clancey, Jr., 160 Lockwood St., Astoria, (2) $5,852, (5) $5,773; Seaside Contg. Co., 193 Beach 108th St., Rockaway Beach, (3) $73,532 Type A; I. Gallo, 203 Division St., Brooklyn, (3) $61,660 Type A, $53,793 Type B; Murphy Bros., 262 Bay 43rd St., Brooklyn, (3) $59,532 Type B; A. Manano, (4) $3,939, (7) $3,505; D. Gross, 895 Fulton St., Woodhaven, (4) $3,296, (6) $4,212, (7) $3,731; G. L. Schrade, (6) $4,592. Noted Aug. 24.

Mich., Detroit—Opened bids (1) Bates St. Sewer, Melbourne Ave. Arm in Melbourne Ave. from Brush St. to Woodward Ave., (2) Mound Ave. Arm Seven Mile Rd. Sewer in Mound Ave. from Seven Mile Rd. to Nevada Ave., (3) Raymond Ave. Extension in Raymond Ave. from Edgewood to Grinnell Aves., from W. Blanck & Co., 823 Ford Bldg., (1) $33,968, (2) $31,300; J. Wagner, West Grand Blvd., (1) $36,641; Jeynes & Affeld, 1208 Ford Bldg., (1) $35,550; C. R. Lennane, 2631 Woodward Ave., (2) $37,500, (3) $6,961; R. D. Baker, 1631 Elmhurst Ave., (2) $31,728; Detroit Drainage Constr. Co., 580 Concord Ave., (3) $7,875; Liberty Constr. Co., 1026 Detroit Savings Bank Bldg., (3) $5,700.

Mich., Springwells—B. P. Esper, village clk., opened bids building (1) Sect. 10 main sanitary sewer, incl. 3,447 ft. 42, 48, 60, 66 and 72 in. pipe, (2) Sect. 14, incl. 5,058 ft. 48, 54, 60, 66 and 72 in. pipe, (3) Sect. 15, incl. 3,068 ft. 36, 48, 69 and 81 in. pipe, from J. Wagner, 2735 West Grand Blvd., Detroit, (1) $61,878, (2) $90,862; Detroit Drainage Constr. Co., 5099 Lemay Ave., Detroit, (1) $64,568; J. Winterbottom, 18524 John R St., Detroit, (1) $73,828, (2) $111,115; J. Porath, 745 Griswold St., Detroit, (2) $108,055, (3) $70,743; Hammen & Co., 4612 Woodward Ave., Detroit, (3) $72,003; R. Mercier, 5435 Wesson Ave., Detroit, (3) $79,965.

CONTRACTS AWARDED

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., improvements to sewer in West 57th St. between 5th and 6th Aves., to Melrose Constr. Co., 103 East 125th St., $42,832. Noted Aug. 31.

N. J., Long Branch—Bd. Comrs., extending municipal sewer and building pumping station, to Monmouth Contg. Co., Red Bank, $18,000. Noted Aug. 10.

S. D., Emery—Sanitary sewers in various streets incl. 15,868 lin.ft. 8-12 in. pipe, to City Sewerage Co., Sioux City, Ia., (street address not available), $17,008; Imhoff tank to O. N. Gjellefald, Forest City, Ia., $3,775. Noted July 20.

S. D., Gregory—Sanitary sewerage system, to E. M. Scheflow, Elgin, Ill., $62,000. Noted July 13.

Calif., Arcata—For 3,225 lin.ft. 24 in., 380 lin.ft. 18 in. vitr. pipe, 250 yd. excav., 3,000 lin.ft. 6 in. vitr. sewers with wyes, to Chambers & De Golyer, Bacon Bldg., Oakland, $23,139. Noted May 11.

Ont., Timmins—See "Waterworks."

Waste Disposal

BIDS DESIRED

N. J., Trenton — Sept. 22, by Bd. of Comrs., Municipal Bldg., addition to present crematory. A. C. Gregory, Municipal Bldg., engr. of sewers and water; adv. this issue.

Bridges

PROPOSED WORK

N. Y., Ithaca—Comrs. Tompkins Co. plan rebuilding bridges destroyed by flood. $30,000. F. C. Evans, Co. Supt. of Highways.

Tex., Richmond — Attorney-Generals Dept., Austin, approved $100,000 bond issue for rebuilding and repairing Fort Bend County bridges, recently destroyed by flood.

BIDS DESIRED

New Hampshire — See "Streets and Roads."

Mass., Cambridge—Sept. 18, by city, steel bascule with approach spans, concrete abutments, 126 ft. long, 60 ft. wide, on 1st St. L. M. Hastings, city engr. B. Brown, 88 Broad St., Boston, consult. engr.

R. I., Providence—Sept. 13, at office of State Bd. Roads, Room 21, State House, Providence, constructing State Bridge 46 known as Hope Valley Bridge, in Hopkinton, No. 64 known as Usquepaug Bridge, in South Kingston, No. 153 known as Silver Creek Bridge, in Bristol; adv. this issue.

Conn., South Norwalk—Sept. 20, by C. L. Barton, mayor, removing steel work and masonry jack arches on south side of present bridge, and constructing 60 ft. span rein.-con. arch extension, 23 ft. wide; adv. this issue.

Pa., Ebensburg—Sept. 15, by H. T. Jones, controller Cambria Co., 3 rein.-con. bridges, one single span over Laurel Run in East Carroll, one over Solomons Run, Dale Boro., and one over Clapboard Run, Conemaugh Twp. $50,000. H. F. Dorr, Trust Bldg., engr.

Ohio—See "Streets and Roads."

O., Toledo—Sept. 26, by W. T. Jackson, Dir. Pub. Serv., constructing bridge over Swan Creek in line of Hawley St. G. A. Laska, secy.; adv. this issue.

Indiana—Sept. 18, by J. D. Williams, dir. State Hy. Dept., Indianapolis, constructing 31 ft. 6 in. steel truss bridge over Drainage Ditch, State Rd. 2-L, Whitley Co., 30 ft. rein.-con. girder over Half Mile Branch, State Rd. 4-P, Jackson Co., 4 x 4 ft. rein.-con. box culvert over Drainage Ditch State Rd. 5-B, Daviess Co., 182 ft. 7 in. skew type steel truss, (wood block floor and paint), over Pigeon Creek, State Rd. 10-A, Vanderburgh Co., 72 ft. skew type steel truss (substructure only), over Robbins Ditch, State Rd. 15-F, Starke Co., 18 ft. rein.-con. slab over Scott Ditch, State Rd. 27-C, Kosciusko Co., 16 ft. rein.-con. slab over Drainage Ditch, State Rd. 27-C, Kosciusko Co., steel truss bridge with three 198 ft. spans, also one 49 ft. span, (wood block floor and paint), over Wabash River, State Rd. 31-A, Vermillion Co. C. Gray, state engr.

Mich., Hillman—Sept. 11, by District Engr., Alpena, rein.-con. plate girder Bridge 600,401, on Trunk Line 32, Montmorency Co., incl. substructure two 21 ft. 6 in. rein.-con. abutments, 467.8 cu.yd Class B concrete, also concrete pier 21 ft. 9 in. high, 176.2 Class C concrete, 43,673 lb. reinforcing steel, superstructure, two 75 ft. spans, 20 ft. roadway, 480.3 Class A concrete, 106,852 lb. reinforcing steel.

Tex., Ft. Worth—Sept. 18, by Comrs. Tarrant Co. bridge over Marys Creek on State Highway 10, three 40 ft. girders, $26,245; bridge over Walnut Creek on State Highway 34, nine 20 ft. slabs, $19,997; bridge over iLttle Fossel Creek, on State Highway 40, six 10 ft. slabs, $5,295. R. V. Glenn, Court House, engr.

Wash., Seattle—Oct. 6, by Bd. Pub. Wks., superstructure of bridge Spokane St. over Duwamish Waterway, incl. bascule portion, 2 side spans each 140 ft., 135 ft. steel crossing, Bascule portion 45 ft. c. to c., 6 ft. sidewalks. Total length 288 ft., 45 ft. wide. $1,250,000. Former bids returned unopened. J. D. Blackwell, Hoge Bldg., engr. Noted Aug. 3.

BIDS RECEIVED

Alabama—State Hy. Dept., Montgomery, 3 concrete bridges, girder type on concrete piles, on Greenville-Camden Rd., Wilcox Co., from Fountaine, Lamb & McLemore, Hattisburg, Miss., $41,783; Keenan, Kyser & Gillis, Selma, $42,156; J. A. Peterson, Montgomery, (street address not available), $43,911. Noted Aug. 24.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids Sept. 1, bridges in following counties: Guernsey Co., Sect. "K" National Rd., rein.-con., from Noble Bridge Co., Mt. Vernon, $9,565; F. A. Moorehead, West Jefferson, $9,765. Guernsey Co., Sect. "I" National Rd., concrete from Noble Bridge Co., Mt. Vernon, $9,076; F. A. Moorehead, West Jefferson, $9,326. Crawford Co., Sect. "G" Bucyrus-Cresline Rd., concrete arch, from Le Hainey & Auth, Toledo, (street address not available), $12,487; Scioto Constr. Co., Kenton, $12,697; O. C. Morrow, Cresline, $12,697. Butler Co., Sect. "C" Hamilton-Scipio Rd., concrete beam from V. F. Hughes, Hamilton, $4,169; J. Conrad, Hamilton, $4,251; Central Paving Co., Hamilton, $4,301. Butler Co. Sect. "J" Hamilton-Middletown Rd., concrete girder from C. C. Johns, Middletown, $1,797; Central Paving Co., Hamilton, $1,913. Noted Aug. 24.

CONTRACTS AWARDED

Pennsylvania—State Hy. Dept., Harrisburg, concrete bridge over Roystown branch of Juniata River near Tatesville, Bedford Co., to Concrete Steel Bridge Co., Clarksburg, Va., (street address not available), $30,235. Noted Aug. 24.

Pa., Mercer — To A. C. Dailey Co., Phillipsburg, Bridge 508, Deer Creek Twp., $1,607; to Minteer & Anderson, New Wilmington, Bridge 3011, Springfield Twp., $2,616, Bridge 2802, Shenango Twp., $6,000, Bridge 2308, Hickory Twp., $6,880; to A. McConnell, Mercer, Bridge 2307, Hickory Twp., $10,796. Noted Aug. 17.

Ia., Dubuque—Dubuque Co. 555 lin.ft. steel and concrete viaduct, 20 ft. wide, to Minneapolis Bridge Co., Metropolitan Life Bldg., Minneapolis, Minn., $56,000; culverts to Even-Uhlrich-Staner Co., Dubuque, (street address not available), $3,548.

Minn., Moorhead — See "Excavation, Drainage, Irrigation."

Tex., Hallettsville—See "Streets and Roads."

Tex., San Angelo—City and Tom Green Co., 500 ft. rein.-con. bridge, over North Concho River on Beauregard Ave., 40 ft., to Brown Abbott, Dallas, (street address not available), $60,671. Noted May 18.

Colo., Denver—Dept. Impvts. and Parks, 122 ft. rein.-con. bridge on Federal Blvd. and West 13th Ave., 63 ft., to R. M. Larson, 1309 Kalamath St., $26,706. Engrs. est. $35,000. Noted Aug. 10.

Dams

CONTRACTS AWARDED

Pa., Greenville—L. B. Taylor, concrete and wood dam across Shenango River on Smathers Estate, to Universal Constr. Co., Empire Bldg., Pittsburgh, $26,194. Noted Aug. 17.

Railways

PROPOSED WORK

Ohio—Municipal Ry. Co., Youngstown, (street address not available), plans rebuilding tracks in Parkview and Sherwood Aves., also repaving same within its

Railways (Continued)

boundaries. $25,000. **Engineer not announced.**

California—City and County of San Francisco will vote on $1,500,000 bonds about Nov. 21, for extensions to municipal railway system. M. M. O'Shaughnessy, city engr.

BIDS DESIRED

New York—Sept. 15, by Transit Comn., 49 Lafayette St., New York, installing tracks for 239th St. Yard of White Plains Rd. Rapid Transit R.R., etc. G. McAneny, chn.

CONTRACTS AWARDED

North Carolina—Cape Lookout Development Co., Beaufort, constructing 6 mi. railroad from Wades Beach to Cape Lookout and hotel at Cape Lookout, to Hancock & Davis, Beaufort.

Excavation, Drainage, Irrigation

PROPOSED WORK

Wis., Waupaca—Waupaca Co., F. D. Co. c/o C. W. Ross, secy., Manawa, having plans prepared and soon takes bids 1.5 mi. of 6-12 in. tile drain and about 3 mi. open ditch. $25,000. L. M. Schindler, 721 Clark St., Appleton, engr.

Calif., Live Oak — Dirs. Reclamation Dist. 2056, take bids about Sept. 15, 40 mi. ditches ranging from 3 ft. to 5 ft. deep, 6 ft. wide, 411,310 cu.yd. excav., 2,116 lin.ft. 12-36 in. concrete pipe culverts, 148 cu.yd. concrete. E. W. Stanton, Live Oak, engr. Noted Aug. 17.

Calif., Macdoel—Butte Valley Irrigation Dist. plans election soon to vote on bonds for irrigating 30,000 acres, constructing pumping plants, canals, etc. E. Bissell, Macdoel, secy. C. T. Darley, Klamath Falls, Ore., ch. engr.

Calif., Selma—Consolidated Irrigation Dist. having plans prepared for 8 concrete drops, 60 ft. long, 12 concrete drops, 40 ft. long, 20 in. concrete pipe line, etc. Voted $775,000 bonds to purchase works of Consolidated Irrigation Dist., and $75,000 bonds for above improvements. W. H. Shafer, Selma, engr.

Ont., Barrie—Simcoe Co. plans to dredge Nottawasaga River and reclaim 20,000 acres flooded lands. $50,000. Engineer, c/o Provincial Dept. Pub. Wks., Toronto.

BIDS DESIRED

N. J., Plainfield—Sept. 18, by Common Council, about 46,000 cu.yd. excav. from an old railroad embankment. A. W. Vars, city engr; adv. this issue.

Minn., St. James—Sept. 21, by A. G. Countryman, aud. Watonwan Co., Judicial Ditch 35, Sect. A, 141,400 lin.ft. 8-40 in. tile, 9,100 lin.ft. open ditch, 1 concrete double headwall, 144 lin.ft. 10-20 in. corrugated iron culvert pipe, 55 catchbasins, $171,862; Sect. B, 17,800 lin.ft. 8-20 in. tile, 5 catchbasins, surf inlet grates, 1 standard concrete headwall, etc., $12,250.

Ark., Wynne—Sept. 22, by Bd. Comrs. D. D. 3, Cross Co., Court House, constructing 53 mi. ditches, ranging from 6-30 ft. in bottom width. W. S. Newsom, Wynne, engr.; adv. this issue.

Colo., Ordway—Sept. 16, by Ordway D.D., 10 mi. open drainage ditch, 300,000 cu.yd. excav., 10 timber bridges, pile foundation, 828 ft. 18 in. vitr. pipe flush conduit culverts, spillways, flumes, etc. $70,000. F. E. Davis, secy. R. A. Sawyer, Ordway, engr.

Wash., Montesano—Comrs. Grays Harbor Co., opened bids Aug. 20, improving D. D. No. 4, incl. 600 acres, draining, dyking, filling streets and roads, (a) cement pipe, (b) galvanized drain pipe, from E. J. Cheatham & Son, Aberdeen, (a) $82,385 (b) $81,575; D. A. Foley & Co., Aberdeen, (a) $82,850 (b) $82,080; Parker & Schram Co., Aberdeen, (a) $89,150 (b) $87,195. Above bids rejected on account of time specified for finishing work. New bids, (naming time limit), will be called. Engrs. est. $90,000. Noted Aug. 10.

BIDS RECEIVED

Wash., Yakima—City Council opened bids Aug. 22, constructing irrigation laterals in district east of Northern Pacific R.R. tracks and north of Pacific Ave., from S. A. Campbell, Sunnyside, $72,096; Yakima Paving Co., Yakima, $82,403; Colucio & Erickson; Hinckley Bldg., Seattle, $75,576. Engrs. est. $72,397.

CONTRACTS AWARDED

Wis., Cross Plains — Dane Co. Farm Drainage Bd., Madison, excavating and laying tile drain in Dist. 7, incl. 39,000 cu. yd. tile drain, to Wisconsin Drainage Co., Elkhorn, $58,500. Engrs. est. $55,000.

Minn., Moorhead—Clay Co., Ditch 45, Lateral 1 and 2, to M. W. Barnard & Son, 612 Globe Bldg., Minneapolis, $36,955; bridges to J. A. Jardine, 1123 1st Ave. S, Fargo, N. D., $15,377. Noted Aug. 17.

Ont., Thedford—Bosanquet, Stephen, West Williams and McGillivray Twps., draining inundated area and reclaiming land to C. Vanslambrouck, Blenheim, $56,055. Noted April 20.

EXCAVATION GRANTS PASS, ORE.

Following are lowest bids opened Aug. 8, by Grants Pass Irrigation Dist., for excavation of main canal, Sta. 0 to Sta. 3.33 (except Sta. 6 to 26, completed), (A) P. Welch, Medford; (B) Pacific Bridge Co., East Salmon St., Portland; J. Hampshire, Grants Pass. The unit bids were as follows:

	C. Yd.	A	B	C
Schedule 1				
Class 1	800....	$0.30	$0.50	$0.40
Class 2	300....	.50	.65	.80
Class 3	100....	1.20	2.25	2.50
Schedule 2				
Class 1	80,000....	.30	.55	.39
Class 2	15,000....	.50	.56	.78
Class 3	2,600....	1.20	1.75	2.20
Schedule 3				
Class 1	6,000....	.30	.38	.39
Class 2	3,900....	.50	.54	.78
Class 3	100....	1.20	2.00	2.50
Schedule 4				
Class 1	40,000....	.30	.61	.55
Class 2	10,000....	.50	.64	1.25
Class 3	10,000....	1.20	2.10	2.50
Schedule 5				
Class 1	8,000....	.45	.39	.39
Class 2	500....	.75	.50	.78
Class 3	100....	1.20	2.00	2.50
Schedule 6				
Class 1	1,200....	.45	.56	.39
Class 2	500....	.75	.65	.78
Class 3	100....	1.20	2.00	2.50
Schedule 7				
Class 1	1,000....	.45	.42	.50
Extended totals.....		$73,580	$119,343	$119,930

Streets and Roads

PROPOSED WORK

N. Y., Mayville—Bd. Village Trustees plan bond election for widening and improving Main St., (a) cement road from gutter to gutter and gutters, $26,000, (b) cement through business section and tarvia on remainder, cement gutters $20,250. Engineer not announced.

N. Y., Niagara Falls—Plans paving 2,039 ft. alley between 5th and 6th Sts., 15 ft., either granite or wood block, asphalt, sheet asphalt, asphaltic concrete, fibre brick or bitulithic. $31,575. Estimate based on granite block. W. B. Bennett, Convention Hall, engr.

Pa., Beaver—Plans paving Insurance and Corporation Sts., 17 ft. wide, vitr. brick. $25,000. E. W. Tomlinson, boro. secy. Engineer not announced.

Pa., Clarion—Comrs. Clarion Co., and others, plan to improve road from Venus to Fryburg. $100,000.

Pa., New Castle—Plans to widen Mercer, Mill, North and Neshannock Sts., from 60 to 75 ft. $25,000.

Md., Baltimore—Plans paving, 6 or 7 in. cement concrete, 1-2-4, Weaver Ave., Glenmore Ave. from Sefton Ave. to point 760 ft. east, Glenoak Ave. from Glenmore to Royston Aves., Arabia Ave. from Weaver to Overland Aves., Glyndon Ave. from Carey to Bayard Sts., Cottage Ave. from Violet to Keyworth Aves., Tyndale Ave. from Parkside Dr. to Harcourt Rd., Harcourt Rd. from Tyndale to Eutaw Aves., Canterbury Lane from Berkshire to Tyndale Aves.; paving 1½ x 1½ sheet asphalt on 6 in. concrete Rueckert Ave. from Harford Rd. to Holder Ave., Elmley Ave. from Belair Rd. to St. Cloud Ave., Lyndale Ave. from Greenview to St. Cloud Aves., Batavia Ave. from Harford Rd. to Belmont Ave., Calverton Ave. from Frederick Ave. to Hollins St. R. K. Compton, 214 East Lexington St., engr.

W. Va., Moundsville — Liberty Dist., Marshall Co., voted $200,000 bonds for road work. A. Purdy, Moundsville, engr. Noted Aug. 10.

W. Va., Williamstown—Sept. 16, to vote on $75,000 bonds paving and laying sewers in 5th, Louise and Clay Sts. J. V. Dunbar, Williamstown, engr.

N. C., Dunn—Plans paving 6 mi. various streets, some type of asphalt on concrete.

N. C., Greensboro—Guilford Co. plans constructing ¾ mi. new macadam and repairing 2 mi. old macadam and placing penetration top on road running northeasterly from County home, $25,000; repairing old macadam and giving same penetration top 8 mi. road from Summerville via Oak Ridge to Staffords Store, $40,000; grading and paving with asphalt on concrete 1.6 mi. road, to connect Pleasant Garden Rd. with the State Highway Olivers, $40,000. W. C. Boren, Greensboro chn. Bd. Co. Hy. Comrs.

N. C., Lenoir—Comrs. Caldwell Co. authorized $100,000 bond issue for completing highway system, concrete or asphaltic concrete. G. C. White, Durham, engr.

Fla. Bushnell—Sumter Co. to vote on $50,000 bonds Oct. 1, constructing 8 mi. road from Bushnell to Rerdell via St. Catherine; $75,000 for road from Linden to St. Catherine Spec. Rd. Dist.; $60,000 for 8 mi. road from Oxford to Wildwood; $50,000 for 6 mi. road from Coleman via Adamsville to Leesburg Rd.; $40,000 for 8 mi. road from Sumterville to Outlet; $30,000 for 5 mi. road from Center Hill to Sloan Ridge; $70,000 for 11 mi. road from Bushnell to Weeds Laundry; $50,000 for 6 mi. road from Webster to Sloan Ridge. F. Cotton, Rerdell, engr.

Ala., Birmingham—Takes bids in about 60 days, grading, curbing, guttering and asphalt surfacing on concrete, 2 mi. 14th St. S. W., 24 ft., $108,000; 1½ mi. 14th Ave. S., 24 ft., $80,500. A. J. Hawkins, city engr.

Tenn., Manchester—Coffee Co. making plans constructing macadam road system, $400,000. N. H. Meriwether, co. engr. Noted June 1.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids which were to be received Sept. 1, grading, bridging and paving 3.551 mi. Sect. "P" Columbus-Sandusky Rd., waterbound macadam. Noted Aug. 24.

Ind., Delphi—Carroll Co. plans grading and gravel surfacing 3 mi. Elmer Showalter Rd., 16 ft., $26,000. J. R. McCain, Delphi, engr.

Ind., Marion—Grant Co. plans grading and gravel surfacing 3.5 mi. Daniel Stuber Rd., 16 ft., $27,000. G. Swisher, Marion, engr.

Ind., Noblesville—Hamilton Co. plans grading and gravel surfacing 3 mi. Henry Brehm Rd., 18 ft., $26,000; 3 mi. John Rupe Rd., 18 ft. $25,500. J. S. Shannon, Noblesville, engr.

Mich., Detroit—Plans prepared grading and paving Six Mile Rd. from Woodward to Oakland Aves., and from Oakland Ave. to Grand Trunk Ry., 3½ in. sheet asphalt on 8 in. concrete, 4,800 cu.yd. excav., 6,160 sq.yd. sheet asphalt, 3,950 lin.ft. Medina curbing. $35,000. J. W. Reid, city engr.

Mich., Detroit—Plans grading and paving 3,400 sq.yd. Minnesota Ave. from John R to Brush Sts., $17,140, 2,040 sq.yd. Cherrylawn Ave. from Cortland to Fullerton Aves., $10,190, 8,090 sq.yd. Rochester Ave. from Linwood to Dexter Aves., $40,450, 7,140 sq.yd. Glendale Ave. from Woodward Ave. to John R St., $35,730, 3,000 sq. yd. Coplin Ave. from end of present pavement to Mack Ave., $15,050, 5,160 sq.yd. Montana Ave. from Woodward Ave. to John R St., $25,330, 760 sq.yd. Quincy Ave. from Gladstone to Hazelwood Aves., $3,930, 2,670 sq.yd. Smart Ave. from McDonald to Lonyo Aves., $13,350, 2,740 sq.yd. Dayton Ave. from McDonald to Lonyo Aves., $13,680, also 16 alleys, totaling $56,412. J. W. Reid, city engr.

Iowa, Elkader—Rejected bids opened Aug. 21 for 21,650 sq.yd. paving, 11,000 lin. ft. concrete curb and gutter, 6,450 cu.yd. excav. $52,000. M. Tschirgi & Son, 712 Amer. Trust Bldg., Cedar Rapids, engrs. Noted Aug. 17.

Tex., McKinney—McKinney Rd. Dist. of Collin Co. to vote on $450,000 bonds Sept. 26, for road improvements. F. W. Cawthon, co. engr.

Tex., Richmond — Attorney-Generals Dept., Austin, approved $500,000 bond issue for highway and road improvements in Rd. Dist. 1, Fort Bend Co. C. H. Kendall, Sugarland, co. engr. Noted June 15.

Tex., Seguin—Guadalupe Co. plans grading, gravel surfacing and building culverts on 10 mi. State Highway 3 east of here, 16 ft. S. C. McCarty, Seguin, engr.

Colo., Boulder—City Council opens bids about Sept. 19, paving 4,000 sq.yd. Pleasant St. and Pennsylvania Ave., bitulithic on rock, $15,000; 12,000 sq.yd. Mapleton Hill Dist., bitulithic on rock, concrete curb and gutter, $50,000; 12,000 sq.yd. 14th St. Dist., bitulithic on present base, $40,000. J. Randolph, Boulder, engr.

Calif., Redwood City—San Mateo Co. plans highway from point near Union Oil Station on Bay Shore Highway to El Camino Real near Tanforan race track. $32,000. G. A. Kneese, co. surv.

BIDS DESIRED

New Hampshire—Sept. 13, by F. E. Everett, comr. State Hy. Dept., Concord, constructing 1.5 mi. State Highway, 18 ft., in Rochester, crushed gravel, $25,000; also one 43 ft. span concrete bridge, in Sutton, $15,000. State Hy. Dept., Concord, engrs.

Streets and Roads (Continued)

New York—Sept. 20, by H. S. Sisson, comr. State Hy. Dept., Albany, improving highways in Franklin, Livingston, Onondaga, Otsego, and Rockland Counties; reconstructing highways in Cortland, Monroe and Ontario Counties. J. C. Finch, secy.; adv. this issue.

N. Y., Brooklyn—Sept. 13, by E. Riegelmann, boro pres., Boro Hall, repaving Union and 95th Sts., 16th and 15th Aves., etc., asphalt.

N. Y., New York—Sept. 12, by H. Bruckner, pres. Bronx Boro, paving West 230th St. from Bway. to Bailey Ave., Hornaday Pl. from Crotona Parkway to Honeywell Ave., both sheet asphalt on concrete; grading, setting, curb, paving, laying sidewalks, etc., on Whitlock Ave. from Southern Blvd. to bridge over Port Morris branch of New York & Harlem R.R., sheet asphalt on concrete; grading for width of 30 ft., centrally located, etc. Seymour Ave. from Waring Ave. to Dewitt Pl. and from Gun Hill Rd. to Burke Ave.; grading, setting curb, laying sidewalks, etc. on Whitlock Ave. from East 149th St. to Leggett Ave.

N. Y., St. George—Sept. 15, by J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving roadway of Southfield Blvd. from Parkinson to Guyon Aves., concrete.

N. J., Woodbury—Sept. 19, by Bd. Freeholders Gloucester Co., constructing Swedesboro-Woodstown Rd. in Borough of Swedesboro and Woolwich and South Harrison Twps., 38,402 sq.yd. concrete pavement; resurfacing Delaware St., sheet asphalt on present reconstructed foundation. C. N. Steelman, clk. W. C. Cattell, co. engr.; adv. this issue.

Maryland—Sept. 19, by State Rds. Commission, Baltimore, building state highway Carroll Co., Contr. CL-31, Baltimore City, Contr. BC-42, Anne Arundel Co., Contr. AA-27, Prince George Co., Contr. P-39, St. Marys Co., Contr. SM-21, Dorchester Co., Contr. D 28. J. N. Mackall, chn.; adv. this issue.

Virginia—Sept. 19, by State Hy. Comn., Richmond, paving 4.75 mi. Project 125-A; 4.6 mi. Project 160; 5.01 mi. Project 168; 6.43 mi. Project 173, 6.27 mi. Project 202. G. P. Coleman, comr.; adv. this issue.

N. C., Hillsboro—Sept. 12, by Mayor, paving 1 mi. road, 13,000 sq.yd. concrete or asphalt with necessary curbing, etc. $40,000. W. M. Piatt, Durham, engr. Noted July 21.

Ohio—Sept. 15, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties:

Huron Co., Sect. "P" Columbus-Sandusky Rd., 3.551 mi., waterbound macadam, $39,154.

Perry Co., Sect. "S-1" Newark-New Lexington Rd., 1.22 mi., bituminous macadam, asphalt or tar, $35,318.

Stark Co., Sect. "D-2" and "E" Alliance-Minerva Rd., 3.96 mi., grading and drainage structures only, $37,642.

Tuscarawas Co., Sect. "A" Canton-Canal Dover Rd., 3 mi., grading and drainage structures only, $18,600.

Tuscarawas Co., Sect. "B" Canton-Canal Dover Rd., 2.299 mi., grading and drainage structures only, $19,349.

Tuscarawas Co., Sect. "E" Canton-Canal Dover Rd., 2.093 mi., grading and drainage structures only, $25,422.

Williams Co., Sect. "C" Stryker-Evansport Rd., 1.187 mi., grading and drainage structures only, $16,190.

Williams Co., Sect. "D" Stryker-Evansport Rd., 2.58 mi., grading and drainage structures only, $6,601.

Jackson Co., Sect. "K" Jackson-Pomeroy Rd., concrete bridge, $4,070.

Pike Co., Sect. "L-2" Columbus-Portsmouth Rd., rein.-con. bridge, $3,889. L. C. Herrick, dir. highways.

O., Bellaire—Sept. 13, by Trustees of Pultney and Twps., improving Neff-Sand Hill Rd., $47,000. W. J. Campbell, clk. of former; A. M. Brown, clk. of latter.

O., Cleveland—Sept. 9, by Bd. Comrs. Cuyahoga Co., Court House, paving S. O. M. Center Rd. 3 and 4, $324,724; Detroit Rd. 4, $132,178. A. J. Hieber, clk. F. J. Landere, Court House, engr.

Ohio, Cleveland—Sept. 9, by Bd. Comrs. Cuyahoga Co., Court House, paving Detroit St. from West Boulevard to Berea Rd., brick or granite. $46,262. F. J. Lander, Court House, engr.

O., Steubenville—Sept. 18, by R. P. Price, dir. Pub. Serv., grading and repaving, etc. 3rd St. from Ross to North Sts., 3rd St. from North to Market Sts., 3rd St. from Adams to South Sts., 3rd St. from South to Bates Sts., asphalt, rein.-con., brick or wood block. B. M. Smith, clk.

O., West Park (Cleveland P. O.)—Sept. 13, paving with brick, Nichols Ave. from Riverside Dr. to West 162nd St., West 119th, West 125th and West 126th Sts. from Lorain to Linnet Aves., West 120th St. from Lorain to Cloverdale Aves., West 139th St. from Lorain to Sacramento Aves., West 128th and West 129th Sts. from Lorain to Thrush Aves., Williams Ave. from Riverside Dr. to Overlook Rd., West 125th, West 132nd and West 120th Sts. from Linnet to Thrush Aves., West 123rd St. from Linnet Ave. to West 122nd St., West 119th St. from Lorain to Midland Aves., West 135th St. from Lorain to Cross Aves., West 123rd and West 125th Sts. from Lorain Ave. to Triskett Rd., Lucille Ave. from Riverside Dr. to West 159th St., Elsienna Ave. from Riverside Dr. to West 168th St., West Park Rd. from Lorain Ave. to Riverside Dr. $100,000. J. Reitz, City Hall, engr.

Minn., Duluth—Sept. 22, by W. H. Borgen. aud. St. Louis Co., gravel surfacing 1.5 mi. State Rd. 6, Federal Aid Project 190, between construction station 0 plus 00 at west corner of Sect. 6, Twp. 68 North, Range 21 West, and construction station 80 plus 03.2 near centre of Sect. 5, Twp. 68 North, Range 21 West, 3,300 cu.yd. gravel; 11.06 mi. State Rd. 6, State Job 2205, between construction station 883 plus 00, in southeast quarter Sect. 13, Twp. 67 North, Range 21 West, and construction station 1466 plus 08.4 near centre of Sect. 5, Twp. 68 North, Range 21 West, 24,330 cu.yd. gravel. $35,000. R. W. Acton, Court House, co. engr.

Kan., Iola—Sept. 29, by Comrs. Allen Co. paving 3.297 mi. Sect. A, King of Trails Highway, Federal Aid Project 127, $125,000, 3.123 mi. Sect. B, King of Trails Highway, Federal Aid Project 127, $120,000, both 18 ft. concrete, bituminous concrete or bituminous macadam. A. Stroup, co. engr.

Kan., Wellington—Sept. 27, by Sumner Co., 26 mi. paving, 18 ft. Alternate bids on one course concrete, bituminous filled brick, bituminous concrete and bituminous macadam. J. W. Mavity, co. engr.

South Dakota—Sept. 12, by State Hy. Dept., Pierre, grading 11.06 mi. Federal Aid Project 98, also building one 32 ft. beam span and one 45 ft. pony truss, Lincoln Co., 75,514 cu.yd. excav., 203 cu.yd. concrete, 57,400 lb. steel, 6.06 mi. Federal Aid Project 50, Sect. C, Sanborn Co., 109,855 cu.yd. excav., 70 cu.yd. concrete, 5,280 lb. steel; 6.49 mi. Federal Aid Project 104, also one 32 ft. beam bridge, Douglas Co., 48,500 cu.yd. excav., 240 cu.yd. concrete, 35,000 lb. steel, F. D. Hudgins, state engr.

ROAD WORK—MISSOURI

Bids were opened by State Highway Comn., Jefferson City, for constructing 13.07 mi. state road from Liberty to Excelsior, from (A) Haden & Austin, Hill and Market Sts., Houston, Tex.; (B) E. S. Merk, Kansas City; (C) W. M. Spencer, Independence. The unit bids were as follows:

	A	B	C
13,000 cu.yd. earth excavation	$0.50	$0.50	$0.50
38,662 cu.yd. sledged stone base	.90	.90	2.25
38,662 cu.yd. sledged stone base, ¼ mi. haul	1.25	1.68	1.00
308,604 cu.yd. sledged stone base, additional ¼ mi. haul	.08	.0625	.06
4,142 cu.yd. waterbound macadam	1.50	1.90	2.50
4,142 cu.yd. waterbound macadam, ¼ mi. haul	1.50	1.85	1.00
33,064 cu.yd. waterbound macadam, additional ¼ mi. haul	.08	.0625	.06
15,534 cu.yd. crushed stone furnished at quarry	1.50	1.90	3.00
15,534 cu.yd. crushed stone, ¼ mi. haul	1.00	1.85	1.00
123,986 cu.yd. crushed stone, additional ¼ mi. haul	.08	.0625	.06
310,680 gal. bituminous binder, Native asphalt	......	......	......
310,680 gal. bituminous binder, oil asphalt	.18	.16	.16
310,680 gal. bituminous binder, refined tar	......	.16	.15
3,000 lin.ft. 4 in. vitrified tile underdrain	.50	.54	.30
Extended totals	$239,186	$264,093	$286,564

ROAD WORK—CONNECTICUT

Following are lowest three bids opened July 26 by State Highway Comn., Hartford, for constructing Willimantic Rd., Coventry Twp. (A) L. Suzio Constr. Co., Meriden; (B) Arborio Rd. Co., Hartford; (C) A. Vito Constr. Co., Norwich. The unit bids were as follows:

	A	B	C
15,540 cu.yd. earth excavation	$1.00	$0.95	$0.95
1,000 cu.yd. borrow	1.00	1.00	1.00
3,060 cu.yd. rock excavation	2.00	2.25	3.00
Grubbing (lump sum)	250.00	500.00	...
164 lin.ft. 14 in. c.i.c.	2.00	1.50	1.90
218 lin.ft. 18 in. c.i.c.	2.50	2.00	2.80
196 lin.ft. 20 in. c.i.c.	3.00	2.30	3.20
134 lin.ft. 24 in. c.i.c.	3.50	2.80	3.90
104 lin.ft. 30 in. c.i.c.	4.75	3.75	4.25
68 lin.ft. 36 in. c.i.c.	5.50	4.50	4.50
2,725 lin.ft. rubble drain	1.20	1.40	2.00
1,800 sq.yd. cobble gutter	.85	1.25	1.00
3,000 lin.ft. wire fence	.25	.22	.30
4,900 lin.ft. w.g. rail	.40	.48	.50
41,300 sq.yd. 3 in. bituminous macadam	.80	.85	.90
7,900 cu.yd. 7 in. n.s. base	3.20	3.75	3.50
1,500 cu.yd. 8 in. stone fill	2.00	2.25	2.00
280 cu.yd. new masonry	8.50	8.00	9.00
Extended totals	$96,918	$104,774	$108,703

ROAD WORK—WASHINGTON

Following are lowest three bids opened July 21, by C. H. Purcell, Dist. Forester, Portland, Ore., for constructing Shuksan-Austin Pass, Whatcom Co., (A) Dunning & Burnett, Bellingham; (B) Siems & Carlson, Spokane; (C) M. O'Reilly, Bellingham. The unit bids were as follows:

	A	B	C
30 acres clearing	$100.00	$300.00	$300.00
15 acres grubbing	100.00	200.00	400.00
91,000 cu.yd. rock excavation	1.00	1.20	1.28
20,000 cu.yd. common excavation	0.40	0.70	0.60
10,000 station yds. overhaul	.10	.08	.06
9.1 mi. finishing earth road	500.00	200.00	250.00
15 cu.yd. class B concrete in trestle footings	25.00	25.00	35.00
820 cu.yd. class C concrete in abutments	25.00	20.00	25.00
250 cu.yd. class C concrete in abutments	25.00	20.00	25.00
500 cu.yd. dry rubble	4.00	5.00	7.00
43,000 lin.ft. 18 in. corrugated metal pipe	5.00	2.50	2.50
100 lin.ft. 24 in. corrugated pipe	6.00	3.75	3.60
50 lin.ft. 36 in. corrugated pipe	8.00	5.55	7.50
1,100 lin.ft. piling	1.00	1.50	1.00
36,000 ft. b.m. frame trestle bents	50.00	65.00	75.00
2,500 ft. b.m. bulkheads, frame trestle bents	50.00	65.00	75.00
26.5 ton bridge steel in place	200.00	60.00	62.00
430 lin.ft. 2 x 2 cedar log culverts	1.50	2.50	3.00
100 cu.yd. hand-placed embankments	2.00	2.00	4.00
1 30-ft. span	700.00	900.00	900.20
5 40-ft. spans	900.00	1,200.00	1,250.00
1 5-ft. span	1,000.00	2,000.00	1,600.00
320 lin.ft. bridge deck	7.00	10.00	9.00
18 lin.ft. bridge deck	7.00	10.00	9.00
80 lin.ft. bridge deck	7.00	10.00	10.00
Extended totals, log culverts with timber trusses	$169,061	$187,553	$204,718
Extended totals, log culverts with framed trestle	146,776	168,168	181,552
Extended totals, concrete pipe with timber trusses	184,761	187,105	202,653
Extended totals, concrete pipe with framed trestle	162,476	168,020	179,488

Streets and Roads (Continued)

New Mexico—Sept. 28 at office State Hy. Comn., Capitol Bldg., Santa Fe, gravel surfacing Federal Aid Project 14-B, between Tesuque and Pojoaquo, Santa Fe Co., 4,221 cu.yd. gravel, 1,176.7 cu.yd. earth-clay plating, etc.; 9.318 mi. Federal Aid Project 72, between Pecos and Rowe, San Miguel Co., 24,507 cu. yd. excav., 2.254 mi. crowning and shaping, 14,519 cu.yd. one course crushed stone surfacing, 432.4 cu.yd. Class A and 78.8 cu.yd. Class B concrete, etc. L. A. Gillett, state highway engr.

Tex., Ft. Worth—Sept. 14, by Comrs. Tarrant Co. grading and gravel surfacing 12.6 mi. Cold Springs Rd. C-46, Arkansas Lane C-50, Denton Rd. C-52, Bludworth School Rd. C-53, Pleasant Glade C-55, 14-24 ft., 5,300 cu.yd. unclassified earth excav., 1,100 cu.yd. concrete in structure, 114,000 sq.yd. gravel surface. $65,000. R. V. Glenn, Court House, engr.

Tex., Mason—Sept. 12, by Comn. Court Mason Co., grading and gravel surfacing 14.25 mi. State Highway 9, from here north to county line, 16 ft., 1,500 cu.yd. concrete, 104,061 cu.yd. earth excav., 8,491 cu.yd. rock excav., 125,000 sq.yd. gravel surface, 126,157 lb. reinforcing steel. J. Gresham, Mason, engr.

Tex., Palo Pinto—Sept. 16, by E. L. Pitts, judge Palo Pinto Co., clearing, surfacing, topping and bridging 10.9 mi. State Highway 1, 18 ft., 87.8 acres clearing, 94,113 cu.yd. borrow, 47,243 cu.yd. earth excav., 12,458 cu.yd. solid rock excav., 114,738 sq. yd. bituminous macadam, 2,120.9 cu.yd. concrete, 38,247 cu.yd. crushed stone base, 268,648 lb. reinforcing. $320,000. G. W. Courter, co. engr.

Tex., Terrell—Sept. 11, by W. P. Williams, judge Kaufman Co., grading and clearing 10 mi. Hiram and Greenville Rd., Terrell Rd. Dist., 100,000 cu.yd. excav. L. M. Ferlet, Terrell, engr.

Colo., Denver—Sept. 20, by Dept. Impvts. and Parks, 2.5 mi. paving Bway. Paving Dist. 6, 60 ft., 62,400 sq.yd. asphalt. $166,500. A. K. Vickery, City Hall, engr. Noted Aug. 17.

California—Sept. 25, by State Hy. Comn., Sacramento, grading 7.8 mi. and paving 6.5 mi. with portland cement concrete, highway between Long Beach and Huntington Beach, Los Angeles and Orange Counties. A. B. Fletcher, state highway engr.

Calif., Lindsay—Sept. 20, by City Trustees, improving various streets, 6,000 cu.yd. grading, 425,000 sq.ft. 1½ in. warrenite on 2½ in. asphaltic concrete, 41,000 sq.ft. concrete gutters, 5,100 lin.ft. concrete curb, 575 sq.ft. concrete walks, etc. H. D. Watts, city engr. Noted Aug. 24.

Quebec—Sept. 19, by J. L. Boulanger, deputy of roads, Parliament Bldg., Quebec, paving 47,618 ft. Laprairie-Lacolle Highway, 14 ft., in St. Luc and St. Marguerite, Laprairie Parish, oiled macadam. M. Necktar, Dept. Rds., Quebec, engr.

Ontario—Sept. 14, by W. A. McLean, deputy minister of highways, Parliament Bldgs., Toronto, 25,000 sq.yd. macadam base course in Clarence and North Plantagenet Twps., Contr. 781. $30,000 to $50,000. G. Hogarth, ch. engr.

Ont., Barrie—Sept. 11, by A. W. Smith, town clk., 14,000 sq.yd. bituminous pavement on rein.-con. or concrete. $60,000. James, Proctor & Redfern, Ltd., 36 Toronto St., Toronto, consult. engrs.

Ont., Paris—Sept. 9, by C. B. Barker, town clk., and Frank Barber & Associates, Ltd., consult. engrs., 40 Jarvis St., Toronto, 5,883 sq.yd. cement concrete pavement, concrete curb, gullies and storm sewers on Dundas and Dumfries Sts. $28,000.

Ont., Toronto—Sept. 9, by F. Barber, engr. York Twp., 40 Jarvis St., 100,000 sq. ft. concrete sidewalks on Vaughan Rd., King Edward, Livingstone, Poulton, Queensdale, Robina, Summit, Thornhill, Windermere and Woodmount Aves., also 3,000 ft. 6 in. c.i. water mains in Kenora Crescent, Northcliffe Blvd., Helen, Schell, Gowan and Inwood Aves. $35,000.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids Aug. 30, paving (1) roadway of Ave. U from Ocean to Flatbush Aves., preliminary 7 in. concrete (2) roadway of Amboy St. from Livonia to Lott Aves. (3) roadway Ave. H. excluding Mall spaces from Ocean Parkway to Coney Island Ave. (4) roadway Bay 28th St. from Bath to Benson Aves. (5) 53rd St. from 16th to 17th Aves., repaving (6) roadway Ridge Blvd. from 86th St. to Shore Rd. (7) Snyder Ave. from New York to Brooklyn Aves. (8) Sterling Pl. from Buffalo to Ralph Aves. (9) Wilson Ave. from Cornelia to Moffat Sts., curbing and paving (10) 61st St. from 18th to 19th Aves., all foregoing sheet asphalt on 6 in. concrete, grading and curbing (11) Troy Ave. from Crown to East New York Aves. (12) 16th Ave. from 75th to 79th Sts., grading sidewalk space, curbing and laying sidewalks where necessary (13) Glenwood Rd. between Brooklyn Ave. and East 40th St. from Soviero & Britten, 10111 114th St., Richmond Hill (1) $98,871; C. Gallagher, 745 Dean St. (1) $98,470; J. J. Guinan Contg. Co., 2314 Gravesend Ave. (1) $90,090; Borough Asphalt Co., 1301 Metropolitan Ave. (2) $16,107 (3) $17,302 (4) $5,999 (5) $6,951 (6) $44,158 (9) $26,152 (10) $7,303; Cleveland Trinidad Paving Co., Flushing (2) $16,028 (3) $19,273 (7) $10,157 (8) $7,902 (9) $25,841; Cranford Co., 52 9th St. (3) $18,818 (4) $6,079 (5) $7,173 (6) $45,801 (7) $9,895 (8) $7,788 (10) $7,494; Sicilian Asphalt Paving Co., 41 Park Row, New York (2) $15,510 (7) $10,047 (8) $7,661 (9) $27,273; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave. (4) $6,303 (5) $7,440 (6) $44,164 (10) $8,042; Grimm Constr. Co., 170 McKinley Ave. (11) $7,541 (12) $1,920 (13) $1,854; F. Persicano, 350 Fulton St. (11) $8,548 (12) $1,844 (13) $1,883; T. B. Scott, 671 Halsey St. (11) $8,541; L. Mangieri, 190 31st St., (12) $1,852; Park Slope Contg. Co., Inc. (13) $1,972. Noted Aug. 24.

N. Y., Lockport—Resurfacing West Ave., from Willite Constr. Co., 342 Madison Ave., New York, (patented willite) $34,895; M. Lardner, 267 Chestnut St., (asphalt) $33,340.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., opened bids Sept. 1, grading, curbing and laying sidewalks on (1) Potter Ave. from Van Alst to Goodrich Sts., (2) 101st St., grading and paving (3) Potter Ave. from Barclay St. to 2nd Ave., grading (4) Jackson Ave., (5) Hinman Ave., grading, laying sidewalks and paving (6) Chaffee St., curbing and laying sidewalks on (7) Opdyke St., paving (8) 101st St., from F. J. Clancy, Corona, (1) $11,899, (2) $41,998; Welsh Bros. Contg. Co., 32 Queens St., (1) $13,340, (4) $6,430, (5) $825; Kennedy & Smith, 93 Amity St., Flushing, (1) $15,965, (2) $40,195; Cranford Co., 52 9th St., Brooklyn, (2) $42,455, (8) $86,756; Cleveland Trinidad Paving Co., Flushing, (3) $36,916, (6) $6,386; W. J. Fitzgerald, 547 West 45th St., New York, (3) $37,048; Sicilian Asphalt Paving Co., 41 Park Row, New York, (3) $38,280, (6) $6,419; Peace Bros., 15 Lawrence St., Flushing, (4) $6,375, (5) $1,025; D. Pangolla, 481 Washington Ave., (5) $625; W. P. McDonald Constr. Co., 17 West 42nd St., New York, (6) $7,920, (8) $102,520; R. A. Hess, Inc., Corona, (7) $4,263; C. Kurth, 9519 126th St., Richmond Hill, (7) $4,288; J. J. O'Brien, Jr., (7) $4,338; Boro Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (8) $98,700. Noted Aug. 24.

N. Y., New York—Park Bd., Municipal Bldg., opened bids Aug. 31, repaving heavy traffic road Southern Blvd. in southwest portion of Botanical Garden, Bronx Boro, from C. B. Beckwith, 2875 Bway., $24,841; Brewstar Constr. Co., $25,440; Asphalt Constr. Co., 208 Bway., $26,715. Noted Aug. 24.

N. Y., Niagara Falls—Paving 24th St. between Ferry and Pine Sts., Contr. 269, (a) sheet asphalt, (b) warrenite bitulithic, (c) 3 in. vertical fibre brick, (d) 3½ in. vertical fibre brick, from Read-Coddington Eng. Corp., 238 Portage Rd., (a) $27,694 (b) $26,306 (c) $30,935; J. F. McKinney Corp., Gluck Bldg., (c) $30,540 (d) $31,466. Engrs. ests. (a) $29,640, (b) $29,640 (c) $34,270 (d) $34,270.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, opened bids Aug. 29, reconstructing concrete roadway of Richmond Turnpike, etc., from J. Johnson Sons, 455 Bway., West New Brighton, $126,856; J. E. Donovan, $134,928; G. Vanderbilt, $136,501. Noted Aug. 24.

Alabama—State Hy. Dept., Montgomery, grading and gravel surfacing 12.265 mi. Greenville-Camden Rd., Ephram Branch to Pine Apple, Wilcox Co., from Lola & Humphries, Ridgeland, S. C., $151,493; Fountaine, Lamb & McLemore, Hattiesburg, Miss., $166,023; Keenan, Keyser & Gillis, Selma, $168,102. Noted Aug. 24.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids Sept. 1, grading, bridging and paving roads with (a) brick (b) rein.-con. (c) plain concrete in following counties: Ashland Co., Sect. "D" Mansfield-Wooster Rd., 3.527 mi., from F. J. Mann & Sons, Ashland, (a) $50,016; P. H. Agerter, 114 South McDonald St., Lima, (a) $54,867. Hancock Co., Sect. "Arcadia" 0.461 mi., from Scioto Constr. Co., Kenton, (b) $30,118. Huron Co., Sect. "G-1" Oberlin-Norwalk Rd., 1.746 mi. from Hill & Hill, Elyria, (street address not available) (a) $52,477; A. J. Baltes, Norwalk, (a) $52,757. Noble Co., Sect. "K" Caldwell-Marietta Rd., 0.956 mi., from G. W. McElfresh, Caldwell, (c) $36,423. Wayne Co., Sect. "O" Wooster-Mansfield Rd., 3.355 mi., from Wilson-Miller Co., Barnesville, (a) $139,254; Cavanaugh-DeNiro Constr. Co., Youngstown, (street address not available) (a) $139,749; Holmes Constr. Co., Millersburg, (a) $140,047. Lake Co., Sect. "B," Cleveland-Buffalo Rd., 1.089 mi., from Gray Bros., Youngstown, (street address not available) (a) $53,937; E. A. Freshwater & Sons, Bucyrus, (a) $54,983. Marion Co., Sect. "H" Grade Separation, grading and paving, from Malloy & Seckel, Marion, (a) $10,666. Huron Co., Sect. "J-2" Bellevue-Norwalk Rd., constructing 2 ft. concrete curb, from Hill & Hill, Elyria, (street address not available) $4,693; Wood & Ogan, Norwalk, $4,789; C. M. Gray, Waterville, $4,874. Huron Co., Sect. "N" Oberlin-Norwalk Rd., 1.32 mi., concrete curb, from Hill & Hill, Elyria, (street address not available) $7,106; A. J. Baltes, Norwalk, $7,106; C. M. Gray, Waterville, $7,368. Huron Co., Sect. "O" Oberlin-Norwalk Rd., 1.28 mi., concrete curb, from Hill & Hill, Elyria, (street address not available) $6,636; C. M. Gray, Waterville, $6,890; A. J. Baltes, Norwalk, $6,905. Noted Aug. 24.

O., Cleveland—Paving East 55th St. from Harvard to Brow Aves., from Enterprise Paving & Constr. Co., 8444 Bway., $6,107, W. McDowell & Son, 10309 Miles Ave., $6,424; Kipling and Halliday Aves. from Ivanhoe to Nathaniel Rds., from Gould and Maybach, 823 East 150th St., $30,705, River Constr. Co., Schofield Bldg., $32,848. Noted Aug. 17.

O., Cleveland—Bd. Comrs. Cuyahoga Co., paving Royalton Rd. 5, 3,800 lin.ft. 4 in. concrete gutter, 1,200 cu.yd. excav., 10,000 sq.yd. 8 in. waterbound macadam, from Lake Erie Constr. Co., Hickox Bldg., $34,951, Pomano Bros., c/o Pavers Exch., Society for Savings Bldg., $35,865; Lee Rd. 4, 6,900 lin.ft. 4 in. brick gutter, 25,600 cu. yd. excav., 5,030 sq.yd. 7 in. concrete base, 1,860 sq.yd. Grade A wearing surface, 23,300 sq.yd. vitr. brick, from Freshwater Constr. Co., Natl. Bldg., $140,672, Enterprise Paving & Constr. Co., 8444 Bway., $142,681. Noted Aug. 10.

O., Columbus—Franklin Co. opened bids Aug. 30, grading, bridging and paving 10.3 mi. Alkire Rd., 16 ft., from W. M. Gray, 408 Fairwood Ave., asphalt, $224,871, tar, $227,811; A. C. Pickelheimer, Newtonville, $234,812. Noted Aug. 17.

Ind., South Bend—Comrs. St. Joseph Co. opened bids Aug. 21, gravel surfacing 3 mi. and concrete paving 0.8 mi. C. A. Carlisle Rd., 23,230 cu.yd. earth excav., 656 lin.ft. 12-36 in. corrugated pipe, from Rieth-Riley Constr. Co., Goshen, $103,800; J. C. Bontrager, Elkhart, $109,000; Bryant & Smelser, Plymouth, $118,340. Engrs. est. $92,000. Noted Aug. 17.

Michigan—State Highway Dept., Lansing, opened bids Aug. 15, grading and surfacing 5.721 mi. State Trunk Line Rd. 35-3, Delta Co., from Stephenson & Martell, Gladstone, $61,023; J. S. and W. J. Butler, Iron Mountain, $78,399; Delta Contg. Co., Escanaba, $80,489. Noted Aug. 10.

Wis., Milwaukee—Milwaukee Co. concrete surfacing, etc., Brown Deer-Menomonee Falls Rd., alternate bids (a) contractor furnishing cement, (b) state furnishing cement, from F. Hildebrand, Jr., 1043 23rd Ave.; (a) $88,913, (b) $63,399; Froemming Bros., 1326 Humboldt Ave., (a) $89,046, (b) $63,216; Kroening Constr. Co., 39th Ave. and Mitchell St., (a) $95,109, (b) $66,759.

Ia., Pella—Opened bids Aug. 21, 36,200 sq.yd. asphalt resurfacing from E. Rasmussen, Pella, $1.20 per sq.yd.; Western Asphalt Paving Co., 1st and Nebraska Sts., Sioux City, $1.29; Wright Constr. Co., 211 Flynn Bldg., Des Moines, $1.33. Noted Aug. 10.

Wash., Seattle—Opened bids Aug. 25, paving Olive Way et al., 9,100 sq.yd. 6 in. sandstone, 1,000 sq.yd. 6 in. asphaltic base, 1,200 sq.yd. replaced asphalt, 2,600 sq.yd. 7 in. concrete, 2,900 lin.ft. asphaltic concrete curb, 3,500 sq.yd. two course concrete sidewalk, 12,000 cu.yd. earth excav., from Collucio & Erickson, Hinckley Bldg., $119,338, alternate $121,328, Olympic Constr. Co., 1326 Northlake St., $112,279, alternate $115,879, D. H. Traphagen, Walker Bldg., $123,275, alternate $124,475, engrs. est. $111,965; paving Lakedell Ave., et al., 7,360 sq.yd. 6 in. concrete, 3,320 lin.ft. concrete curb, 2,000 lin.ft. asphaltic concrete gutter, 1,850 sq.yd. concrete sidewalk, 2,700 cu.yd. earth excav., from J. L. Smith, Smith Bldg., $43,785, Collucio & Erickson, Hinckley Bldg., $44,767, engrs. est. $42,555.

California—State Hy. Comn., Sacramento, grading and gravel surfacing 9.33 mi. highway from westerly boundary and Central House, Amador Co., (1) 45,200 cu.

Streets and Roads (Continued)

yd. excav., (2) 16,400 cu.yd. gravel surface, (3) 515 cu.yd. Class A portland cement concrete (culverts and monuments), etc., from Blumenkranz & Vernon, Stockton, (street address not available), (1) $1.10, (2) $2.25, (3) $18, total $102,378; Isbell Constr. Co., Fresno, (street address not available), (1) $1.10, (2) $2.25, (3) $30, total $109,664; Wilmshurst & Manetas, San Francisco, (street address not available), (1) $1.23, (2) $2.65, (3) $25, total $118,927. Noted Aug. 1.

Calif., Belvedere — Improving various streets, 1,634 cu.yd. excav., 3,422 cu.yd. fill, 958 cu.yd. gravel surface, 1,480 ton asphalt or warrenite surfacing, 2,100 ft. sidewalks, from P. L. Burr, 512 Mission St., San Francisco, (using plain asphalt) $33,380; S. P. Brownlee, San Rafael, (street address not available), (using both plain asphalt surface and warrenite bitulithic) $34,800.

Calif., Fresno—Fresno Co., grading and paving Route 4, Sect. A, (1) 14,330 yd. excav., (2) 858,535 sq.ft. asphaltic concrete, from T. Hanrahan, 1361 P St., (1) $1.80, (2) $0.1633; California Constr. Co., Fresno, (street address not available), (1) $0.70, (2) $0.193; Thompson Bros., 1514 H St., (1) $1, (2) $0.199; Warren Constr. Co., Bacon Bldg., Oakland, (1) $0.45, (2) $0.214.

Calif., Healdsburg — Improving various streets, (1) 24,000 ft. concrete curb, (2) 5,500 lb. reinforcing, (3) 410,000 ft. 1½ in. warrenite bitulithic on 4 in. concrete, (4) 18,000 yd. excav., (5) 470,000 sq.yd. finish subgrade, (6) 1,500 sq.ft. ½ in. warrenite bitulithic on 5 in. concrete, (7) 48,000 sq. ft. concrete gutter, from Clark & Henery Constr. Co., 38 South Sutter St., Stockton, (1) $0.58, (2) $0.08, (3) $0.214, (4) $1.25, (5) $0.016, (6) $0.235, (7) $0.30; Warren Constr. Co., Bacon Bldg., Oakland, (1) $0.69, (2) $0.09, (3) $0.2225, (4) $1.50, (5) $0.0225, (6) $0.2435, (7) $0.29; Federal Constr. Co., Call Bldg., Oakland, (1) $0.65, (2) $0.10, (3) $0.23, (4) $1.65, (5) $0.03, (6) $0.25, (7) $0.30.

CONTRACTS AWARDED

Massachusetts—State Hy. Dept., Boston, bituminous macadam paving, 4,900 ft. highway, 18 ft. in Danvers, to Canton Eng. Co., Canton, $24,448; 6,500 ft. highway, 18 ft., in Holden, to McCabe & Giovanninni, 27 East Concord St., Boston, $47,938; concrete paving 14,700 ft. highway, 18 ft., in Leicester, to Bruno & Pettiti, 18 Tremont St., Boston, $187,092.

Conn., New London—Dept. Pub. Wks., cement concrete paving about 1 mi. Mohegan Ave., 18 ft., to Waterbury Concrete Constr. Co., 65 Jefferson St., Waterbury. Engrs. est. $25,000.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, paving Crown, East 15th Sts., Ave. L, Riverdale Ave., repaving 18th Ave. and resurfacing Diamond St., to Cranford Co., 52 9th St., $8,222, $8,813, $10,209, $3,163, $29,378 and $44,791 respectively; paving 10th Ave., East 2nd, 59th and 66th Sts., to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., $6,787, $2,597, $7,619 and $6,124 respectively; Kermit Pl., to Borough Asphalt Co., 1301 Metropolitan Ave., $2,133; repaving Washington Ave., to J. Meehan & Son, 74 Cortland St., New York, $103,040; grading, curbing and laying sidewalks on East 15th St. and grading, curbing and flagging 10th Ave., to A. E. Castle, 3313 Tilden Ave., $3,151 and $1,013 respectively; recurbing and paving De Kalb Ave., to Sicilian Asphalt Paving Co., 41 Park Row, New York, $47,807. Noted Aug. 24.

N. Y., Buffalo—Paving Tuscorora Rd. and Ramsdell Ave., to Rock Asphalt & Constr. Co., Morgan Bldg., $57,266 and $16,170 respectively; Hutchison Ave., to H. P. Burgard Co., 1968 Fillmore Ave., $12,985, all specification B. standard asphalt on concrete.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., recurbing, reflagging and paving Dutch Kills St., and paving Pettit Pl., to Cleveland Trinidad Paving Co., Flushing, L. I., $7,764 and $3,174 respectively; paving North Jane St., to Astoria Contg. Co., 320 Grand Ave., $6,607; paving Howland St., grading, regrading, curbing and paving South Jane St. et. al., to Welsh Bros. Contg. Co., 34 Queens St., $5,731 and $24,780 respectively; paving 122nd (Brevoort) St. and recurbing and paving Bleecker St., to Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, $3,130 and $2,968 respectively; grading, regrading and laying sidewalks on Crown Pl., to R. A. Hess, Inc., Corona, L. I., $2,056; grading, regrading, curbing and paving Van Alst Ave., to Peace Bros., Inc., 20 Main St., Flushing $14,470; grading, recurbing and laying sidewalks on 122nd (Brevoort St.), to H. J. Mullen Contg. Co., Jamaica Ave. and 144th St., Jamaica, $1,781, Gates Ave., to H. E. Kordes Co., Inc., 2577 Cooper St., Brooklyn, $3,855; grading 42nd St., grading, curbing, laying sidewalks and crosswalks on 81st St., and 126th (North Villa) St., to C. Kurth, 9519 12th St., Richmond Hill, $3,003, $3,538 and $1,128 respectively; grading, curbing, laying sidewalks and paving Gleane St., to Sicilian Asphalt Paving Co., 41 Park Row, New York, $10,448. Noted Aug. 31.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing, recurbing, flagging and reflagging 46th St., etc., and paving 7th Ave., to W. J. Fitzgerald, 547 West 45th St., New York, $63,637 and $12,566 respectively. Noted Aug. 31.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., repaving Broad St., etc., to W. J. Fitzgerald, 547 West 45th St., $45,734; 78th St., etc., to Asphalt Constr. Co., 208 Bway., $20,804. Noted Aug. 31.

N. Y., Rochester—Resurfacing Savannah St., to Rochester Vulcanite Pavement Co., Rochester, $16,170; paving Glasser St., to Ribstein-Holter Co., Rochester, $10,605; Klein St., to J. Frederich Co., Rochester, $14,730; Willowbank Pl., to T. Holohan, Rochester, $5,982; Kay Terrace, to Whitmore, Rauber & Vicinus, Rochester, $13,969, all asphalt. Street addresses for above contractors not available. Noted June 29.

N. Y., Waterloo—Paving 21,696 sq.yd. various streets, bituminous macadam, to E. W. Foley Contg. Co. Corp., 1 East Main St., $24,842. Noted Aug. 17.

N. J., Cape May—City Comrs., 23,000 sq.yd. cement concrete, to Mercer Constr. Co., Trenton, (street address not available), $56,309. Noted Aug. 10.

N. J., Freehold—Reconstructing Throckmorton St., 10,000 sq.yd. rein.-con., 4,000 lin.ft. curbing, 3,000 cu.ft. excav., to H. V. Oliver, 5 Spring St., New Brunswick, $32,200. Noted Aug. 17.

Pa., Ellwood City—Paving and grading North St., to Meniece & Riley, Ellwood City, $24,682.

Pa., Phila.—To H. B. Warren, Phila., (street address not available), paving Fayette Ave., $24,022; Curtiss Bros., Tacony St., paving Ferndale St., $2,065; T. L. Flannigan, 1204 East Montgomery Ave., paving Luzerne St., $22,681; Barber Asphalt Paving Co., Land Title Bldg., paving 22nd St., $35,773; F. Mark Constr. Co., Commercial Trust Bldg., paving Washington Lane, $3,043; J. Mehan & Sons, 915 West Dauphin St., paving Turner St., $2,630, 28th St., $6,903, Lombard St., $3,903; to Eastern Paving Co., Colonial Trust Bldg., paving Buist Ave. and Haines St., $27,339, Columbia Ave., Turner and Louden Sts., $18,488, Pittsville Ave. and 23rd St., $27,158, Torresdale Ave., $18,281. Noted Aug. 31.

Pa., Scranton—Lycoming Co., 2,600 ft. highway in Fell Twp., to H. B. Sproul Constr. Co., 218 Adams St., $31,427.

W. Va., Charleston—Comrs. Kanawha Co., concrete paving 2.72 mi. Montgomery West Rd., Sect. 4, to J. M. Randish & Co., Huntington, (street address not available), $48,929; 2.4 mi. Pratt West Rd., Sect. 5 and 2.63 mi. East Bank West Rd., Sect. 6, to G. T. Fogle, Charleston, (street address not available), $41,732 and $46,562 respectively. Noted June 15.

N. C., Henderson—Hardsurfacing various streets, to R. G. Lassiter Co., Oxford, $189,720. Noted July 27.

Alabama—State Hy. Dept., Montgomery, grading, concrete surfacing and 120 ft. steel span bridge on 4.82 mi. Montgomery-Selma-Union Rd., Dixie Overland Highway, Dallas Co., to Worthington & Co., 1st Natl. Bank Bldg., Birmingham, $139,698. Noted Aug. 24.

O., Columbus.— Franklin Co. aplying bituminous macadam top course on 1.34 mi. Boehm Rd., Plain Twp., 16 ft., to S. M. Woolsey, Marian, $29,301. Noted Aug. 10.

O., Marietta—Widening and resurfacing 2nd St., to Federal Asphalt Co., Main and D Sts., Hamilton, $39,976. Noted July 27.

Indiana—State Hy. Dept., Indianapolis, paving 18,480 ft. State Rd. 33, 16 ft., Lake Co., 32,833 sq.yd. concrete on concrete, to J. C. O'Connor & Sons, Ft. Wayne, (street address not available), $71,686, engrs. est. $75,000. Noted Aug. 10.

Michigan—State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rd. 49-5, 2.773 mi. Sects. A, C and D, to A. Folks, Hanover, incl. 29.5 sta. grading, $10, 31,240 cu.yd. excav., $0.40, 50.4 cu.yd. 1:2:4 concrete, and 129 cu.yd. 1:3:6 concrete, $17, 23,830 sq.yd. gravel surfacing $0.57, total $32,432; 2.783 mi. Sect. B to Hoehle Constr. Co., Jackson, 16,647 cu.yd. excav., $0.40, 53.6 cu.yd. 1:2:4 concrete, $18, 44.5 cu.yd. 1:3:6 concrete, $17, 26.027 sq.yd. gravel surface, $0.40, total $21,111; 4.52 mi. Federal Aid Project 85, Lapeer Co., to Gohr Bros. Contg. Co., 310 South Capitol Ave., Lansing, $45,412; 4.875 mi. State Trunk Line Rd. 34-5, Hillsdale Co., to Nicholson & Brown, Mt. Pleasant, $37,707.

Mich., Royal Oak (Detroit P. O.)—Paving Lafayette St. from 1st St. to Ten Mile Rd., 15,000 sq.yd. concrete, to R. J. Powelson & Co., 6445 Iroquois Ave., Detroit, $37,518.

Wis., Mellen—Paving 8 blocks Bennett and Main Sts., 11,700 sq.yd. rein.-con., 5,175 lin.ft. curb and gutter, 1,600 cu.yd. gravel filling, 4,000 cu.yd. earth excav., etc., to Woodrich Constr. Co., 1141 Metropolitan Life Bldg., Minneapolis, Minn., $38,500. Noted Aug. 31.

Ia., Carroll—Paving 16,000 sq.yd. various streets, asphaltic concrete, to J. S. McLaughlin & Sons, Mankato, Minn., (street address not available), $2.49 per sq.yd.

Minn., St. Paul—Paving 40 blocks, 56,500 sq.yd. 3 in. creosoted wood block, to Fielding & Sheply, Inc., 216 University Ave., $257,593. Noted Aug. 31.

Kan., Ft. Scott—Bourbon Co. furnishing and applying tarvia on 11.5 mi. Horton St., Redfield, Humboldt and Pawnee Rds. to Barrett Co., 1st and Campbell Sts., Kansas City, Mo., $0.133 per gal.

Wyoming—State Hy. Dept., Cheyenne, surfacing (1) 8 mi. Yellowstone Highway, west of Casper, 24 ft., Federal Aid Project 85, Natrona Co., 12,600 cu.yd., engrs. est. $33,000; grading, surfacing and building culverts on (2) 3.1 mi. Moorcroft-Carlile Rd., 24 ft., Federal Aid Project 132, Crook Co., engrs. est. $47,000, (3) 8.2 mi. Kemmerer-Marbleton Rd., 24 ft., Federal Aid Project 136, Lincoln Co., engrs. est. $50,000, (4) 4.4 mi. New Castle-Four Corners Rd., 24 ft., Federal Aid Projects 27-A and 27-B, Weston Co., engrs. est. $61,000, (5) 8 mi. Yellowstone Highway from Powder River to Waltman, 24 ft., Niobrara Co., engrs. est. $41,000, (6) 12 2 mi. Fort Bridger-Dog Springs Rd., 24 ft., Uinta Co., engrs. est. $50,000; grading, surfacing, building culverts and 133 ft. timber treated span on (7) 1.8 mi. from Vantassel to State line, 24 ft., Federal Aid Project 131, Niobrara Co., engrs. est. $18,000, (8a) grading, (8b) building concrete culverts and bridge on 3.2 mi. Worland-Ten Sleep Rd., 24 ft., Federal Aid Project 108-E, Washakie Co., engrs. est. $31,000, (9a) grading and surfacing, (9b) concrete culverts and fords on 3.1 mi. Yellowstone Highway from Horse Creek to Little Bear Creek, 24 ft., Federal Aid Project 133, Laramie Co., engrs. est. $27,000 to R. V. Van Zant, Casper, (1) $19,240. W. L. Connelly, Lingle, (2) $31,456, (7) $12,859. Connelly & Bundy, Lingle, (3) $39,510, (6) $70,096. R. George, Rozette, (4) $51,864. Utah Constr. Co., Eccles Bldg., Ogden, Utah, (5) $27,903. Johnson Constr. Co. Basin, (8a) $14,361. C. E. Kensall, Burlington, (8b) $9,353. F. A. Bundy, Cheyenne, (address not available), (9a) $15,033. Levy Constr. Co., Symes Bldg., Denver, Colo., (9b) $5,485. Noted Aug. 17.

Mont., Laurel—Paving Main St., Federal Aid Project 57, 12,197 sq.yd. concrete, to Wickham Bros. & Schwieger, Lovell, Wyo., $46,900.

Tex., Dallas—Bd. Comrs., resurfacing Elm St. from Market to Ervay Sts., bituminous, to Central Bitulithic Co., Praetorian Bldg., $45,677.

Tex., Seguin—Guadalupe Co. surfacing 19 mi. State Highway 3 from here to Bexar Co. line, 16 ft., 198,992 lin.ft. concrete curbing 174,075 sq.yd. 1½ in. bituminous macadam, penetration method using 1 gal. asphalt and 0.06 cu.yd. limestone per sq.yd. to Haden & Austin, Hill and Market Sts., Houston, $110,000.

Colorado — State Hy. Dept., Denver, gravel surfacing 3.634 mi. Federal Aid Project 209, from 1¾ mi. northwest of Grand Junction toward Fruita, Mesa Co., to Hinman Bros., Craig, $37,822, engrs. est. $45,286; 8.341 mi. Sante Fe Trail from Hasty easterly toward Lamar, Federal Aid Project 218-A, Bent Co., Monaghan & Cunningham, 1710 Market St., Denver, $47,499, engrs. est. $58,925; paving 0.433 mi. from Arkansas River Bridge north of Las Animas, extending south to Las Animas city limits, State Project 630, Bent Co., concrete, W. A. Colt & Son, Las Animas, $12,389, engrs. est. $13,184, 4.049 mi. Ft. Collins-Denver Rd., Federal Aid Project 221, Larimer Co., one course plain cement concrete, F. C. Dreher Constr. Co., Cooper Bldg., Denver, $124,842, engrs. est. $144,627. Noted Aug. 24.

Colo., Denver—Dept. Impvts. and Parks, concrete paving 12 blocks Alley Paving Dist. 85, to Stack Bros. Constr. Co., 338 South High St., $24,687. Engrs. est. $29,467. Noted Aug. 31.

Streets and Roads (Continued)

Nevada—State Hy. Comn., Carson City, grading (1) 3.76 mi. Route 9, Sect. A, Washoe Co., grading, surfacing and building culverts on (2) 3.7 mi. Reno-Lawtons Rd., Washoe Co., (3) 5.4 mi. Lincoln Highway from Grimes to Salt Wells, Churchill Co., (4) 8.52 mi. from west county line to Battle Mountain, Route 1, Sect. 1-A, Lander Co., to Baker Bros., San Francisco, Cal. (street address not available), (1) $30,783, (2) $59,491; Dodge Bros. & Dudley, Fallon, (3) $32,063; Boyd Bros., Halleck, (4) $39,100. Noted Aug. 17.

Calif., San Francisco—Bd. Pub. Wks., paving Ocean Beach Esplanada, Sect. D, to Healy-Tibbitts Constr. Co., 9 Main St., $54,609. Noted Aug. 17.

Calif., Santa Cruz—Santa Cruz Co. will grade and pave Lake Ave. in Pajaro Rd. Dist., 94,400 sq.ft. oil macadam, 2,186 cu.yd. excav., by day labor, under supervision of L. Bowman, co. surv.

Calif., Visalia — Improving Northwest 2nd, Northeast 3rd and 2nd Aves., et al., to Visalia Paving & Constr. Co., Visalia, (street address not available), $81,295. Noted Aug. 31.

Ont., Ottawa—Bd. Control paving Nicholas St., to O'Leary Ltd., Bank Natl. Bldg., Rideau St., $51,596; Sherbrooke Ave. and Gloucester St. to City Dept. Wks., $6,151 and $12,255 respectively. Noted July 6.

Industrial Works

PROPOSED WORK

N. Y., Tonawanda—Tonawanda Board & Paper Co. plans 1,000,000 gal. capacity water power plant, in connection with factory. To exceed $40,000. M. W. Simon, pres.

N. J., Camden—J. B. Van Sciver Co., Front and Federal Sts., plans 1 story, 32 x 50 ft. brick power house, in connection with new furniture factory, Front and Federal Sts. To exceed $40,000. Ballinger Co., 105 South 12th St., Phila., engrs.

Pa., Johnsonburg—Rolfe Tannery Co., Johnsonburg, plans to rebuild plant recently destroyed by fire. $150,000.

Pa., Phila.—Nahn & Greenberg, Morris Bldg., soon take bids 3 story, brick and stone garage and sales building, 1618 North Broad St. L. B. Rothchild, 1225 Sansom St., archt.

Pa., Phila.—Supplee-Wills-Jones Milk Co., 26th and Jefferson Sts., plans 3 story, 128 x 220 ft. dairy building, Folkrod St. $150,000.

Pa., Pittsburgh—Englert Mfg. Co., 2133 East Carson St., having plans prepared by H. Lang, archt., 1617 Brownsville Rd., 2 story, 68 x 120 ft., rein.-con., brick and tile factory, South 25th and Jane Sts.

Pa., Pittsburgh—Stroh Steel Hardening Process Co., Westinghouse Bldg., plans to alter and build addition to steel foundry, Chateau and Ridge Sts. $250,000. Private plans.

Pa., Warren—J. T. Newell, 244 Penna. Ave. W., having plans prepared by E. A. Phillips, archt., Warren Trust Bldg., 4 story, 55 x 90 ft. brick plant, Liberty St.

Pa., York—York Mfg. Co., plans 5 story, 60 x 100 ft. addition to factory. $300,000. Architect not announced.

Md., Salisbury—Hearn Oil Co., 3rd and Commerce Sts., Wilmington, Del., plans large storage and distributing plant, Mill St. $40,000. C. Hearn, mgr. Architect not announced.

W. Va., Logan—R. E. Matticks, having plans prepared by Means & Handloser, archts., Robson-Prichard Bldg., Huntington, 3 story, 52 x 120 ft., rein.-con. garage and repair shop. $40,000.

N. C., Weldon—Weldon Warehouse and Storage Corp., soon takes bids 1 story, 100 x 300 ft., cotton storage warehouse, brick and concrete. Hutton & Scheffler, Citizens Bank Bldg., Raleigh, archts.

Ga., Rome—B. M. Hood Brick Co., Candler Bldg., Atlanta, has purchased plant of Rome Fireproofing Co., here, and plans additions and improvements, $75,000. Architect not announced.

O., Cleveland—S. Richland, 8328 Quincy Ave., had plans prepared by M. Altschuld, archt., 5116 Woodland Ave., 1 story, 56 x 100 ft. garage, brick and steel, plain foundation, East 103d St., and St. Clair Ave. $40,000.

O., Dayton—Terminal Cold Storage & Ice Co., 772 Reibold Bldg., having plans prepared 3 story, 135 x 150 ft. storage warehouse, brick and concrete, $100,000. Private plans.

O., East Cleveland (Cleveland P. O.)—A. M. Gordon, 207 Schofield Bldg., Cleveland, had plans prepared by A. F. Janowitz, archt., Permanent Bldg., Cleveland, 2 story, 41 x 177 ft. brick and steel garage, Lakefront Ave. $50,000.

O., Martins Ferry—Nov. 7 to vote on $400,000 bonds, for reconstructing municipal electric light plant and waterworks. J. N. Chester Engineers, Union Bank Bldg., Pittsburgh, Pa., engrs.

Ind., Ft. Wayne—J. E. Ford, Douglas and Harrison Sts., having plans prepared by C. R. Weatherhogg, archt., Citizens Trust Bldg., 2 story, 150 x 250 ft., garage, rein.-con., brick and steel, Main St. $75,000.

Mich., Detroit—C. F. Smith Co., 625 West Grand Blvd., having plans prepared by A. Kahn, archt., 1000 Marquette Bldg., 8 story, 116 x 150 ft., rein.-con. and brick warehouse, plain foundation, Vinewood Ave. $150,000.

Mich., Flint—Fisher Body Ohio Co., East 140th St. and Coit Rd., Cleveland, O., having plans prepared by A. Kahn, archt., 1000 Marquette Bldg., Detroit, 2 story, 202 x 401 ft., rein.-con. and brick factory, plain foundation, Wilcox St.

Ill., Pana—Wadley Co., West North St., Indianapolis, Ind., plans 2 story, 63 x 115 ft. packing plant, rein.-con., brick and steel, here. $40,000. F. A. Winterrowd, Amer. Central Life Bldg., Indianapolis, Ind., archt.

Wis., Plymouth—Phenix Cheese Co. having preliminary plans prepared 2 story, 30 x 60 ft. top addition and 5 story, 30 x 60 ft. side addition, rein.-con., plain foundation. $60,000. R. A. Harbach, mgr. Private plans.

Colo., Loveland—City plans hydro-electric plant, 1125 kva. capacity, on Big Thompson River in Loveland Canon, $400,000. L. C. Osborn, city engr.

Ont., Kitchener — A. H. Koepke, 204 Frederick St., had plans prepared 2 story, 50 x 100 ft. mill, galvanized iron.

Alta., Calgary—Imperial Oil Ltd., Regina, Sask., plans refinery on 108 acre site, here, 3,500 bbl. capacity, on Bow River. $2,500,000. Engineer not announced.

BIDS DESIRED

R. I., Providence—United Electric Railways Co., Union Station, taking bids 1 and 2 story, 88 x 259 ft. garage and service station, brick and concrete, Melrose and Russell Sts. $100,000. Private plans. Noted Aug. 24.

N. Y., Rochester—Sept. 9, by W. Steele & Sons Co., archts., 16th and Arch Sts., Phila., factory, Plymouth Ave. near Barton St., here, for Electric Storage Baattery Co., 181 South Clinton St. Plans and specifications at office of Company.

D. C., Wash.—Sept. 10, by Corby Baking Co., 2301 Georgia Ave., N. W., 3 story, 76 x 110 ft. garage, work shop and power plant, rein.-con. and brick, $75,000. Private plans. P. M. Anderson, 705 Southern Bldg., engr.

Pa., Phila. — C. Wunder, archt., 1415 Locust St., taking bids 4 story, 66 x 99 ft. brick, steel and terra cotta factory, plain foundation, 15th and Master Sts., for Unique Knitting Co., 1324 North Lawrence St. $80,000.

Pa., Warren—Crescent Furniture Co., Warren, will build 4 story, 48 x 82 ft., brick and steel addition to plant and brick and tile dry kiln. Work will be done by separate contract. Private plans.

Ind., Indianapolis—Enquirer Printing & Publishing Co., 309-11 East Ohio St., taking bids 85 x 93 ft. brick and rein.-con. printing plant, East Ohio St. $225,000. R. N. Edwards, Union Trust Bldg., archt. Noted July 20.

Mich., Detroit—Sept. 19, by S. E. Remey, archt., 1140 Griswold St., 2 story, 70 x 140 ft. rein.-con., brick and steel garage, plain foundation, Dix Ave., for Kessler Sales & Service Co., 4627 Dix Ave., $40,000.

Ill., Chicago—R. S. Smith, archt., 111 West Monroe St., receiving bids 1 story, 95 x 125 ft. factory, rein.-con., brick and steel, 1809-17 Summerdale Ave., for McDonald Loose Leaf Co., 638 Federal St. $40,000.

CONTRACTS AWARDED

Mass., Cambridge—Cambridge Rubber Co., 748 Main St., 4 story, 83 x 102 ft., rein.-con. factory, to Scully Co., Cambridge. Archts. est. $100,000.

Mass., East Boston (Boston P. O.)—Boston & Lockport Block Co., 100 Condor St., 1 story, 90 x 170 ft. steel factory, to S. C. Sperry Co., 299 Main St., Cambridge. Archts. est. $35,000.

Mass., Malden—Yale Knitting Co., Sherman St., 4 story, brick and steel addition to plant, Sherman St., to Tredennick Co., 10 High St., Boston. Archts. est. $40,000. Noted March 2.

Mass., Waltham (Boston P. O.)—Wilkins-Potter Press, 77 Washington St. N., Boston, 1 story, 90 x 160 ft. printing building, brick, to S. C. Sperry Co., 299 Main St., Cambridge. Archts. est. $60,000.

N. Y., Falconer—Niagara, Lockport & Ontario Power Co., Hinman Rd., Lockport, 2 story, 60 x 100 ft., rein.-con. and brick sub-station, South Dow St., here, to Jamestown Constr. Co., 60 River St., Jamestown, Engrs. est. $50,000.

N. Y., Jamestown—General Metalsmiths Inc., 313 Prendgegast Ave., 1 story, 60 x 250 ft. factory, brick; to Chapman & Graham, 132 Blackstone Ave. Archts. est. $150,000.

N. Y., Jamestown—International Casement Co., 84 Hopkins Ave., 1 story, 75 x 150 ft., brick and concrete factory addition, Hopkins Ave., to Warren Constr. Co., Gokey Bldg. Archts. est. $40,000.

N. Y., New York—A. Jawitz Realty Co., c/o J. Fisher, archt. and engr., 25 Ave. A., will build 1 story, 100 x 200 ft. brick, steel and concrete garage, plain foundation, East 173rd St., by day labor.. $75,000.

N. Y., New York—J. Pearlbinder, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build brick, steel and concrete garage, plain foundation, Westchester Ave., by day labor. $100,000.

N. Y., Woodhaven (Jamaica P. O.)—Propper Silk Hosiery Mills, Inc., 276 5th Ave., 3 story, 50 x 202 ft., brick and rein.-con. factory, plain foundation, to Barney-Ahlers, 110 West 40th St., New York. Archts. est. $100,000.

N. J., Trenton—Magnetic Pigment Co., 601 Cass St., 4 story, 65 x 110 ft., and 3 story, 40 x 60 ft., rein.-con., brick and steel additions to factory, Cass St., to N. A. K. Bugbee Co., 206 East Hanover St. $50,000.

Pa., Altoona—Caums Ice Cream Factory Co., 5th Ave. and 9th St., general contract 3 story, 25 x 120 ft. addition to factory, to J. C. Orr & Son, 7th Ave. and 5th St. Archts. est. $45,000. Noted Jan. 12.

Pa., Erie—Erie Co. Milk Assn., 2028 State St., 3 story, rein.-con., brick and steel warehouse, French and 20th Sts., to C. Schafer, 256 West 21st St. Engrs. est. $50,000. Noted Aug. 17.

Pa., Phila.—Horn & Hardart Bakery Co., 214 South 10th St., 3 story, 73 x 78 ft., rein.-con. and brick warehouse, plain foundation, Warnock and St. James Sts., to H. R. Rust, 19 South 8th St., $120,000.

Pa., Pittsburgh — Hardie Bros., 1601 Liberty Ave., 5 story, 100 x 325 ft. candy factory, 14th and Pike Sts., to Feltyberger & Reed, Peoples Bank Bldg. Engrs. est. $350,000. Noted March 30.

Pa., Starbreck (Warren P. O.)—Warren Steel Car Co., 1 story, 90 x 260 ft., brick and steel factory, to Hammond Iron Wks., Warren. Archts. est. $75,000. Noted Aug. 24.

N. C., Charlotte — Saco Lowell Shops, Realty Bldg., constructing home and mechanical building, Mint and Commerce Sts., to T. C. Thompson & Bro., 609 North Smith St., $150,000.

O., Alliance—Crescent China Co., Alliance, (street address not available), 1 story, 140 x 700 ft., brick and steel, factory, to H. K. Ferguson Co., 6521 Euclid Ave., Cleveland. Archts. est. $250,000.

O., Cleveland—Amer. Ship Building Co., 4900 Division Ave., 1 story, 60 x 500 ft. factory, steel and corrugated iron, 4900 Division Ave., steel contract to Republic Structural Iron Wks., East 53rd St. and St. Clairs Ave. Archts. est. $120,000.

O., Cleveland—J. Bookatz, 656 East 99th St., 1 story, 66 x 120 ft. garage, brick and steel, Superior Ave. near East 103rd St., to Gross Bros., 2272 East 89th St. Archts. est. $50,000.

O., Cleveland—H. H. Bramson, Cadillac Bldg., 1 story, 75 x 115 ft. garage and store, brick and timber 725 East 125th St., to Peerless Constr. Co., Cadillac Bldg. Archts. est. $40,000.

O., Cleveland—Cyclone Fence Co., 1287 Marquette Ave., 1 story, 50 x 130 ft. factory addition, brick and steel 1287 Marquette Ave., to E. F. Gibbons Constr. Co., Prospect-4th Bldg. Archts. est. $40,000.

O., Cleveland—Yeiser Co., 1183 Holmden Ave., 1 story, 28 x 84 ft. machine shop, brick and steel, to S. W. Emerson Co., 1836 Euclid Ave. Archts. est. $40,000.

O., Cleveland—Wolf Envelope Co., 1749 East 22nd St., 1 story, factory addition, brick and steel, 1749 East 22nd St., to A. A. Lane Constr. Co., 1869 East 55th St. Archts. est. $50,000.

O., Middletown—Gardner Harvey Paper Co., West 3rd St., 1 story, 200 x 396 ft.,

Industrial Works (Continued)

brick and concrete factory, to F. K. Vaughn, Hamilton, (street address not available). $125,000. Noted Aug. 24.

O., Warren—Youngstown Steel Co., Stambaugh Bldg., Youngstown, 2,000 ton structural steel for mechanical puddling plant, to Amer. Bridge Co., Frick Bldg., Pittsburgh, Pa. Noted May 25.

Mich., Detroit—A. Kahn, archt., 1000 Marquette Bldg., 2 story, 40 x 106 ft. rein.-con. and brick factory, plain foundation, Rose and 18th Sts., to F. N. Cooper, 6370 Gratiot Ave. Archts. est. $40,000. Noted June 29.

Mich., Detroit—A. Kahn, archt., 1000 Marquette Bldg., 4 story, 95 x 259 ft., rein.-con., brick and steel addition to automobile plant, Jefferson and Clark Aves., to H. G. Christman Co., 315 Stevens Bldg., for Studebaker Corp., Brush and Piquette Aves. Noted Aug. 3.

Mich., Detroit—Ford Motor Co., Highland Park, 1 story, 245 x 1,570 ft. rein.-con., brick and steel factory, Livernois Ave., to Walbridge Aldinger Co., 2356 Penobscot Bldg. Archts. est. $750,000. Noted July 20.

Wis., Appleton—Hermann Motor Car Co., 680 College Ave., 2 story, 80 x 80 ft., rein.-con. and brick garage, plain foundation, Superior St., to M. Boldt & Sons, 545 State Rd. Engrs. est. $40,000.

Wis., Bear Creek—H. A. Rasmussen will build 1 story, 50 x 90 ft., rein.-con. and brick garage, plain foundation, by day labor. $40,000. W. W. De Long, Appleton, (street address not available), archt.

Wis., Berlin—J. M. Stabbe will build 1 story, 50 x 120 ft., grist and feed mill, brick and rein.-con., plain foundation, by day labor. Private plans. Engrs. est. $40,000.

Wis., Marinette—H. A. White, 2000 Hall Ave., 1 story, 117 x 117 ft., rein.-con., brick and steel garage, plain foundation, to T. Klaver, 1861 Dunlap St. Archts. est. $40,000. Noted Mar. 23.

Wis., Peshtigo—Thompson Bros., will build 3 story, 60 x 100 ft. timber, factory addition, plain foundation, by day labor. Private plans.

Wis., Prescott—J. A. Miller, 1 and 2 story, 50 x 70 ft., rein.-con. and brick garage and repair shop, to S. M. McDonald, Prescott. Archts. est. $40,000.

Wis., Sparta — Gross-Overland Co., 1 story, 28 x 100 ft., brick and concrete garage, plain foundation, to Naset Bros., Sparta. Engrs. est. $40,000.

Kan., Kansas City—City Ice Co., 21st and Campbell Sts., Kansas City, Mo., refrigerating plant, 3,000 ton capacity, and car icing platform, brick and rein.-con., 14th and Muncie Sts., here, general contract to E. W. Sproul, 201 Oak St., Kansas City, Mo. Archts. est. $200,000.

Tex., San Antonio — State Bd. Control, Austin, (1) power house (2) oil storage tank (3) smoke stack, at Southeast Insane Asylum, here, to Coleman & Jenkins, Gunter Bldg., (1) $25,989, W. W. Lehr, South Medina St. (2) $2,315; Sumner & Sollet, Natl. Bank of Commerce Bldg. (3) $3,600. Noted Aug. 17.

Calif., Oakland—Star Motor Co. of California, East 14th St., brick and concrete warehouse, East 14th St., to P. J. Walker Co., Monadnock Bldg., San Francisco, $75,000.

Buildings

PROPOSED WORK

Mass., Cambridge—Bank and Office—Cambridge Savings Bank, having plans prepared by Newhall & Blevins, archts., 9 Park St., Boston, 5 story, brick, marble and stone, Dunster St. $250,000.

Mass., New Bedford—Lodge—Masonic Building Assn., c/o C. M. Baker, archt., 25 Arch St., Boston, having plans prepared 5 story, 66 x 148 ft., brick and limestone, Union St., $300,000.

Mass., Shrewsbury—High School—Plans 2 story, 70 x 160 ft. brick and steel. $150,000. C. R. Stacey, Supt. of Schools. Architect not announced.

Conn., Danbury — School — St. Josephs Roman Catholic Parish plans 2 story, brick and steel. $150,000. W. J. Dullard, 6 Robinson Ave., pastor. Architect not announced.

Conn., Greenwich—Lodge—Acacia Lodge 85, F. & A. M., 12 Havemeyer Pl., having plans prepared by F. G. C. Smith, archt., Smith Bldg., and G. B. Post & Sons, associated archts, 101 Park Ave., New York City, 2 story, 86 x 110 ft., brick and concrete, Havemeyer Pl., $150,000.

Conn., New Haven — Apartment — L. Miller, 162 Bishop St., having plans prepared by J. Weinstein, archt., Metropolitan Bldg., 4 story, Whitney Ave. $150 000.

Conn., Stamford—Church and School—Holy Name Roman Catholic Church having sketches drawn by H. F. Ludorf, archt., Mutual Bldg., New Britain, 1 story brick and stone church, and 2 story school. $200,000. F. Viardiz, pastor.

N. Y., Albany—Church—St. Peters Episcopal Church, c/o B. G. Goodhue, archt. and engr., 2 West 47th St., New York, having sketches made brick and stone, plain foundation, 107 State St., here. $150,000.

N. Y., Attica—High School—Voted $262,000 bonds Aug. 21, new high school.

N. Y., Batavia—Bank and Office—Bank of Batavia plans modern bank and office building. $150,000. Architect not announced.

N. Y., Buffalo—Office—G. B. Walbridge, 384 West Ferry St., plans office on 85 x 131 ft. site, Franklin and Court Sts. To exceed $500,000. Architect not announced.

N. Y., New York—Apartment—Forty Five Park Ave. Corp., c/o Rouse & Goldstone, archts. and engrs., 512 5th Ave., having plans prepared 9 story, 78 x 95 ft., brick, steel and stone, plain foundation. $700,000.

N. Y., New York — Apartment — H. Plough, 529 Courtlandt Ave., having plans prepared by C. Schaefer, archt. and engr., 394 East 145th St., 5 story, brick, steel and stone, plain foundation, Walton Ave. $250,000.

N. Y., New York—Church—Little Mount Zion Baptists, 234 West 136th St., having plans prepared 1½ story, 88 x 91 ft., brick and stone, plain foundation, 130 West 140th St. $200,000. W. A. Campbell, pastor. Private plans.

N. Y., Saranac Lake—High School—Plans to vote on $400,000 bonds for new high school. C. B. Cutler, c/o Bd. Educ., archt.

Pa., Altoona — Business — Central Trust Co., Central Trust Bldg., and J. Brett, 1309 11th Ave., jointly, having plans prepared by J. Hillard, archt., Hutchinson Bldg., 5 story, 100 x 120 ft. brick, steel and stone business block, 11th Ave. $150,000.

Pa., Bradford—Club—Piomingo Tribe 199 Red Men, plans brick clubhouse, Pine St. $150,000. Architect not selected.

Pa., Dallas—High School—School Bd. plans high school. $150,000 or more. Architect not selected.

Pa., Ebensburg—Hospital—Cambria Co. having plans prepared by W. R. Myron, archt., 1204 First Natl. Bank Bldg., hospital on Little Farm, near here. $150,000.

Pa., Grove City—Hotel—E. G. Herschaw and others, 1st Natl. Bank Bldg., plan hotel, Carruthers Park. $150,000. Owsley & Co., Youngstown, O., (street address not available) $150,000.

Pa., Juniata (Altoona P. O.)—Church—First Metodist Church, had plans prepared by A. W. Rudolph, archt., 107 Wadsworth Ave., Llyswen, 2 story, 104 x 124 ft., rein.-con., steel and stone, 8th Ave. $150,000.

Pa., Midland—High School—Bd. Educ. receiving sketches for 2 story and basement. $200,000.

Pa., Phila.—Apartment—J. Rosen, 5216 Parkside Ave., plans 3 story, 40 x 120 ft. brick and steel, plain foundation, 52nd and Parkside Aves. $200,000. Private plans.

Pa., Phila.—Church—H. D. Dagit & Sons, archts., 34 South 17th St., soon takes bids 2 story, stone, Mt. Airy Ave. and Boyer St., for Holy Cross Roman Catholic Church, 134th St. and Mt. Airy Ave. $200,000.

Pa., Phila.—Store and Office—W. Hering, 112 North 12th St., soon takes bids, 8 story, 60 x 70 ft. and 47 x 69 ft. rein.-con., brick, steel and stone, 114-122 North 12th St. $500,000. Ballinger Co., 12th and Chestnut Sts., archts.

Pa., Scranton—Store—New Wall Paper Co., 122 North Washington Ave., plans 4 story, 130 x 160 ft., brick, North Washington Ave. To exceed $150,000.

Pa., Sharon — Clubhouse — F. O. Eagles, plans clubhouse, North Water Ave. $150,000. Architect not selected.

N. C., Raleigh—School—Had plans prepared by C. G. Sayre, archt., Raleigh, (street address not available), for Wiley School, 3 story, 120 x 160 ft., brick, stone and concrete. $165,000.

Fla., Miami—Court House and Jail—Bd. Comrs. Dade Co. voted $650,000 bonds for court house and jail. R. A. Coachman, Jr., member Bd. Comrs. Noted Dec. 29.

O., Cleveland—Commercial and Apartment—J. Laronge, 214 Williamson Bldg., having plans prepared by Walker & Walker, archts., 1900 Euclid Ave., 4 story, 90 x 100 ft., brick and steel, northwest corner Euclid Ave. and East 63rd St. $250,000.

O., Cleveland—Sales—Schwegler & Co., 6501 Euclid Ave., having plans prepared by Walker & Weeks, archts., 1900 Euclid Ave., 4 story, 60 x 125 ft., concrete, brick and steel, 7023 Euclid Ave. $200,000.

O., Cleveland—Store—Ohio Sample Furniture Co., 2142 East 9th St., having plans prepared by Christian, Schwarzenberg and Gaede, archts., 1900 Euclid Ave., 3 story, 60 x 100 ft., brick, concrete and steel, 7029 Euclid Ave. $150,000.

O., Columbus—Dormitory—F. H. Olds, 112½ South High St., having sketches made by R. Sims, archt., Grand Theatre Bldg., 4 story, 50 x 150 ft., Neil Ave. $170,000.

O., Columbus—Office—United Commercial Travelers, 638 North Park St., having plans prepared by T. D. McLaughlin, archt., Savings Bldg., Lima, 2 story, 75 x 153 ft., brick and concrete, Park St. $250,000.

O., Findlay—Hospital—Home and Hospital Comn. plans large brick addition. Will mature in spring. $150,000. Architect not announced.

O., Mansfield—Industrial—Ohio State Bd. Control, Columbus, having plans prepared by R. S. Harsh, state archt., Ohio Bldg., Columbus, for industrial building at Mansfield Reformatory, here. $200,000.

O., Massillon—High School—Bd. Educ. having plans prepared by O. D. Howard, archt., 8 East Broad St., Columbus, 2 story, 160 x 171 ft., brick and concrete addition. $200,000.

O., Portsmouth—Hospital—Mercy Hospital having preliminary plans prepared by E. Brielmaier & Sons, archts., 432 Bway., Milwaukee, Wis., 3 story, rein.-con. and brick addition, plain foundation. $350,000.

O., West Park—High School—Bd. Educ., O. Juergens, clk., West 152nd St. and Lorain Ave., Cleveland, plans 3 story, brick, steel and concrete. $600,000. Architect not selected.

Ind., Connersville — High School—Bd. Educ. plans 2 story, brick, $150,000. E. E. Dunlap & Co., State Life Bldg., Indianapolis, archts.

Ind., Ft. Wayne—Church—New Congregational Church, c/o G. Mahurin, archt., Lincoln Life Bldg., having plans prepared. 2 story, 66 x 118 ft. and 56 x 97 ft. brick. $150,000.

Ind., Ft. Wayne — Church — Plymouth Church, c/o G. Mahurin, archt., Lincoln Life Bldg., having revised plans prepared. 2 story, 150 x 155 ft. brick and stone, Berry St. $150,000. Noted Jan. 12.

Ind., Ft. Wayne — Pharmaceutical — Wayne Pharmacal Co., 202-206 West Berry St., plans 4 story, 100 x 150 ft., rein.-con. and steel, Berry St. $225,000. Architect not selected.

Ind., Ft. Wayne—School—Bd. Educ. plans McCullough School, 1 story, brick. $250,000. G. Mahurin, Lincoln Life Bldg., archt.

Ind., Ft. Wayne—Temple—Mizpah Temple plans 3 story, brick and fireproof construction. $300,000. G. Mahurin, Lincoln Life Bldg., archt.

Ind., Indianapolis—Apartment—Windsor Realty Co., c/o George MacLucas, archts., Lemcke Annex, having plans prepared 3 story, 74 x 121 ft. brick, North Pennsylvania St. $150,000.

Ind., Indianapolis—Hotel—G. J. Marott, 18 East Washington St., plans 10 story, rein.-con., steel and brick, North Meridian St. $1,500,000. Vonnegut, Bohn & Mueller, 610 Indiana Trust Bldg., archts.

Ind., Indianapolis—Physicians Building D. W. Fossler, Hume-Mansur Bldg., having revised plans prepared by D. Graham, archt., Hume-Mansur Bldg., 10 story, 67½ x 195 ft., brick, steel and concrete, North Pennsylvania St. $800,000.

Ind., Indianapolis—Sales, etc.—Conduitt Automobile Co., 314 North Delaware St., having plans prepared by F. [illegible] Hunter, archt., State Life Bldg. 3 story, 63 x [illegible] ft., brick and rein.-con., sales and service station, North Meridian St., $150,000.

Ind., Indianapolis—Sales, etc.—Olin Sales Co., 515 North Meridian St., plans 3 story, brick and fireproof, sales and service station, North Meridian St. $150,000. Rubush & Hunter, 430 Amer. Central Life Bldg., archts. Noted July 27.

Ind., Suth Bend — Dormitory — Notre Dame University plans 2 story, brick and stone. $150,000. P. Hefferman, 169 High St., Boston, Mass., archt.

Ind., South Bend—Dormitory——Notre Dame University plans 2 story, brick and stone, $150,000. J. P. Hefferman, 169 High St., Boston, Mass., archt.

Ill., Wilmette—Apartment-Hotel—Beach Manor Real Estate Impvt. Co., Wilmette, plans 9 story, 225 x 225 ft., brick, concrete,

Buildings (Continued)

steel, tile and stone. $1,500,000. R. L. Simmons, Elkhart, Ind., archt.

Mich., Ann Arbor—Apartment—University Housing Corp., Ann Arbor, having plans prepared by H. Angell, archt., 722 Free Press Bldg., Detroit, 3 story, 90 x 106 ft. brick and steel, plain foundation, University Ave. $175,000.

Mich., Detroit—Apartment—J. W. Wilson, archt., 17 Campus Martius, preparing plans 7 story, 115 x 155 ft. rein.-con., brick and steel, plain foundation, Marquette and Jefferson Aves. Owners name withheld.

Mich., Detroit—Apartment—H. Yannover, 1036 East Kirby Ave., having plans prepared by Kohner & Seeler, archts., 1402 Kresge Bldg., 10 story, rein.-con., brick and steel, plain foundation, Seward Ave.

Ill., Chicago—Store and Dance Hall—J. Marzano, 931 Polk St., having plans prepared by Levy & Klein, archts., 111 West Washington St., 2 story, 150 x 150 ft. store and dance hall. $500,000.

Wis., Beaver Dam—School and Auditorium—St. Patrick's Catholic Congregation, having plans prepared by F. L. Kronenberg, archt., Carroll Blk., Madison, and soon takes bids 2 story, 90 x 132 ft., rein.-con.., brick and stone, plain foundation. $150,000. A. J. Leist, Beaver Dam, pastor.

Minn., Eveleth—Hospital—Having plans prepared by E. H. Berg, archt., Eveleth, 5 story, rein.-con., brick and tile. $700,000.

Mo., Kansas City—School—Bd. Educ. having plans prepared by C. A. Smith, archt., 602 Finance Bldg., 2 story, 80 x 104 ft. rein.-con., brick and stone, incl. tile swimming pool, etc., 11th and Harrison Sts.

Tex., San Antonio—Hospital—Southwest Texas Baptist Hospital, had sketches made by W. N. Noonan, archt., Moore Bldg., 4 story, 80 x 145 ft. (1st unit), rein.-con., and brick, plain foundation, Nolan St. $400,000. Total when complete $1,000,000.

Utah, Provo—Municipal—City and Utah Co. plan improvements to municipal building. $150,000.

Calif., Berkeley—Library—Pacific School of Religion, c/o W. H. Ratcliff, Jr., archt., 1st Natl. Bank Bldg., having plans prepared library, brick, College Ave. $1,000,000.

Ont., Sandwich—School—Bd. Educ. soon takes bids 2 story, 116 x 166 ft. rein.-con., brick and steel, Felix Ave. $205,000. A. J. Riddell, 355 Sandwich St., archt. $205,000.

Hawaii-Honolulu—Stores and Offices—Castle Cook Steamship Co., Ltd., Honolulu, having plans prepared by C. W. Dickey, archt., 2149 Bway., Oakland, Calif., 3 story store and office building, fireproof construction, Class A. $420,000.

BIDS DESIRED

N. H., Nashua—Bank—Sept. 14 (change of date) by Second National Bank, 185 Main St., brick, steel and stone, plain foundation. $200,000. Mowbray & Uffinger, 56 Liberty St., New York City, archts. and engrs. Noted Aug. 17.

N. Y., Ithaca—Laboratory—Sept. 28, by C. D. Bostwick, Comptroller, Cornell University, addition to laboratory building at New York Veterinary College, Cornell University (south wing, James Law Hall). L. F. Pilcher, Capitol, Albany, state archt.; adv. this issue.

N. Y., New York—School—Sept. 12, by Supt. Bd. Educ., 500 Park Ave., for P. S. 64, brick, steel and stone, Walton Ave. and East 171st St. $500,000. C. B. J. Snyder, Concord St. and Flatbush Ave., Brooklyn, archt. and engr.

Pa., Carbondale—School—Sept. 15, by Secy. Bd. Educ., 3 story, 19 room, brick, to be known as Roosevelt School, Salem and Spring Sts. $200,000. L. Hancock, Jr., 1010 Mears Bldg., Scranton, archt.

Pa., Phila.—Apartment—Sept. 9, by L. B. Rothchild, archt., 1225 Sansom St., 3 story, 39 x 105 ft. brick, stee land stone, plain foundation, 21st and Venango Sts., for Venango Realty Co., c/o architect.

Pa., Phila.—Store and Office—Hoffman-Henon Co., archts., Finance Bldg., taking bids 2 story, 30 x 110 ft. rein.-con., stone and marble, plain foundation, 15th and Spruce Sts. $200,000. Owner's name withheld.

N. C., Tarboro—High Schools—Sept. 12, by R. E. Sentell, supt. Public Schools of Edgecombe Co., Tarboro, constructing high school at Crisp, school at Speed, and Western Edgecombe High School. To exceed $150,000. J. M. Kennedy, Merchants Bank Bldg., Raleigh, archt.

O., Cleveland—Apartment—S. Selden and S. Passov, 789 East 99th St., taking bids and opens same about Sept. 10, 3 story, 122 x 128 ft., brick and timber, Superior Rd. $150,000. M. Altschuld, 5116 Woodland Ave., archt. Noted July 27.

O., Columbus—School—Sept. 18, by Bd. Educ. at office E. L. McCune, clk., Ohio Natl. Bank Bldg., improving Dana Ave. School; John Burroughs School, West Sullivant Ave., and Pilgrim School, Taylor Ave. H. D. Smith, 50 East Town St., archt. Noted Aug. 17.

Ind., Piercetown—School—Sept. 14, by A. J. Menzie, trustee, 2 story, 72 x 104 ft., brick. $150,000. Griffith & Goodrich, 211 East Berry St., Ft. Wayne, archts.

Mich., Detroit—School—Sept. 13, by Bd. Educ., 1354 Bway. Ave., 2 story, 91 x 92 ft. addition to Neinas School, also 1 story, 55 x 70 ft. playroom, rein.-con., brick, steel and stone, plain foundation, McMillan and Military Aves. $150,000. Malcolmson, Higginbotham & Palmer, 405 Moffat Bldg., archts.

Mich., Detroit—Hotel—Sept. 19, by C. D. Lundblad, archt., 206 New Telegraph Bldg., 4 story, 35 x 200 ft. brick and steel, plain foundation, Woodward Ave. $175,000. Owner's name withheld.

Mich., Port Huron—School—Sept. 23, by Bd. Educ., 3 story, 116 x 268 rein.-con. and brick, plain foundation. $250,000. Van Leyen, Schilling, Keough & Reynolds, 3440 Cass Ave., Detroit, archts. Noted July 20.

Ill., Chicago—Apartment—P. F. Olsen, archt., 127 North Dearborn St., receiving bids 3 story, 100 x 124 ft., rein.-con., brick and steel, Cornelia and Janssen Sts., for W. L. Wuerzinger, 10 North Clark St., $200,000.

Ill., Chicago—Bank and Office—Sept. 11, by Holabird & Roche, archts., 104 South Michigan Ave., 14 story, rein.-con., brick and steel addition, Clark and Monroe Sts., for Chicago Trust Co., c/o architects. $1,000,000.

Ill., Chicago—Hotel—P. F. Olsen, archt., 127 North Dearborn St., receiving bids 3 story, 120 x 155 ft., rein.-con., brick and steel, Sheridan Rd. and Airdrie Pl., for Silverman & Goldberg, c/o architect. $375,000.

Ill., Kenilworth—Apartment-Hotel—O. C. Harris, 189 West Madison St., Chicago, receiving bids 9 story, 225 x 225 ft., rein.-con., brick and steel, Sheridan Rd. and Lake Michigan Ave., here. $1,500,000. E. L. Simmons, Elkhart, Ind., archt.

Wis., Milwaukee—Club House and Auditorium—R. Messmer & Bros., archts., 221 Grand Ave., receiving bids and opens same about Sept. 12, 3 story, 50 x 120 ft., 45 ft. high, brick and concrete, plain foundation, 11th and State Sts., for Amer. Luther Assn., 283 11th St. $150,000.

Wis., Sheboygan—Theatre—Rex Theatre, 10 North 8th St., taking bids 1 and 2 story, 50 x 110 ft., brick, rein.-con. and stone, plain foundation, 8th St. $150,000. W. C. Weeks, 630 Ontario St., archt.

Tex., San Antonio—Market House—Sept. 18, by City Secretary, 2 story, 100 x 500 ft., rein.-con., plain foundation, Market Plaza, $200,000. Dielman & Spillman, 306 East Commerce St., archts. and engrs. Noted Feb. 9.

Calif., Sacramento—Library, etc.—Oct. 3, by Dept. Pub. Wks., Div. Engineering, constructing library, courts and office building, marble, tile, stone and terra cotta. To exceed $150,000. G. B. McDougall, Forum Bldg., archt.

Ont., Galt—Collegiate—Sept. 16, by Cameron & Ralston, archts., Bartlett Bldg., Windsor, 3 story, 30 room, rein.-con., brick, steel, tile and stone, for Bd. Educ. $300,000.

BIDS RECEIVED

N. Y., Albany—School—Bd. Contract & Supply, City Hall, opened bids Aug. 28, general contract P. S. 20, 3 story, 62 x 196 ft. with 32 x 89 ft. wing, brick, North Pearl St., from W. G. Sheehan Constr. Co., 28 Dewitt St., $191,364, McCann Building Co., 68 State St., $203,400, C. P. Boland, 30 4th St., Troy, $204,000; heating work from Austin Eng. Co., 121 West 42nd St., New York, $29,772, J. Hunter Heating & Contracting Co., 68 Liberty St., $30,990, E. W. Tompkins & Co., 27 Grand St., $31,950. Noted Aug. 17.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, opened bids Aug. 29, P. S. 16, Wilson St. near Bedford Ave., here, from C. Meads Co., 217 West 14th St., New York, $174,100; G. Colon, 81 West 125th St., New York, $189,766; F. M. Kelly Co., $194,945. Noted May 18.

N. Y., New Brighton—High School—Bd. Educ., 500 Park Ave., New York, opened bids Aug. 29, addition to Curtis High School, Hamilton Ave. and St. Marks Pl., here, from G. Colon Co., 81 East 125th St., New York, $457,308; T. Dwyer, Bway. and 216th St., New York, $459,000; G. Dekente, $490,000.

O., Greenfield—High School—Bd. Educ., opened bids Aug. 31, 2 story, brick, stone and concrete, from Danis-Hunt Constr. Co., 907 Schwind Bldg., Dayton, $234,000; State Constr. Co., Grant and Broad Sts., Columbus, $236,986; D. W. McGrath & Sons, 255 East Broad St., Columbus, $238,900.

CONTRACTS AWARDED

Mass., Dorchester (Boston P. O.)—Bath House—Park Dept., 33 Beacon St., Boston, 1 and 2 story, 87 x 370 ft. brick, here to Alco. Constr. Co., 178 North St., Boston, $193,000.

Mass., Medford—Hospital—Lawrence Memorial Hospital, Governors Ave., 3 story, 50 x 150 ft. with 40 x 75 ft. ell, brick and steel, also 3 story, 40 x 60 ft. service building, Governors Ave., to Evatt Constr. Co., 161 Devonshire St., Boston. Archts. est. $200,000.

N. Y., New York—Apartment—Ards Building Corp., c/o G. A. Bagge & Sons, archts. and engrs., 299 Madison Ave., will build brick, steel and stone apartment, plain foundation, Fort Washington Pl. and 181st St., by day labor. $250,000.

N. Y., New York—Club House—Intercollegiate Cosmopolitan Club, 2929 Bway., 9 story, 128 x 168 ft., brick, steel and stone, 520 Riverside Dr., to M. Eidlitz & Son, Inc., 41 East 42nd St. Archts. est. $750,000. Noted Aug. 3.

N. Y., New York—Store and Office—Burroughs-Wellcome Co., 18 East 41st St., 12 story, 45 x 100 ft., brick, steel and stone, plain foundation, 9 East 41st St., to Fountain & Choate, 110 East 23rd St. Archts. est. $1,250,000.

N. J., Newark—Bank—Guilbert & Bettelle, archts. and engrs., 2 Lombard St., brick and steel, for North Ward Bank, to C. R. Hedden, 228 South 7th St. Archts. est. $300,000. Noted June 29.

Pa., Ambler—High School—Bd. Educ., 2 story, 73 x 161 ft., brick, steel and stone, plain foundation general contract to Barnes & McLoughlin, 17 South 17th St., Phila., $97,900, total est. $150,000. Noted June 22.

Pa., McKeesport—School—Holy Trinity Catholic Congregation, 133 7th Ave., 2 story, 73 x 130 ft., brick and tile, 7th Ave., to Blair & Mack, 1409 Library Ave. Archts. est. $150,000.

Pa., Phila.—Office—Phila. Realty Bd., 1126 Walnut St., 3 story, 36 x 103 ft., 13th and Spruce Sts., to F. A. Havens Co., 845 North 19th St. Archt. est. $200,000. Noted Aug. 10.

Pa., Phila.—Sanitarium—Bd. Pub. Health, City Hall, general contract, 1½ story, 35 x 148 ft. with two 43 x 90 ft. wings, brick and stone, plain foundation, at Byberry, to G. H. Evans Co., 109 North 13th St., $119,430.

Pa., Pittsburgh—Home—Little Sisters of Poor, c/o P. Wall, 705 Preble Ave., and R. M. Trimble, archt., Ferguson Bldg., 3 story, 53 x 220 ft., Benton Ave., to Landau Bros., 125 1st Ave. Archts. est. $200,000.

Pa., Pittsburgh—College—Duquesne University, Bluff St., 4 story, 161 x 164 ft., Bluff St., to H. Busse Co., Wabash and Main Sts. Archts. est. $275,000.

Pa., Titusville—Theatre—Morosco Holding Co., 25 West 43rd St., New York City, 2 story, 40 x 120 ft., brick, West Spring St., to F. C. Danner, New Kensington. Archts. est. $150,000. Noted June 22.

Pa., Wilkes Barre—Church—St. Stephens Parish, 143 x 240 ft. brick and steel, South Franklin St., to J. Curtis Co., Wilkes-Barre. Archts. est. $150,000.

W. Va., Charleston—Apartment—S. Stephenson, 28 Bradford St., 3 story, 93 x 103 ft., brick and stone, Virginia and Greenbrier Sts., to Roush Bros., Charleston (street address not available). Archts. est. $150,000.

O., Cleveland—Armory—Troop A Veterans Assn., c/o R. A. Perkins, captain, East 55th St. and Curtiss Ave., 1 story, 203 x 212 ft., concrete, brick and steel, Fairmount and Kemper Rds., to Central States Eng. & Constr. Co., Union Commerce Bldg. Archts. est. $350,000. Noted May 4.

O., Cleveland—Church—St. Vincent De Pauls Church, c/o M. J. Flannigan, pastor, 1109 Superior Ave., 1 story, 53 x 118 ft., brick, concrete and steel, West 135th St. and Lorain Ave., to Schirmer-O'Hara Co., 2031 Euclid Ave. Archts. est. $150,000.

O., Cleveland—Commercial—J. Babin, 827 Superior Ave., 2 story, 75 x 220 ft., brick, steel and timber, northeast corner East 97th St. and Euclid Ave., to Piscopo Constr. Co., 2233 Edgehill Rd. Archts. est. $200,000. Noted Jan. 12.

O., Oxford—Dormitory—Bd. Trustees Miami University, general contract 3 story women's dormitory, to J. Lowes, 508 West 2nd St., Dayton, $187,770; heating, plumbing and electrical work, to Walker Constr. Co., Hamilton, $26,580. Noted Aug. 17.

O., Washington C. H.—Commercial and Club—Elks Lodge, 3 story 74 x 165 ft., brick and concrete, to S. Q. Henke & Son, Gallipolis. Archts. est. $150,000. Noted July 20.

Buildings (Continued)

Ind., New Haven—School—G. E. C. Schaper, trustee, 2 story, 105 x 112 ft., brick and fireproof construction, to W. A. Sheets, 522 East Berry St., Fort Wayne. Archts. est. $157,000. Noted Dec. 8.

Mich., Crystal Falls—Hotel—Oliver Iron Mining Co., Wolvin Bldg., Duluth, Minn., 3 story, 96 x 98 ft., concrete and brick. plain foundation, to H. Gundlach, Leopold Bldg., Houghton. Archts. est. $150,000.

Mich., Detroit—Apartment—Clifford Land Co., c/o J. P. Jogerst, archt, 1127 Shelby St., 10 story, 150 x 171 ft., rein.-con., brick and steel, plain foundation, Clifford St., to Natl. Constr. Co., 1031 Dime Bank Bldg. Archts. est. $1,500,000. Noted May 4.

Mich., Detroit — Apartment — G. Klein, c/o A. Kahn, archt., 1000 Marquette Bldg., 8 story, 107 x 111 ft., rein.-con., brick and stone, plain foundation, Pingree Ave., to Bryant & Detwiler, 2336 Dime Bank Bldg. Archts. est. $400,000. Noted July 13.

Ill., Chicago—Apartment and Store— H. Minkus c/o Leichenko & Esser, archts., 38 South Dearborn St., 4 story, 70 x 127 ft., rein.-con., brick and steel, Bway. and Roscoe St., to Waldman Constr. Co., 165 North Clark St. Archts. est. $275,000.

Ill., Chicago—Bank—Stony Island Trust & Savings Bank, 6822 Stony Island Ave., 8 story, 65 x 115 ft., rein.-con., brick and steel, 68th St. and Stony Island Ave., to F. Burke, 35 South Dearborn St. Archts. est. $500,000. Noted June 15.

Ill., Chicago — Church — Logan Square Congregation Building Comn., 3134 Fullerton Ave., 2 story, 75 x 150 ft., rein.-con., brick and steel, 3133-37 Fullerton Ave., to Behrens Constr. Co., 2149 North Talman Ave. Archts. est. $250,000.

Ill., Chicago—Theatre, Store and Office—General Amusement Co., 127 North Dearborn St., 1 and 2 story, 103 x 124 ft., rein.-con., brick and steel, 1900-10 North Western Ave., to G. Thompson & Son, 30 North La Salle St. Archts. est. $200,000.

Ill., Evanston—Church—St. Pauls Evangelical Lutheran Congregation, c/o W. C. Jones, archt., 19 South La Salle St., Chicago, 1 story, rein.-con., brick and steel, Greenwood and Maple Sts., here, to Schmidt Bros. Constr. Co., 105 North Clark St., Chicago. Archts. est. $150,000.

Wis., Bangor—High and Grade School—Bd. Educ., 2 story, 60 x 150 ft., rein.-con., brick and stone, plain foundation, to C. W. Noble, 206 State Bank Bldg., La Crosse. Archts est. $150,000.

Wis., Madison—Hospital—Bd. Regents, University of Wisconsin, 7 story, 250 x 300 ft., rein.-con., brick and steel, plain foundation, Charter St., to Immel Constr. Co., 200 North Main St., Fond du Lac, $668,443. Noted Feb. 2.

Ia., Des Moines—Community House—Jewish Community Center, c/o L. Oransky, pres. United Jewish Charities, 315 Walnut St., general contract 2 story, rein.-con., brick, tile and stone, 8th and Forest Sts., to J. Maine & Sons, 119 8th St., $105,000. Noted Mar. 17, 1921.

Ia., Dubuque—Bank and Office—Union Trust & Savings Bank, c/o J. F. Neebe, chn. Building Comn., 13th St. and Central Ave., general contract, 3 story, 75 x 100 ft., rein.-con., brick, tile, granite and terra cotta, to Strandberg Bros., 19 South La Salle St., Chicago. Archts. est. $250,000. Noted Sept. 1.

N. D., Dickinson — Administration — Bd. administration State College, Bismarck, general contract 3 story, 110 x 300 ft., rein.-con., brick, tile and stone, at State Normal School, here, to T. F. Powers & Co., 419 8th St. N., Fargo, $225.482. Noted March 16.

Utah, Ogden—Gymnasium—L. D. S. Church School System, concrete and brick work for 3 story, 60 x 110 ft., Jefferson Ave., to E. J. Isakson, 252 22nd St., $125,000. Noted July 27.

Ont., Kitchener—Collegiate—School Bd., 3 story, 185 x 250 ft. brick, steel and stone technical school, to Anglin-Norcross, Ltd., Continental Life Bldg., Toronto. Archts. est. $375,000.

Ont., London—University—J. M. Moore, archt., 489 Richmond St., 3 story, 175 x 300 ft. brick, steel and stone science building, to J. Putherbough, 1006 Wellington St. Archts. est. $250,000. Noted Aug. 10.

Hawaii, Honolulu — Hospital — Queens Hospital Assn., 3 story, rein.-con., to Ingvorsen Constr. Co., Honolulu. $375,000.

Federal Government Work

PROPOSED WORK

N. Y., Brooklyn — Oil Storage House — Constructing Quartermaster, 39 Whitehall St., New York, soon receives bids oil storage house at army supply base, here.

O., Chillicothe—Hospital—War Dept., c/o Construction Quartermaster, soon receives bids for U. S. Veterans Hospital, here.

Calif., Mare Island—Remodeling—Spec. 4601—Bureau Yards & Docks, Navy Dept., Wash., D. C., soon receives bids remodeling Building 53, here. Noted March 9.

BIDS DESIRED

N. Y., New York—Dredging, etc.—Oct. 5 at office U. S. Engineer, 710 Army Bldg., 39 Whitehall St., dredging and rock removal in East River; adv. this issue.

Pa., Phila.—Stone and Breakwater—Sept. 8, by Supt. Lighthouses, furnishing stone and building breakwater at Brandywine Shoal Light Station, Delaware Bay, Del.

Del., Wilmington—Dredging—Oct. 6, at office U. S. Engineer, Wilmington, dredging Tuckerton Creek, N. J.; adv. this issue.

D. C., Wash.—Isolation Building—Sept. 10, by Dept. Agriculture, isolation building at St. Elizabeth Hospital.

La., Alexandria—Extension, etc.—Sept. 28, by Treas. Dept., Wash., D. C., extension, remodeling, etc., U. S. Post Office and Court House, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Colo., Fitzsimons—Roads—Sept. 16, by local Constructing Quartermaster, concrete paving West Gate and E-9 Rds., Fitzsimons General Hospital.

Utah, Eureka—Post Office—Sept. 29, by Treas. Dept., Wash., D. C., for U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

California—Road—Sept. 12, by C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., 881 Mills Bldg., San Francisco, grading and building structures, on Currant Creek Rd. in Nevada Natl. Forest, 3,000 cu.yd. rock and 45,000 cu.yd. earth excav., 260 cu.yd. Class B concrete, 10,000 lin.ft. furrow ditch, etc.

BIDS RECEIVED

Mass., Chelsea—Grading—Treas. Dept., Wash., D. C., grading, here, from G. D. Campbell, 56 Market St., Poughkeepsie, N. Y., $17,000; S. Beskie, Beacon, N. Y., $32,000; M. Spino, Beacon, N. Y., $21,180.

R. I., Providence—Dredging—U. S. Engineer, dredging in harbor at Bridgeport, Conn., Sects. (1) 10,000 cu.yd., (2) 65,600 cu.yd., (3) $24,200 cu.yd., (a) work as a whole, (b) sections separately from P. Sanford Ross, Inc., 277 Washington St., Jersey City, N. J., (a) Sects. 1, 2 and 3, $0.2233 per cu.yd.; J. S. Packard Dredging Co., 1004 Turks Head Bldg., (a) Sects. 1, 2 and 3, $0.23, (b) Sects. 1 and 2, $0.23, Sect. 3, $0.30; Taylor Dredging Co., Foot of Communipaw Ave., Jersey City, N. J., (a) Sects. 1, 2 and 3, $0.325. Noted Aug. 10

Md., Baltimore—Mechanical Equipment—Treas. Dept., Wash., D. C., mechanical equipment in U. S. Marine Hospital, here, from Noland-Clifford, 322 28th St., Newport News, Va., $72,024; H. E. Crook Co., 28 Light St., $73,999; W. G. Cornell Co., 19 Patterson St., N. E., Wash., D. C., $85,850. Noted Aug. 17.

D. C., Wash.—Air Compressor—Public Printer, Government Printing Office, opened bids for furnishing air compressors, from Carroll Electric Co., 714 12th St., $21,500; Chicago Pneumatic Tool Co., 300 North Michigan Ave., Chicago, $24,242; W. G. Cornell Co., 19 Patterson St., N. E., $25,690.

D. C., Wash.—Pump—Dist. Comrs., 509 Dist. Bldg., 1 steam centrifugal pump unit, 10,000,000 gal. capacity, from De Laval Steam Turbine Co., North Clinton St. and Pennsylvania R.R., Trenton, N. J., (a) $33,060, (b) $54,585; Worthington Pump and Mchy. Co., 115 Bway., New York City, $50,319, alternate bid, deduct $1,150, if no tests are held deduct $800.

Ga., Augusta—Roads and Walks—Treas. Dept., Wash., D. C., roads and walks at U. S. Public Health Service Hospital 62, here, (a) concrete, (b) gravel, from Hodgson & Jones, Montgomery, Ala., (a) $30,975, (b) $17,900; W. F. Bowe, Jr., 541 Broad St., (a) $33,840, (b) $25,900; C. E Jones, 1688 Jenkins St., (a) $37,500, (b) $22,500. Noted Aug. 17.

Wis., Fond du Lac—Post Office—Treas. Dept., Wash., D. C., extension to U. S. Post Office, here, from Garber & Cissel, Bethlehem, Pa., (street address not available) $12,000; Devault & Deitrick, Canton, O., (street address not available) $14,222; Pearce Bros., Inc., 220 West 42nd St., New York City, $13,400. Noted July 27.

Utah, Spanish Fork—Post Office—Treas. Dept., Wash., D. C., opened bids Aug. 22 for U. S. Post Office, here, from G. A. Whitmeyer, 826 25th St., Ogden, $39,800; C. Weitz Sons Co., 713 Mulberry St., Des Moines, Ia., $48,375; Duvall & Deitrich, Canton, O. (street address not available). $48,796. Noted July 27.

Calif., Mare Island—Circulating Loop—Spec. 4684—Bureau Yards & Docks, Navy Dept., Wash., D. C., circulating loop for central power plant at Navy Yard, here, (1) work complete from Tibbets Pacific Co., 16 California St., San Francisco, (1) $101,960 (200 days), (2) $69, (3) $69, (4) $69, (5) $25, 6 $69, 7 $98, (8) $28, (9) $0.60; Clinton Constr. Co., 136 Townsend St., San Francisco, (1) $120,218, (2) $206, (3) $90, (4) $146, (5) $304, (6) $400, (7) $150, (8) add $30 deduct $20, (9) add $1 deduct $0.25; Healy-Tibbets Constr. Co., 64 Pine St., San Francisco, (1) $123,370 (230 days), (2) add $100 deduct $30, (3) add $100 deduct $30, (4) add $45 deduct $15, (5) add $40 deduct $15, (6) add $60 deduct 20. Noted July 27.

CONTRACTS AWARDED

N. Y., New York—Dredging—U. S. Engineer, 710 Army Bldg., 39 Whitehall St., dredging and rock removal in Bronx River, to Bridgeport Dredge and Dock Co., 1024 Main St., Bridgeport, Conn., $111.313. Noted July 6.

Va., Quantico—Retaining Walls—Spec. 4647— Bureau Yards & Docks, Navy Dept., Wash., D. C., retaining walls at Marine Flying Field, here, to E. G. Heflin, Fredericksburg, $5,200 (90 days). Noted Aug. 31.

W. Va., Huntington—Steel Maneuver Boat—U. S. Engineer, Huntington, steel maneuver boat for Dam 1, Big Sandy River, to Midland Barge Co., Midland, Pa., $7,980.

Fla., Key West—Distilling Plant—Spec. 4546—Bureau Yards & Docks, Navy Dept., Wash., D. C., distilling plant at Naval Base, here, to A. Pope, 4722 15th St., N.W., Wash., D. C., $63,250 (150 days). Noted Aug. 24.

Miss., Vicksburg—Levee Work—U. S. Engineer, P. O. Box 421, levee work, to Roach, Stansell, Lawrence Bros. & Co., North Memphis Savings Bank Bldg., Memphis, Tenn., Windemere and Cleremont Levees, $117,900; Lambert Bros., St. Rose, La., St. Clair Levee, $15,000; H. A. Schornberger, Triumph, La., Orange Farm, Vaccaro River and Fort St. Phillip Levees, $20,050; Clark, Rodgers, Burt & Brown, Natchez, Longwood Levee, $163,050.

La., New Orleans—Levee Work—U. S. Engineer, 329 Customhouse, levee work in various districts, Ione Levee, to W. C. Mullen, 2408 Cherry St., Vicksburg, Miss., $73,950.

Minn., Duluth—Breakwater—U. S. Engineer, repairs to breakwater, Keweenaw Waterway, to T. L. Durocher Co., Detroit, Mich., (street address not available). $70,000.

Mo., Neelys Landing—Riprap Stone—U. S. Engineer, 1st and 2nd Dists., Custom House, Memphis, Tenn., riprap stone, here, to Arnold Stone Co., Neelys Landing, $19,200.

Tex., Galveston—Dredging—U. S. Engineer, Galveston, dredging 30 ft. Project Houston Ship Channel, Sect. 1, to Atlantic, Gulf and Pacific Co., 13 Park Row, New York City, $688,745; Sect. 2, United Dredging Co., 233 Bway., New York City, $283,957. Noted July 20.

Mont., Malta — Drainage — U. S. Recl. Service, Malta, structures on Nelson Reservoir Canal and Vandalia Canal, laterals and wastewater ditches, Milk River Project, to Ditty, Schultz & Sigvardt, Lewistown, (street address not available). $27,796. Noted July 13.

Calif., San Diego—Wards and Service Building — Spec. 4636 — Bureau Yards & Docks, Navy Dept., Wash., D. C., wards and service building for hospital reservation at Naval Base, here, to Lange & Bergstrom, 819 Timkin Bldg., $482,500 (300 days). Noted Aug. 31.

H. T., Pearl Harbor—Ordnance Buildings, etc.—Spec. 4566—Bureau Yards & Docks, Navy Dept., Wash., D. C., 6 ordnance buildings, railroad track and water main extensions, etc., at Kauhua Ammunition Depot, naval operating base, here, to J. L. Young Eng. Co., Campbell Bldg., Honolulu, $166,140 (294 days). Noted Aug. 17.

FEDERAL POWER COMMISSION

Application for Licenses and Permits

Applications

322—Anaconda Copper Mining Co., Anaconda, Mont.—Wants license for Georgetown Lake Dam, incl. concrete dam, woodstave conduit, power house and appurtenant structures and transmission lines, Georgetown Lake and Flint Creek, partly within Missoula Natl. Forest, Granite and Deer Lodge Counties. Work completed and now under Forest Service permit.

323—C. E. Schaup, 304 Commonwealth Trust Bldg., 222 Market St., Harrisburg, Pa.—Wants preliminary permit for concrete dam 12 ft. high, at head of Sassafras Island, power plant and appurtenant machinery on Sassafras Island, to be operated in conjunction with Drumgold Project 46, Susquehanna River, Dauphin and York Counties, Pa.

324—Empire District Electric Co., Galena, Kan.—Wants preliminary permit

Federal Power Commission (Continued)

rein.-con. arch dam, 175 ft. high in Sect. 23, T. 22 N., R. 22 W. White and James Rivers above Branson in Taney, Stone and Barry Counties, Mo., and Carroll Co., Ark. Power house with appurtenant facilities and transmission lines to Joplin, Mo., and to connect with lines of Ozark Power & Water Co.

325—Southern Sierras Power Co., Riverside, Calif.—Wants license for 15,000 volt distribution line, 8.4 mi. long, from Edom to Palm Springs Resort, across Aqua Caliente Indian Reservation.

326—Holton Power Co., Riverside, Calif.—Wants license for distribution line from Holton Power Co. line, Dixieland, Imperial Co., to Imperial Oil and Gypsum Co.'s plant in Sect. 8, T. 16 S, R. 11 E.

327—Southern Sierras Power Co., Riverside, Calif.—Wants license for 2 mi. of 2,200 volt distribution line near Bishop and Laws, Inyo Co.

328—City of Los Angeles, Dept. of Pub. Service, 603 Knickerbocker Bldg., Los Angeles, Calif.—Wants preliminary permit for 5 reservoirs to store 7,965 acre-feet, on Pine and Morgan Creeks, Inyo Co.; diversion canal and tunnel below confluence of Morgan Creek with Pine Creek, steel penstocks and power house.

329—Bear Valley Utility Co., San Bernardino, Calif.—Wants license for 7.95 mi. of 33,000 volt transmission line near Big Bear Lake, San Bernardino Co.

330—Southern Sierras Power Co., Riverside, Calif.—Wants preliminary permit for 4 storage reservoirs at headwaters of Bishop Creek, a tributary of Owens River, Inyo Co.

331—City of St. Paul, Minn.—Wants preliminary permit to develop 15,000 hp. on St. Croix River, from St. Croix Falls to head of Kettle Rapids, Nevers, Lower Kettle, Upper Kettle, Markham-Kelsey-Druar and other power sites on this section of river.

332—W. C. Brower, 706 Hutton Bldg., Spokane, Wash.—Wants preliminary permit for concrete dam in Phantom and Blue Grouse Creeks, 18 in., 24 in. and 36 in. pipe line 1.75 mi. long, and power house with auxiliary works in Sects. 1, 2 and 10, T. 50 N., R. 2 W, B. M., Coeur d'Alene Natl. Forest, Kootenai Co., Idaho.

333—E. Mucklow, Powell, Wyo.—Wants license for 30 in. by 15 in. head gate deflects water from Lake Creek into ditch of 5 second-feet capacity. Said ditch extends 1,958 ft. to 9 ft. overshot wheel which operates intermittently a sawmill, 264 ft. of ditch extending across Shoshone Natl. Forest. Static head equals 9 ft. Sect. 18, T. 57 N., R. 106 W.

Miscellaneous

PROPOSED WORK

Park and Equipment—Niagara Falls, New York—Plans election to vote on $285,000 bonds, for new park, fully equipped, in Grill Run section. E. J. Fort, city mgr. W. Bennett, city engr.

Athletic Field and Park—Beaver, Pa.—Plans modern, fully equipped athletic field and park. $25,000. E. N. Tomlinson, boro. secy. Engineer not announced.

Park, Pool, etc. — Phila., Pa. — F. H. Caven, dir. pub. wks., soon takes bids park, wading pool, shelter house, etc. $50,000. P. B. Sinkler, 1211 Chestnut St., engr.

Steel Tower Transmission Line — Fayetteville, N. C.—Carolina Power Co., Raleigh, plans 40 mi. steel tower transmission line from here to Laurenburg. P. A. Tillery, Capitol Apartments, Raleigh, supt.

Colo., Denver—Hospital—University of Colorado, Boston Bldg., had plans prepared by Briscoe, Fisher & Fisher, archts., U. S. Natl. Bank Bldg., 3-5 story, rein.-con. and brick, Colorado Blvd. and 9th Ave. $1,250,000. See "Miscellaneous" under "Bids Desired."

BIDS DESIRED

Portland Cement—New York, N. Y.—Sept. 15, by Bd. Purch., Municipal Bldg., furnishing and delivering Portland cement, sand and broken stone, to Dept. Plant & Structures. G. A. Whalen, chn.

Piers—Stillwater, N. Y.—Sept. 14, at office of H. C. Pitney, clk., encasing with concrete, 5 piers under Stillwater Bridge; adv. this issue.

Boardwalk—Long Branch, N. J.—Sept. 12, by City Comrs., City Hall, renewing and widening 4,300 lin.ft. boardwalk, from point near Morris Ave. to Sea View Ave. J. W. Seaman, 192 B'way, city engr.; adv. this issue.

Bulkhead — Chicago, Ill. — Sept. 13 by South Park Comrs., 57th St. and Cottage Grove Ave., 7200 lin.ft. bulkhead. J. F. Neil, secy.; adv. this issue.

BRIDGE—MIAMI, FLA.

Bids were opened by F. H. Wharton, city mgr., Aug. 22, for constructing Miami River Bridge at Southwest 2nd Ave., from (A) Comer-Ebsary Foundation Co., Miami, (awarded contract); (B) South Florida Eng. & Contg. Co.; (C) Penn Bridge Co. The unit bids were as follows:

	A	B	C
300,000 lb. structural metal work, etc.	$0.073	$0.08	$0.0784
47,000 lb. machinery, etc.	.39	.30	.34
1,300 cu. yd. 1: 1½: 3½ concrete	27.00	24.00	25.00
1,200 cu. yd. 1: 1½: 3 concrete	22.25	37.50	41.00
40 cu. yd. 1:1:2 concrete	40.00	62.50	45.00
52,000 lb. reinforcing steel	.07	.07½	.05
Electrical equipment (lump sum)	6,021.84	6,420.00	4,750.00
20M ft. B.M. untreated timber	80.00	100.00	76.00
25M ft. B.M. treated timber	125.00	125.00	105.00
1,100 sq. yd. macadam pavement	1.50	1.00	3.40
7,300 cu. yd. embankment	1.35	1.20	1.05
Extended totals all items (19 items)	$144,090	$154,400	$163,245

BRIDGE—NEW HAVEN, CONN.

Following is (A) lowest and (B) highest bid opened by Director of Public Works, June 14, for construction of Tomlinson Bridge over Quinnipiac River. The contract for the general masonry, sandstone piers and asphalt pavement was awarded to C. W. Blakeslee & Sons, Inc., 58 Waverly St., $475,153; steel work to Phoenix Bridge Co., Phoenixville, Pa., $212,866; electrical work to New Haven Electric Co., 294 Elm St., $22,816.

	A	B
Removing old piles, each	$2.00	$4.00
Cutting old piles, each	1.50	2.00
Removing masonry above mean low water, cu.yd.	2.00	2.20
Removing masonry below mean low water, cu.yd.	2.20	4.50
Excavation above mean low water, cu.yd.	1.50	3.00
Excavation below mean low water, cu.yd.	2.00	3.50
Dredging, cu.yd.	.70	1.00
Foundation piles, lin.ft.	.42	.79
Treated long leaf yellow pine piles, lin.ft.	.85	.945
Creosoted long leaf yellow pine, M	140.00	180.00
Foundation concrete, 1-3-5, cu.yd.	15.20	18.10
Stone and backing, concrete, cu.yd.	60.00	84.40
Reinforced concrete, 1-2-4, cu.yd.	20.00	22.20
Steel rods for reinforcing, lb.	.035	.055
Erection structural steel in bascule piers, ton	9.00	27.00
Waterproofing bascule piers, sq.yd.	.30	.33
Waterproofing roadway, sq.yd.	.20	.215
Gunite, sq.ft.	.60	.60
Grading, cu.yd.	1.50	1.50
Rip-rap in place, ton	2.20	2.25
Wood block paving, fixed spans, cu.yd.	5.25	6.55
Wood block paving, approaches, cu.yd.	5.40	6.55
Removing old curb, lin.ft.	.18	.20
Setting new granite curb, lin.ft.	2.90	3.25
Sidewalks on approaches, sq.ft.	.18	.23
Wood fence on approach, lin.ft.	.70	1.25
Pileshoes in place, each	2.00	2.00
Portland cement, bbl.	3.20	3.25
Timber in open caisson, M	100.00	100.00
Asphalt pavement, fixed span, cu.yd.	3.50	3.75
Asphalt pavement approach, cu.yd.	3.50	3.84

Foundation—Denver, Colo.—Sept. 15, by Briscoe, Fisher & Fisher, archts., U. S. Natl. Bank Bldg., concrete foundation for 3-5 story, rein.-con. and brick hospital, Colorado Blvd. and 9th Ave., for University of Colorado, Boston Bldg. $100,000. Total cost $1,250,000.

Crane—Aberdeen, Wash.—Sept. 23, by Port of Grays Harbor, at office of Commission, 206 East Wishkah St., 5 ton lumber handling mill type crane with 75 ft. span lumber grapple. Former bids rejected. F. H. Lamb, pres.; adv. this issue. Noted July 27.

Tank—Dorval, Que.—H. Meloche, 249 St. Joseph St., taking bids Imhoff sewerage tank, automatic sewerage chlorinator.

Mechanical Equipment—Vancouver, B. C.—Oct. 2, by Harbor Comrs., 712 Pender St., mechanical equipment for new pier on Burrard Inlet, incl. eight 3 ton cranes, four 9 ton freight elevators, four 200 ton capstans at 100 ft. per minute, four tractors and four trailers, etc., all electrically operated. A. D. Swan, 10 Phillips Pl., Montreal, Que., engr.

BIDS RECEIVED

Dumping Platform and Ramp, etc.—New York, N. Y.—J. H. Delaney, comr. Docks & Ferries, Pier "A" foot of Battery Pl., superstructure on pier at East 35th St. consisting of rein.-con. dumping platform and ramp, Contr. 1773, from McHarg Barton Co., $45,835; J. Young, Jr., 103 Park Ave., $46,697; Rosenthal Eng. & Contg. Co., 228 Jackson St., Brooklyn, $47,395. Noted Aug. 24.

CONTRACTS AWARDED

Refined Asphalt, etc.—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, furnishing and delivering 130,000 gal. refined asphalt, liquid form, to Standard Oil Co., 26 Bway., New York, $0.0521 per gal.; 1,500 cu.yd. binder stone, to Calvin Tomkins, 30 Church St., New York, $2.03; 5,200 cu.yd. asphalt sand, to Hygrade Builders Supply Co., 6th St. and 2nd Ave., $1.19; 750 net ton limestone, etc., to New York Trap Rock Corp., 101 Park Ave., New York, $7.88; 28,900 ft. lumber, to Prever Lumber Co., 250 West 23rd St., New York, $976; 8,000 gal. tar road binder, to F. J. Lewis Mfg. Co., 177th and Ferris Sts., New York, $0.1672; 2,200 cu.yd. paving sand, to J. F. Meehan, 103 Park Ave., New York, $0.97; 3,000 cu.yd. 1½ in. gravel, to Rossoff Sand & Gravel Co., 152 West 42nd St., New York, $7.124; 5,300 bbl. Portland cement, to Burroughs Building Material Co., Johnson Ave. and Newtown Creek, $2.88; 30,000 asphalt paving blocks, to Hastings Paving Co., 25 Broad St., New York, $89; 20,000 wood paving blocks, to Amer. Creosoting Co., 17 Battery Pl., New York, $54.10. Noted Aug. 24.

Clearing, etc.—New York, N. Y.—G. A. Whalen, comr. Plant & Structures, Municipal Bldg., clearing site, excavating, sheeting and bracing for foundation for proposed repair shop, 16th St. and Ave. C, to Contractors Service Corp., 226 Jackson St., Brooklyn, $46,342. Noted Aug. 31.

Fine Gravel — New York, N. Y. — Bd. Purch., Municipal Bldg., furnishing and delivering fine gravel to Dept. Parks, Manhattan Boro, to Rosoff Sand & Gravel Co., 152 West 42nd St., $2.65 per cu.yd. Noted Aug. 31.

Oak Piles, etc.—New York, N. Y.—Bd. Purch., Municipal Bldg., furnishing and delivering oak piles to Dept. Plant & Structures, to G. E. Best, Bloomfield Ave., Caldwell, N. J., $8,750; sand grits for Dept. Parks, Bronx Boro, to Ames Bldg. Material Co., 3441 Kingsbridge Ave., Bronx, $690. Noted Aug. 17.

Paving Sand—New York, N. Y.—J. Miller, pres. Manhattan Boro, Municipal Bldg., furnishing and delivering 3,000 cu.yd. paving sand, to G. A. Colgan, Jr., 90 William St., $1.50 per cu.yd. Noted Aug. 31.

Eliminating Grade Crossings and Elevating Tracks—Pittsburgh, Pa.—Pennsylvania R.R., Central Region, Union Sta., eliminating grade crossings and elevating tracks, incl. 22,665 cu.yd. excav., 75,080 lin.ft. piling, 13,930 cu.yd. foundation masonry, 2,328 cu.yd. bridge masonry, 22,575 cu.yd. retaining mosonry, 486 cu.yd. rein.-con., 1,017,000 lb. steel superstructure, 16,500 lin.ft. curb, 5,890 sq.yd. paving 14,800 sq.ft. concrete sidewalks, 46,000 lin.ft. track, etc. to A. L. Anderson & Bros. Inc., Altoona Trust Bldg., Altoona.

Cement Mixing Machine—Madison, Wis. Cement mixing machine for use in city street department, to H. Y. Smith Co., 1301 1st Natl. Bank Bldg., Milwaukee. Noted July 20.

Grain Elevator—Minneapolis, Minn.—Pioneer Grain Corp., Corn Exchange Bldg., will build 5 story, concrete, frame and metal clad grain elevator, at 500 25th Ave. S. E., by day labor. $50,000.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Sept. 19.

Sheet Asphalt Resurfacing

Woodbury, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of the County of Gloucester for the resurfacing of Delaware Street, in the County of Gloucester with a sheet asphalt surface upon the present reconstructed foundation, estimated amount of asphalt surface pavement required is 15,056 sq.yd.; of stone for reconstructing foundation is 5,271 tons; and opened and read in public at the Court House, Woodbury, N. J., on Tuesday, the nineteenth day of September, 1922, at 10.30 a.m., Eastern Standard Time.

Drawings, specifications and forms of bids, contract and bond for the proposed work, prepared by William C. Cattell, County Engineer, and approved by the State Highway Commission, have been filed in the office of said engineer at Woodbury, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blueprints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to The Board of Chosen Freeholders of the County of Gloucester and must be accompanied by a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500 nor more than $20,000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of The Board of Chosen Freeholders of the County of Gloucester.

CHESTER N. STEELMAN,
Clerk.
WILLIAM C. CATTELL,
County Engineer.

Bids: Sept. 14.

Paving, Curbing, Storm Sewers, etc.

Mobile, Ala.

Sealed bids will be received until noon Thursday, Sept. 14, 1922, by the City Commission of the City of Mobile, Alabama, for the following:

One course Concrete Paving six inches in thickness—29,756 square yards. Concrete Curbing eighteen inches deep by five inches wide—14,512 lin.ft. Double strength storm sewers 12 inch—1,334 ft. 15 inch—1,160 ft. 18 inch—2,405 ft. 21 inch—522 ft.

Standard Storm sewers, 6 inch—3,036 ft. 10 inch—1,872 ft. 12 inch—1,340 ft. 15 inch—315 ft. 24 Standard Manholes—83 Standard Inlets and 19 Standard Special Basins. A deposit of one thousand dollars will be required to accompany each bid. 1—For Paving and Curbing. 2—For Storm Sewers. Plans and specifications are on file in the City Engineer's office and can be seen on application. The right is reserved to reject any or all bids.

R. V. TAYLOR,
Commissioner of Streets.
WRIGHT SMITH,
City Engineer.

OFFICIAL PROPOSALS

Bids: Sept. 12.

Boardwalk Construction

Long Branch, N. J.

Public notice is hereby given that sealed proposals are invited and will be received by the Board of Commissioners of the City of Long Branch, New Jersey, for the renewal and widening of about forty-three hundred (4,300) lineal feet of boardwalk extending from a point near Morris Avenue northwardly to Sea View Avenue.

Said bids will be opened and read at a regular meeting of the Board of Commissioners held at City Hall on Tuesday evening, September 12, 1922, at 8 o'clock p.m. (daylight saving time) or as soon thereafter as the matter can be presented.

Drawings and specifications for the proposed work prepared by J. W. Seaman, City Engineer, have been filed in the office of the City Clerk and at the office of the Engineer, at 192 Broadway, Long Branch, New Jersey, and may be procured by prospective bidders upon a deposit of Ten Dollars $10.00) which will be refunded upon the return of the plans and specifications at or before the time the bids are received.

Bids must be made on the standard proposal forms in the manner prescribed therein and required by the specifications and must be enclosed in sealed envelopes bearing the name and address of the bidder and marked, "Bids for rebuilding boardwalk," addressed to Frank C. Quinn, City Clerk, and must be accompanied by a certified check for not less than ten per cent (10%) of the amount bid upon proposed work as stated in the proposal, drawn to the order of Frank L. Howland, City Treasurer, or cash in equal amount, and to be delivered at the place and at the hour above named.

Dated Long Branch, N. J., August 31, 1922.

FRANK C. QUINN,
City Clerk.

Bids: Sept. 20.

Iighway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., advanced standard time, which is twelve o'clock noon eastern standard time, on Wednesday, the 20th day of September, 1922, for the improvement of highways in the following counties:

Franklin............(one highway: 8.91)
Livingston..........(one highway: 0.99)
Onondaga...........(one highway: 3.47)
Otsego..............(one highway: 1.74)
Rockland....(two highways: 1.48 & 4.08

Also for the reconstruction of the following:

Cortland............(one contract: 0.54)
Monroe..............(one contract: 4.70)
Ontario..............(one contract: 2.23)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.
J. C. FINCH,
Secretary.

OFFICIAL PROPOSALS

Bids: Sept. 19.

Road Construction

Woodbury, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of the County of Gloucester for the construction of the Swedesboro-Woodstown road in the Borough of Swedesboro and Townships of Woolwich and South Harrison, in the County of Gloucester, New Jersey, with a reinforced concrete pavement, estimated amount of concrete pavement required is 38,402 sq.yd., and opened and read in public at Court House, Woodbury, New Jersey, on Tuesday, the nineteenth day of September, 1922, at 10.00 o'clock, Eastern Standard Time.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by William C. Cattell, County Engineer, have been filed in the office of the said engineer at Woodbury, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blueprints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside thereof, addressed to The Board of Chosen Freeholders of the County of Gloucester and must be accompanied by a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500 nor more than $20,000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of The Board of Chosen Freeholders of the County of Gloucester.

CHESTER N. STEELMAN,
Clerk.
WILLIAM C. CATTELL,
County Engineer.

Bids: Sept. 26.

Bridge Work

Toledo, Ohio.

Sealed proposals will be received by the Director of Public Service of the City of Toledo, until Twelve O'Clock noon, September 26, 1922, for the construction of a bridge over Swan Creek, in the line of Hawley Street.

The work will consist of:

1. Removing old structure.
2. Building two abutments approximately 1,800 cubic yards of concrete.
3. Furnishing steel girders—90 feet span.
4. Paving bridge and approaches, approximately 787 square yards.

Proposal forms, plans and specifications can be seen at the office of the Commissioner of Engineering or can be obtained from said office on deposit of $10.00 for each set, which will be refunded provided plans and specifications are returned in good order.

The Director of Public Service reserves the right to reject any or all bids or to accept any bid which he may deem advantageous to the City of Toledo.

W. T. JACKSON,
Director of Public Service.
Attest: GEORGE E. LASKA,
Secretary.

OFFICIAL PROPOSALS

Bids: Sept. 19.

Road Work

Richmond, Va.

Bids will be received at the Office of the **Virginia** State Highway Commission, corner 10th and Marshall Streets, Richmond, Va., until 12 o'clock noon, Tuesday, September 19, for the construction of:

PROJECT 125A, Route 6, from Fairfax-Loudoun County line to Project 125B, in Loudoun Co. 4.75 miles of 16 ft. bituminous macadam roadway, involving approximately 10,200 cu.yd. excavation; 286 ft. of pipe, 51 cu.yd. concrete and 2,100 lb. of reinforcing steel. Alternate bids are requested, using concrete pavement.

PROJECT 160, Route 5, west from Suffolk, in Isle of Wight Co. for a distance of 4.6 miles of 18 ft. one-course concrete roadway, involving approximately 33,642 cu.yd. of excavation; 432 lin.ft. of pipe, 302 cu.yd. concrete; 9,789 lb. of steel and 1,440 lin.ft. of piling.

PROJECT 168, Route 6, from Chantilly to Loudoun County line, in Fairfax County, 5.01 miles of 16 ft. bituminous macadam roadway, involving approximately 29,220 cu.yd. of excavation: 360 lin.ft. of pipe, 569 cu.yd. concrete; 19,290 lb. of steel. Alternate bids are requested, using concrete pavement.

PROJECT 173, Route 1, between Falling Cr. and Dutch Gap Road in Chesterfield County. 6.43 miles of 18 ft. concrete roadway, involving approximately 13,542 cu.yd. excavation; 360 lin.ft. pipe; 360 cu. yd. of concrete; 77 cu.yd. rubble masonry, and 19,143 lb. of steel.

PROJECT 202, Route 9, between Louisa and Cobham in Louisa Co. 6.27 miles of 18 ft. one-course concrete roadway, involving approximately 37,893 cu.yd. excavation; 928 ft. of pipe; 172 cu.yd. of concrete, and 9,167 lb. of steel. Alternate bids will be considered using bituminous macadam surfacing.

Certified checks to the amount of $5,000.00 must accompany bids on these projects. A bidder's bond may be filed in lieu of certified check, 20 per cent in excess of amount of certified check.

Plans and specifications for inspection are on file at the office of the Virginia State Highway Commission, corner 10th and Marshall Streets, Richmond, and at the offices of the following District Engineers: Projects 125A and 168 at Manassas, 160 at Suffolk, and 173 and 202 at Richmond, Va. Additional plans for bidders can be obtained upon application to the Highway Commissioner, Richmond, for these projects upon receipt of check for Five dollars ($5.00), payable to Assistant Commissioner, $2.50 of which will be refunded when plans are returned in good condition within two weeks after bids are opened.

Specifications and bidding proposals may be obtained by request from the office of the Highway Commissioner, Richmond, Va.

Engineers will be at the following places to show prospective bidders over the work: At Fairfax C. H., 10:00 a.m., Friday, Sept. 15th, for Projects 125A and 168. At Suffolk, Dist. Engr.'s Office, 10:00 a.m., Thursday, Sept. 14, for Project 160. At Richmond, General Office, 10:00 a.m., Tuesday, Sept. 12, for Project 173. At Louisa C. H. at 10:00 a.m., Friday, Sept. 8, for Project 202.

The State Highway Commission reserves the right to reject any or all bids.

STATE HIGHWAY COMMISSION,
H. G. Shirley, Chairman.
G. P. Coleman, Commissioner.

Bids: Sept. 23.

Lumber Handling Crane

Aberdeen, Wash.

Sealed proposals will be received by the Port of Grays Harbor at the office of the Commission, 206 E. Wishkah St., Aberdeen, Wash., until 10 o'clock A.M., Sept. 23, 1922, for one 5 ton lumber handling mill type crane equipped with lumber grapple 75 foot span.

Further information on application.

PORT OF GRAYS HARBOR,
FRANK H. LAMB, President.
J. A. VANCE, Secretary.

OFFICIAL PROPOSALS

Bids: Sept. 19.

Sanitary Sewers

Hagerstown, Md.

Sealed proposals for building sanitary sewers in certain streets, alleys, rights-of-way secured and to be secured, and other localities in North and Central Hagerstown, will be received at the offices of The Sewerage Commission in Police Headquarters Building, until 7.30 p.m., Tuesday, September 19th, 1922, at which time and place, during the session of the Sewerage Commission, the proposals will be publicly opened and read.

The work to be done embraces the building of approximately 25,000 lineal feet of sanitary sewers, ranging in size from 18 inches to 8 inches with all manholes, foundations and appurtenances, also approximately 9,500 lineal feet 6-inch house connections and approximately 400 lineal feet 66-inch storm water sewer.

On and after September 2nd, 1922, specifications and blank forms of proposals can be obtained, and detailed plans examined at the offices of the Sewerage Commission, and a full set of plans will be sent to any contractor, on the receipt of $10.00, the same to be returned upon the surrender of the plans in good condition.

The Sewerage Commission of the city of Hagerstown reserves the right to reject any and all bids.

E. LEROY HEARD,
Countersigned: Secretary.
JOHN CARMICHAEL, Chairman.

Thank You, Mr. Ferguson

"We just let contracts for approximately 25 miles of road construction yesterday and I attribute to a great extent the large number of bidders we had to the Publicity we received through the *News-Record.*"

Very truly yours,
Angus Ferguson, Ch. Engr.,
Traylor County Road Department
Grafton, W. Va.

Bids: Sept. 13.

Bridges

Providence, R. I.

Sealed Proposals for the Construction of State Bridges number 46, known as the Hope Valley Bridge in Hopkinton, number 64, known as the Usquepaug Bridge in South Kingston and number 153, known as the Silver Creek Bridge in Bristol, R. I., will be received at the office of the State Board of Public Roads, Room 21, State House, Providence, R. I., until twelve o'clock noon, on Wednesday, September 13, 1922, at which time the proposals will be publicly opened and read. Each proposal must be submitted upon a blank form furnished by the Board and accompanied by a certified check for two hundred dollars, ($200.00), made payable to the State of Rhode Island.

The contract will include the removal of the old bridges and the erection of three reinforced concrete bridges containing 163, 214 and 117 cubic yards of concrete masonry, respectively.

Plans and Specifications for this construction will be available on and after 10.00 a.m. Saturday, September 2, 1922, and may be obtained from the office of the State Board of Public Roads by making a deposit of $10.00, which will be refunded upon return of plans and specifications complete and in good condition.

These bridges must be completed on or before December 1, 1922.

ABRAM L. ATWOOD,
BENJAMIN F. ROBINSON,
FRANK COLE,
J. HENRY WOODARD,
ALTON HEAD,
State Board of Public Roads.

OFFICIAL PROPOSALS

Bids: Sept. 13.

Highway Work

Baltimore, Md.

Sealed proposals for building four sections of State Highway, as follows:

HOWARD COUNTY, Contract No. HO-23 —One section of state highway from end of Folly Quarter Road to Triadelphia Pike, a distance of 1.5 miles (concrete).

HARFORD COUNTY, Contract No. H-29 —One section of state highway from Whiteford toward Dublin, for a distance of 1.0 mile (concrete).

PRINCE GEORGE COUNTY, Contract No. P-37 — One section of state highway from Forestville toward Ritchie, for a distance of 2.0 miles (gravel).

CALVERT COUNTY, Contract No. C-14 —One section of state highway from Prince Frederick toward Hollowing Point, for a distance of 4.0 miles (gravel).

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., Standard Time, on the 13th day of September, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 25th day of August, 1922.

JOHN N. MACKALL, Chairman.
L. H. STEUART, Secretary

Bids: Sept. 29.

Furnishing and Laying Raw Water Main

Cleveland, Ohio.

Sealed proposals will be received at the office of the Commissioner of Purchases and Supplies, Room 219 City Hall, Cleveland, Ohio, until 12:00 o'clock noon, official Cleveland time, Friday, September 29, 1922, for furnishing and laying about 10,400 lineal feet of 60-inch pipe and other miscellaneous work, for the Division of Water; alternate bids will be received for either cast iron pipe or steel pipe; the bids will be opened and read in the Council Chamber immediately thereafter.

Each bid must be accompanied by a certified check on a solvent bank for six thousand ($6,000) dollars, drawn payable to the City of Cleveland, as surety for the acceptance of the contract.

Each bid must be made in accordance with the plans and specifications; copies of the plans and specifications, proposal and contract may be obtained at the office of the Commissioner of Water, Room 214 City Hall; a deposit of five ($5.00) dollars will be required for each complete set of plans and specifications; said deposit to be returnable upon return in good condition of the said plans and specifications.

No proposal will be entertained unless made on the blanks furnished by the Division of Water and delivered at the office of the Commissioner of Purchases and Supplies, previous to 12:00 o'clock noon on the day above specified.

The City reserves the right to reject any or all bids.

A. V. RUGGLES,
Commissioner of Water.

Bids: Sept. 1, 1923.

Sydney Harbour Bridge

New South Wales, Australia.

INTENDING TENDERERS are hereby notified that the time for receipt of Tenders at Sydney, New South Wales, for the construction of the Superstructure and Substructure of a Cantilever Bridge across Sydney Harbour has been extended by the New South Wales Government until 1st September, 1923.

T. A. COGHLAN,
Agent-General for New South Wales,
Australia House, London, W. C. 2.
14th July, 1922.

Bids: Sept. 26.

Sewage Disposal Plant

Fort Worth, Tex.

Sealed proposals addressed to the Hon. Mayor and Board of Commissioners, Fort Worth, Texas., will be received at the office of C. S. Snow, City Secretary, City Hall, up to 9:00 o'clock a.m., Tuesday, September 26th, 1922, at which time said proposals will be publicly opened, read and considered by the Board of Commissioners for furnishing all necessary materials, equipment and labor for constructing a certain Sewage Disposal Plant for the City of Fort Worth, Texas.

Bidders must submit with proposal a certified check in the sum of Fifteen Thousand ($15,000.00) Dollars, payable, without recourse, to the order of E. B. Cheatham, City Auditor, as a guaranty that bidder will enter into contract and execute bond and guaranty in the forms provided, within ten days after notice of award of contract to him. Proposals without certified check will not be considered. The successful bidder must furnish bond to the amount of 33⅓ per cent of the sum bid, on form attached to "form of contract" attached to specifications, from a reliable surety company approved by the Mayor and Board of Commissioners. All "lump sum" and "unit" prices must be stated in both script and figures.

The City reserves the right to reject any or all bids, and to waive formalities.

In case of ambiguity, or lack of clearness in stating prices in the bids, the City reserves the right to consider the most advantageous construction thereof, or to reject the bid. Unreasonable (or "unbalanced") unit prices will authorize the City to reject any bid. Bidders are expected to inspect the site of the work and to inform themselves regarding all local conditions.

Instructions to bidders, proposal and contract forms, specifications and plans are on file at the office of Dudley L. Lewis, City Engineer; John B. Hawley, 403 Cotton Exchange Building, Fort Worth, and E. E. Sands, Mason Building, Houston, Texas.

Copies of plans and specifications may be secured from any of the above offices after September 12th—upon deposit of $100.00, to be returned to contractor upon submission of a bona fide bid on the work, with plans and specifications, or upon returning plans and specifications, intact, prior to date of receiving bids; otherwise the deposit will be forfeited.

E. R. COCKRELL, Mayor.
J. C. LORD, Com. Water & Sewers.
D. L. LEWIS, City Engineer.
C. S. SNOW, City Secretary.
Fort Worth, Texas,
August 29th, 1922.

Bids: Sept. 11.

Sanitary Sewers

Madisonville, Ky.

Sealed proposals will be received by the Board of Public Works of the City of Madisonville, at the office of the City Clerk for constructing a system of Sanitary Sewers in and for the City of Madisonville, Ky., until one o'clock P.M., September 11, 1922, at which time they will be opened and publicly read.

The work consists of furnishing all labor, material and equipment of all kinds necessary for the construction of approximately 9.2 miles of sanitary sewers, in sizes from 8 in. to 12 in. with all necessary appurtenances complete in accordance with the plans and specifications on file, at the office of the Engineers and the City Clerk.

Each bill must be accompanied by a certified check in the amount of $3,000.00 or an acceptable bidder's bond and drawn in favor of the City Treasurer of Madisonville, Ky.

A bond in the amount of fifty (50) per cent of the contract price will be required for the faithful performance of the work.

Copies of plans and specifications may be seen at the office of the City Clerk of Madisonville, or may be obtained from the Engineers on deposit of ten ($10.00) dollars which will be returned if a bona fide bid is made.

The City reserves the right to reject and and all bids.

F. P. STUM,
Chairman Board of Public Works.
W. J. DUHN,
Secretary Board of Public Works.
HOWERTON-TIRSWAY CO.,
Engineers,
Asheville, N. C.

Bids: Sept. 18.

Excavation

Plainfield, N. J.

Bids will be received by the Common Council of the City of Plainfield, N. J., on Monday, September 18, 1922, at 8:30 p.m., (Daylight Saving Time) for about 46,000 cu.yd. of excavation from an old railroad embankment.

Time for completion, May 1, 1923.

Certified check required, $1,000.

Amount of bond required, 100 per cent of contract price.

The Common Council reserves the right to reject any or all bids, to waive defects in bids, or to accept any bid as it shall deem for the best interest of the city.

Plans and specifications may be obtained from the undersigned.

ALEXANDER W. VARS,
City Engineer.
Dated, Sept. 7, 1922.

A Representative Reports—

"It was my privilege to meet the Road Commissioners of Kalamazoo County (Mich.) in session and they wished me to convey to your staff their appreciation of the excellent results obtained through publishing proposals in *Engineering News-Record.*"

Bids: Sept. 22.

Incineration Plant or Crematory

Trenton, N. J.

The Board of Commissioners of the City of Trenton will receive, at the regular meeting of the Board, to be held in the Municipal Bldg., Trenton, N. J., on September 22, 1922, at 2 p.m., ordinance time being 1 o'clock Standard time, sealed proposals for the erection of an addition to the present crematory in accordance with plans and specifications made by A. C. Gregory, Engineer of Sewers and Water, on file in the office of the City Clerk. Copies of the plans and specifications may be seen and obtained at the office of the Engineer of Sewers and Water, Municipal Bldg., Trenton, N. J., on and after Sept. 1, 1922, upon payment of $10.00 which will be refunded upon return of the plans and specifications in good condition.

A. C. GREGORY,
Engineer of Sewers and Water.

Bids: Sept. 11.

Submerged Intake Crib

Monroe, Mich.

Sealed proposals will be received by the City Clerk of Monroe, Mich., up to 7:30 o'clock p.m., eastern standard time, of the 11th day of September, 1922, for the construction and placing of a new submerged water intake crib to be located in Lake Erie near the existing waterworks intake crib.

The crib will be approximately 28 feet square, constructed of timber, floated to the site, sunk into position, and anchored by concrete deposited under water.

The plans and specifications under which the work is to be done may be examined at the office of the City Clerk, Monroe, Michigan, or at the office of Hoad, Decker, Shoecraft and Drury, Consulting Engineers, Ann Arbor, Michigan. Copies of the plans and specifications may be obtained by making a deposit of five dollars which will be refunded upon their return in good condition or their use in a submitted proposal.

A certified check for a sum not less than five per cent of the amount of the proposal will be required with each proposal.

The right to accept any proposal, to reject any or all proposals, and to waive defects in proposals is reserved by the City.

J. H. GILMORE, Mayor.
F. M. KRESSBACH, City Clerk.
HOAD, DECKER, SHOECRAFT & DRURY,
Consulting Engineers, Ann Arbor, Mich.

Bids:: Sept. 25.

Spavinaw Water Supply Project

Tulsa, Okla.

Sealed proposals for the construction of the major portion of the Spavinaw Water Supply Project for the City of Tulsa, Oklahoma, will be received by the Water Commission of the City of Tulsa, and may be filed at the office of the City Auditor, City Hall, Tulsa, Oklahoma, until 3:00 p.m. Monday, September 25th, 1922, and will be opened and publicly read immediately thereafter at a regular meeting of the Water Commission of the City of Tulsa at 3:00 p.m., Monday, September 25, 1922. Proposals will be received on the following contracts:

Contract No. 1 Telephone Line.
Contract No. 2 Clearing Site of Spavinaw Lake.
Contract N. 3 Spavinaw Dam.
Contract No. 4 60 in. Reinforced Concrete Pipe.
Contract No. 5 Tunnel and Approaches.
Contract No. 6 54 in. Reinforced Concrete Pipe.
Contract No. 7 Mohawk Reservoir.
Contract No. 8 Furnishing Cast Iron or Steel Pipe and Specials.
Contract No. 9 Furnishing Gate Valves.
Contract No. 10 Laying Cast Iron or Steel Pipe.
Contract No. 11 High Pressure Reservoir.

After the reading of the bids on these contracts they will be immediately considered, but in no event will any contract or contracts be awarded earlier than forty-eight (48) hours thereafter.

The principal quantities are approximately as follows:

DAM: Concrete, 79,000 cubic yards.
Earth embankment, 182,000 cubic yards.
PIPE: 28 miles of 60 in. and 25 miles of 54 in. pre-cast reinforced concrete pipe.
Earth Excavation in trench, 310,000 cubic yards.
Rock Excavation in trench, 26,000 cubic yards.
TUNNEL: 7,000 ft. 84 in. Tunnel.
3,050 ft. 84 in. monolithic concrete conduit.
MOHAWK RESERVOIR: 300,000 cubic yards earth embankment.
REINFORCED CONCRETE HIGH PRESSURE RESERVOIR OR RESERVOIRS: 10,000,000 gal. aggregate capacity; 10,000 ft. 36 in. Cast Iron or Steel Pipe; 6,000 ft. 30 in. Cast Iron or Steel Pipe; 8,000 ft. 20 in. Cast Iron Pipe. Specials and Valves.

Each proposal must be accompanied by a certified check on any reputable bank or trust company, payable without reserve to the City of Tulsa, Oklahoma, for five per cent (5%) of the amount of the bid.

All proposals must be made on blank forms furnished by the City of Tulsa and in accordance with the "Requirements for Bidding and Instructions to Bidders."

Proposals may be tendered on one or more contracts or on all of the contracts, but any proposal must include all items under the contract or contracts for which bid is tendered.

Plans, Specifications and Requirements for Bidding and Instructions to Bidders are on file at the Office of the Water Commission at the City Hall and may be seen at the office of Trammell and Holway, Engineers on the Spavinaw Water Supply Project, 329 Kennedy Building, Tulsa, Oklahoma, or at the office of Dabney H. Maury, Consulting Engineer for the said Project, 1445 Monadnock Block, Chicago, Illinois. Complete plans and specifications will be furnished by the Engineers or by the Consulting Engineer, upon the deposit of $50.00 by check payable to Trammell and Holway. Upon return of the plans and specifications in good condition within a reasonable time after the awarding of the contracts, $30.00 will be refunded. Proportionate deposit and refund may be arranged for if bidder desires only parts of the plans.

The Water Commission reserves the right to reject any bid or bids, or all bids, and to waive any informalities.

WATER COMMISSION OF THE
CITY OF TULSA.
A. J. RUDD, Chairman,
G. R. McCULLOUGH,
C. S. AVERY,
H. L. STANDEVEN,
A. L. FARMER,
ROY GARBETT,
City Auditor.
TRAMMELL and HOLWAY, Engineers,
329 Kennedy Building,
Tulsa, Oklahoma.
DABNEY H. MAURY,
Consulting Engineer,
Chicago, Ill.

Bids: Sept. 25.

Sewage Pumping Equipment

Hackensack, N. J.

The Hackensack Improvement Commission, the governing body of the City of Hackensack, Bergen County, New Jersey, requests proposals for the following, to wit:

Contract No. 3—For furnishing pumping equipment, consisting of A. B. Wood patent trash pumps; motors and switchboards to be installed in the structures to be built for the City of Hackensack under another contract, which contract is known as Contract No. 1.

The foregoing equipment is more completely described and set forth in the plans and specifications on file with Lemuel Lozier, Engineer of the Commission, and with the clerk of the Commission.

The plans and specifications, information for bidders, forms of proposals and contracts, forms of bonds required and other information can be seen at the office of Lemuel Lozier, Engineer of the Commission, Room 3, Bank Building, Main and Mercer Streets, Hackensack, New Jersey; copies of such plans and specifications may be obtained by bidders on making a deposit of $100.00, which deposit will be refunded upon the return of the plans and specifications in good condition.

The contract will be let to the lowest responsible bidder, subject to the right of the Commission to reject any and all bids.

All bids must be made on the form of proposal to be obtained from the Engineer of the Commission, and must give the prices both in writing and in figures, and must give such other information and be signed in the manner indicated on the form of proposal. Each bid submitted for Contract No. 3 must be accompanied by a certified check for $1,000, payable to the "Hackensack Improvement Commission."

Checks of the unsuccessful bidders will be returned immediately upon the award of the contract. The check of the successful bidder will be returned to the bidder upon the execution of the contract and the furnishing of the bonds required, within ten days after the date of the award thereof, or within such extended time as may be determined by the Commission. In case of failure to execute the required contract, and furnish the required bonds within such time, such check shall be forfeited to the Hackensack Improvement Commission as liquidated damages.

The proposals herein required for Contract 3 shall be presented to the Hackensack Improvement Commission, at the Municipal Building, 346 State Street, Hackensack, Bergen County, New Jersey, on Monday, the twenty-fifth (25) day of September, 1922, at 8 P.M. daylight saving time, 7 P.M. standard time.

No bids will be received prior to said hour and none thereafter. The proposals shall be submitted in sealed envelopes or packages.

The proposals shall be endorsed as follows:

"Proposals for pumping equipment Contract No. 3."

THE HACKENSACK IMPROVEMENT
COMMISSION,
By SPENCER D. BALDWIN, Mayor.
WILLIAM SCHAFF, Clerk.

Bids: Sept. 13.

Bulkhead

Chicago, Ill.

SEALED PROPOSALS will be received by the South Park Commissioners, 57th Street and Cottage Grove Avenue, Chicago, Illinois, until 12 o'clock noon, September 13, 1922, for the construction of a bulkhead paralleling the shore line of Lake Michigan from opposite 29th Street to opposite 39th Street, a distance of approximately 7200 lineal feet.

PLANS AND SPECIFICATIONS may be obtained without cost to responsible bidders by application to the South Park Commissioners' office as above. Each bid must be accompanied by cash or certified check amounting to five (5%) per cent of the estimated total of bid, and the bidder to whom the contract is awarded will be required to execute with the contract a surety company bond in the sum of 25 per cent of the estimated amount of the contract.

J. F. NEIL,
Secretary.

Bids: Sept. 14.

Bridge Work

Stillwater, N. Y.

Bids will be received, for the encasing by concrete of five piers under the Stillwater Bridge crossing the Hudson River at Stillwater, at the office of the Town Clerk, Mr. H. C. Pitney, at Stillwater, N. Y., on **Thursday, September 14, 1922, at** two o'clock p.m., (new time), at which time they will be publicly opened and read. The right is reserved to reject any or all bids.

Necessity demands the immediate repairs to two of the piers. Time will be allowed for the balance of work, governed by the weather and river conditions.

Plans and specifications may be had at the **office of Mr. H. C. Pitney, Town Clerk,** at Stillwater, N. Y. A certified check for 5% of the amount of the bid will be required to accompany each proposal. Checks to be made payable to Emmor J. Smith.

EMMOR J. SMITH,
Town Supt. of Schaghticoke.
REUBEN BRITTEN,
Town Supt. of Stillwater.

Mr. Potter Knows—

(Alexander Potter, C. E.)
(50 Church St., New York)

He recently received 63 requests for plans and specifications on a New Jersey water supply system.

Bids were advertised in the Official Proposal Columns.

"This speaks well for *Engineering News-Record* as an advertising medium," he wrote us.

Bids: Oct. 3.

Water Works System and Sanitary Sewer System

Haines City, Fla.

Sealed proposals for furnishing material and constructing a Water Works System and a Sanitary Sewer System for the Town of Haines City, Fla., will be received by the Mayor and Council at the City Hall, until 2 P.M., October 3rd, 1922.

The Water Works System will consist of approximately 4 miles of 4 in., 6 in., 8 in. and 10 in. cast iron pipe, with specials, valves and hydrants, a clear water collecting well, pump station and equipment, and a 100,000 gallon elevated tank.

The Sewer System will consist of approximately 1.7 miles of 8 in., 10 in. and 15 in. vitrified pipe, with manholes, flush tanks, and appurtenances, and a settling tank and tile under-drain system.

Each proposal must be accompanied by a certified check, payable to the Town of Haines City, Florida, to an amount equal to five (5) per cent of the bid, as a guarantee that the contract will be entered into if awarded. A bond of one hundred per cent (100%) of the contract price will be required. Payments will be made on monthly estimates.

Plans and specifications are on file in the office of the City Clerk, at Haines City, Florida, and with Paul H. Norcross, Consulting Engineer, 1404 Candler Building, Atlanta, Georgia.

Bidders may obtain copies from the Engineer by enclosing certified check for twenty-five ($25.00) dollars, payable to the Town of Haines City, Florida. If blue prints are desired they may be had at the cost of printing. If the plans, specifications and blue prints are returned within thirty days after opening bids, the check for twenty-five dollars will be returned.

R. O. PHILPOT,
President City Council.
JED R. YALE,
City Clerk.

PAUL H. NORCROSS,
Consulting Engineer,
1404 Candler Building,
Atlanta, Georgia.

Bids: Sept. 21.

Sewer Construction

Letting No. 4

Louisville, Ky.

Sealed proposals will be received by the Commissioners of Sewerage of Louisville until 12 o'clock noon, September 21, 1922, for the following sewer construction in Louisville, Ky., according to drawings and specifications now on file in the office of the Commission:

This letting embraces Bardstown Road District Trunk Sewer and Drain, Sections B and C and the Spring Drive—West—Sewer and Drain included in a single contract.

Approximate quantities are as follows:

The Drains: 790 lin.ft. of 87 inch; 625 lin.ft. of 63 inch; 320 lin.ft. of 60 inch; 375 lin.ft. of 21 inch; 285 lin.ft. of 18 inch; 420 lin.ft. of 12 inch.

The Sewers: 790 lin.ft. of 18 inch; 950 lin.ft. of 15 inch; 1,085 lin.ft. of 8 inch.

And two reinforced concrete junction chambers.

Proposals are invited for alternate types of sewer barrel construction.

Drawings, form of proposal, contract and specifications may be obtained from the office of the Commission upon the deposit of Ten Dollars ($10.00) to secure the return of same in good condition before October 7, 1922.

Each proposal must be inclosed in a sealed envelope addressed to the Commissioners of Sewerage, 417 West Main Street, Louisville, Ky., and accompanied by a certified check drawn upon a State or National Bank or a trust company established in the city of Louisville (or the city of New York) for an amount not less than seven (7) per cent of the total amount of the accompanying proposal payable to the Commissioners of Sewerage of Louisville or the bond executed as set forth in the information for bidders.

The Commission reserves the right to reject any or all proposals.

COMMISSIONERS OF SEWERAGE OF
LOUISVILLE.
By OSCAR FENLEY,
Vice Chairman.
P. H. HOGE, JR.,
Sect. & Treas.

J. B. F. BREED,
Chief Engineer.

Bids: Oct. 10.

Sewage Pumping Station and Grit Chamber

Syracuse, N. Y.

Sealed proposals will be received until 2 o'clock p.m., standard time, October 10, 1922, at the office of the Syracuse Intercepting Sewer Board, 104 City Hall, Syracuse, N. Y., for the machinery and equipment for the Sewage Pumping Station and Grit Chamber now in course of construction at the Sewage Treatment Works of the City of Syracuse.

Equipment included in the contract are the switchboard and control mechanisms, four 24-inch horizontal shaft centrifugal pumps direct-connected to 75 H.P. variable speed A.C. motors, auxiliary vacuum, priming pumps and sump pump, a 10 K.W. motor-generator set, cast iron suction and discharge piping with four 24-inch hydraulically operated gate valves, a 54-inch hydraulically operated sluice gate, three 48-inch by 51-inch electrically operated sluice gates, a 7½ ton hand operated traveling crane, with permission to use same during erection, and a grit cleaning mechanism consisting of tramrail with electrically operated hoist and ½ cubic yard clam-shell bucket; and all necessary wiring and piping connections. All equipment will be erected upon concrete foundations provided by the Board under another contract.

Proposals must be made on blanks to be furnished upon application and must be accompanied by a New York draft or a certified check for $6,000, which is to be deposited therewith as guarantee that the successful bidder will execute the contract within five days after its award.

Drawings, specifications and form of proposals and contracts are on file in the offices of the Board. Copies thereof may be obtained by depositing $10 to insure their return in acceptable condition on or before November 1, 1922.

HARRY J. HAMLIN,
Secretary.

OFFICIAL PROPOSALS

Bids: Sept. 23.

Sewers

Bloomington, Ill.

Sealed bids will be received by the Trustees of the Bloomington and Normal Sanitary District, at 404 Unity Building, Bloomington, Illinois, up to 10 o'clock a.m., September 23, 1922, for the construction of the following work of the District.

Division Street Sewer Extension, consisting of:

820 feet of 18 inch Vitrified Pipe Sewer.
12 feet of 18 inch Cast Iron Pipe Sewer.
2 Manholes.
1 Overflow Chamber.
1 Headwall.

And the Valley Sewer Overflow Chamber, requiring 37 cubic yards of reinforced concrete.

All bids must be on forms prescribed by the Trustees, and bidding blanks may be obtained from Taylor & Woltmann, 428 Unity Building, Bloomington, Illinois, engineers for the District.

Plans, profiles and specifications for the work may be obtained from the engineers.

All bids must be accompanied by a check for 10 per cent of the amount of the bid certified by a responsible bank, payable to John W. Harber, president of the Board of Trustees.

The Trustees reserve the right to reject any and all bids.

Dated Bloomington, Illinois, August 22, 1922.

JOHN W. HARBER,
FRED D. BARBER,
JOHN J. CONDON,
Trustees, Bloomington and Normal Sanitary District.

Bids: Sept. 22.

Drainage Work

Wynne, Ark.

Bids will be received by the Board of Commissioners of Drainage District No. 3, of Cross County, Arkansas, at the Court House in Wynne, on Friday, September 22nd, 1922, for the construction of about fifty-three miles of ditches ranging in size from six to thirty feet in bottom width and amounting to about 1,438,000 cubic yards of earth excavation; also the clearing of about 674 acres of right of way and the laying of about 3,000 lineal feet of pipe.

The Commissioners will reserve the right to receive auction or sealed bids, or both, and to reject any or all bids.

Bidders' bond or a certified check for Five Thousand Dollars will be required of all bidders; and a satisfactory surety bond amounting to 50% of the contract will be required of the successful bidder.

A map of the district showing the location of the different ditches and elevations and a copy of the contract and specifications may be had upon the payment of $2.00 to the engineer, or they may be seen at the County Clerk's Office in Wynne. Bidders so desiring will be accompanied over the District on Wednesday and Thursday, September 20th and 21st.

W. S. NEWSOM, Engineer,
Wynne, Ark.

OFFICIAL PROPOSALS

Bids: Sept. 20.

Concrete Arch Bridge

Norwalk, Conn.

Sealed proposals will be received by the Mayor of the City of Norwalk, South Norwalk, Connecticut, at 7 o'clock P.M. (daylight saving time) on September 20, 1922, for the removal of steel work and masonry jack arches on the south side of the present bridge and for the construction of a reinforced concrete arch extension, 60 ft. span and about 23 ft. wide, at the Wall Street Bridge in Norwalk, Connecticut.

Plans, specifications and proposal blanks for this work may be seen at the office of the City Engineer, City Hall, South Norwalk, Connecticut, or they may be obtained from the City Clerk, South Norwalk, Connecticut, upon the payment of $5.00, which sum will be refunded to all parties submitting a proposal for this work.

Each bid shall be accompanied by a property certified check payable to the order of the Treasurer, City of Norwalk, upon a bank satisfactory to the Mayor and Council, for the sum of $2,500.00.

All proposals must be marked "Proposal for the construction of the southerly extension to Wall Street Bridge."

The City reserves the right to reject any or all bids.

CALVIN L. BARTON,
Mayor.

Bids: Sept. 28.

Laboratory Building

Ithaca, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work, Addition to Laboratory Building (South Wing—James Law Hall), at the New York State Veterinary College, Cornell University, Ithaca, N. Y., will be received by Mr. C. D. Bostwick, Comptroller, Cornell University, Ithaca, N. Y., until 12 o'clock noon, (Standard Time), on Thursday, September 28, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3472, 3473, 3474 and 3475. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the office of Mr. C. D. Bostwick, Comptroller, Cornell University, Ithaca, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: August 28, 1922.

OFFICIAL PROPOSALS

Bids: Sept. 20.

Outfall Sewer

Manchester, N. H.

Sealed proposals, on blank forms attached to the specifications and furnished by the Surveyor of the Department of Highways, Manchester, N. H., addressed to the Surveyor, Department of Highways, Manchester, N. H., will be received until 4 o'clock P.M. (Daylight Saving Time), September 20, 1922, for furnishing all material and labor for the construction of an Outfall Sewer, together with connections, dry weather outfall, head wall, etc., as shown upon the plans and specified in the specifications adopted by the City of Manchester, through the Surveyor.

The bids must be accompanied by a certified check to the amount of 5% of the total amount of the bid, made payable to the Treasurer of the City of Manchester and said check must be submitted and inclosed with the Sealed Proposal.

Contract, Drawings, Specifications and other data are on file for inspection at the Surveyor's Office, City Hall, Manchester, N. H., and specifications and plans can be had by making a payment of $10 to the Surveyor.

The right is reserved to reject any and all bids and to waive any informality in the bids.

E. R. CONANT, Surveyor,
Department of Highways,
Manchester, N. H.
Manchester, N. H., August 30, 1922.

Bids: Sept. 19.

Six Sections of Highway Work

Baltimore, Md.

SEALED PROPOSALS for building six sections of State Highway, as follows:

Carroll County—Contract CL-31—One section of state highway from Westminster toward Warfieldsburg for a distance off 2.0 miles—(Concrete).

Baltimore City—Contract BC-42—One section of state highway along Columbia Ave. from Monroe Street to Gwynn Falls, for a distance of 0.42 mile—(Sheet Asphalt).

Anne Arundel County—Contract AA-27—One section of state highway along the Southern Maryland Blvd. from Benfield south for a distance of 4.0 miles—(Concrete).

Prince George County—Contract P-39—One section of state highway along the Southern Maryland Blvd. from Marlboro south for a distance of 4.0 miles—(Concrete).

St. Marys County—Contract SM-21—One section of state highway from the state road one-half mile north of Leonardtown toward Compton, a distance of 1.0 mile—(Gravel).

Dorchester County—Contract D-28—One section of state highway from Rhodesdale toward Vienna, for a distance of 1.0 mile—(Concrete).

Will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 19th day of September, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans, will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 31st day of August, 1922.

JOHN N. MACKALL,
Chairman.
L. H. STEUART, Secretary.

To Make Each Part As Strong As The Rest

¶That was the secret of the old carriage maker's work of "building a wonderful, one-horse chaise that wouldn't wear out till judgment day"—¶That plan is the keynote of Swart specialized Contract Bond Service. ¶Each step from the securing of preliminary information to the preparation of the case and presentation of it to the underwriter is handled as though the whole deal hinged on a single point. ¶That is why Swart Service Really Serves. ¶That is why Swart Service would be an economical buy at twice the standard rates. ¶That is why the ordinary type of service is twice as expensive as Swart Service. ¶That is why with Swart Service at your service at the cost of the ordinary sort it is the best buy for you. ¶Swart is ready to tell you more. Are you ready to listen?

Swart Service Really Serves

HARMON V. SWART

Contract Bonds *Compensation Insurance*

92 William Street, New York

CONTRACT BONDS FOR RESPONSIBLE CONTRACTORS

Expert investigation by the Ætna's engineering department is often the deciding factor in issuing a contract bond.

ÆTNA CASUALTY AND SURETY COMPANY

HARTFORD, CONN. AGENTS EVERYWHERE

OFFICIAL PROPOSALS

Bids: Sept. 11.

Street Improvement

White Plains, N. Y.

Sealed bids or proposals for the improvement of Palmer Avenue from Central Avenue westerly to Miles Square Road, a distance of 0.57 miles in the City of Yonkers, Westchester County, New York, will be received at the office of the Clerk of the Board of Supervisors, Court House, White Plains, N. Y., until 10 a.m., September 11, 1922 (Standard Time).

Specifications, proposal sheets and all information relative to same may be procured at the office of the County Superintendent of Highways, Court House, White Plains, N. Y., upon making a deposit of Three Dollars ($3.00).

BOARD OF SUPERVISORS.
FRED L. MERRITT, Clerk.
August 26, 1922.

Bids: Oct. 10.

Steam Turbine and Accessories

New Orleans, La.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans up to 12 o'clock, noon, Tuesday, October 10th, 1922, for furnishing one 6,000 kw. STEAM turbine and accessories.

Specifications and blank forms of proposals may be obtained at Room 303, No. 526 Carondelet Street, New Orleans.

The right is reserved to reject any or all bids.

A. G. MOFFAT,
Secretary.

GEO. G. EARL,
General Superintendent.
Aug. 10, 1922.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, Buffalo, N. Y.—Sealed proposals will be received here until 11 a.m. (Eastern Standard Time), September 28, 1922, and then opened, for dredging and rock excavation in Sandusky Harbor, Ohio. Further information on application.

U. S. GOVERNMENT

PROPOSALS FOR STEEL OIL BARGES.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9:00 a.m., Sept. 15, 1922, and then opened, for construction and delivery of two 4,000-barrel steel oil barges in the Mississippi River, at New Orleans, La. Further information on application.

U. S. ENGINEER OFFICE, HONOLULU, T. H., August 10, 1922.—Sealed proposals will be received here until 11 a.m., October 31, 1922, and then opened, for dredging in Honolulu Harbor, T. H. Further information on application here or to U. S. Engineer Office, 401 Customhouse, San Francisco, Calif.

U. S. ENGINEER OFFICE, SAVANNAH, Ga.—Sealed proposals will be received here until 12 noon, September 26, 1922, and then opened, for repairing training walls in Savannah Harbor, Ga. Further information on application.

U. S. ENGINEER OFFICE, Providence, R. I. Sealed Proposals will be received here until 11 o'clock a.m., standard eastern time, September 15, 1922, and then opened, for repairing of east jetty at entrance to Nantucket Harbor, Mass. Further information on application.

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y. Sealed proposals will be received here until 12 m., October 5, 1922, and then opened, for dredging and rock removal in East River, N. Y. Further information on application.

U. S. ENGINEER OFFICE, MOBILE, ALA.—Sealed proposals will be received here until 11 o'clock a.m., Oct. 10, 1922, and then opened, for the construction of one 100-ft. Diesel-Electric towboat. Further information on application.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, FLORENCE, ALA.—Sealed proposals will be received here until 11 a.m., September 18, 1922, and then opened, for furnishing and delivering livery of two steel barges. Further information on application.

U. S. ENGINEER OFFICE, JACKSONVILLE, FLA.—Sealed proposals will be received here until 12 m., Sept. 21, 1922, and then opened, for jetty repairs at the entrance to St. Johns River, Fla. Further information on application.

U. S. ENGINEER OFFICE, FLORENCE, ALA.—Sealed proposals will be received here until 11 a.m., September 18, 1922, and then opened, for the construction and de- one hydraulic turbine of 1,000 horsepower capacity, with governor. Further information on application.

TREASURY DEPARTMENT, SUPERVISING ARCHITECT'S OFFICE, WASHINGTON, D. C. Sept. 1, 1922. Sealed proposals will be opened in this office at 3 p.m., September 29, 1922, for the construction of the United States Post Office at Eureka, Utah. Drawings and specifications may be obtained from the Custodian of the site at Eureka, Utah, or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., **August 31, 1922.** Sealed proposals will be opened in this office at 3 p.m., September 28, 1922, for Extension, Remodeling, etc., of the United States Post Office and Court House at Alexandria, La. Drawings and specifications may be obtained from the Custodian at Alexandria, La., or at this office in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGR. OFFICE, WILMINGTON, DEL.—Sealed proposals will be received here until 11 A.M., October 6, 1922, and then opened, for dredging Tuckerton Creek, N. J. Further information on application.

Engineering News-Record

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The Dominant Proposal Medium

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Sept. 18	East Grand Forks, Minn.	Sept. 7
Sept. 18	Steubenville, O.	Sept. 7
Sept. 18	North Muskegon (Muskegon P. O.), Mich.	Sept. 14
Sept. 19	New York, N. Y.	Sept. 14
Sept. 22	Duluth, Minn.	Sept. 7
Sept. 23	Columbus, O.	Sept. 14
Sept. 25	Tulsa, Okla.	Aug. 24
	Adv. Aug. 24 to Sept. 14.	
Sept. 28	Poughkeepsie, N. Y.	Sept. 14
	Adv. Sept. 14.	
Sept. 29	Cleveland, O.	Sept. 7
Oct. 1	Ponchatoula, La.	Aug. 3
Oct. 3	Haines City, Fla.	Sept. 7
	Adv. Sept. 7 and 14.	
Oct. 5	Marshall, Ill.	Sept. 14
Oct. 10	Greensboro, N. C.	Sept. 14
	Adv. Sept. 14.	
Oct. 19	Newark, N. J.	Sept. 7
	Adv. Sept. 14.	

SEWERS

Bids Close		See Eng. News-Record
Sept. 15	Asbury Park, N. J.	Sept. 14
Sept. 19	Newark, N. J.	Aug. 24
Sept. 19	Hagerstown, Md.	Sept. 7
Sept. 20	Manchester N. H.	Sept. 7
Sept. 20	Denver, Colo.	Sept. 7
Sept. 20	Rye, N. Y.	Sept. 14
	Adv. Sept. 14.	
Sept. 21	Jacksonville, Fla.	Aug. 31
Sept. 21	Louisville, Ky.	Sept. 7
Sept. 23	Bloomington, Ill.	Aug. 31
Sept. 23	Columbus, O.	Sept. 14
Sept. 25	Hackensack, N. J.	Aug. 31
Sept. 25	Ellsworth, Wis.	Sept. 14
	Adv. Sept. 14.	
Sept. 26	Ft. Worth, Tex.	Sept. 7
	Adv. Sept. 7 and 14.	
Sept. 28	Lake Forest, Ill.	Aug. 31
Sept. 29	Chesterton, Ind.	Sept. 14
	Adv. Sept. 14.	
Oct. 3	Toronto, Ont.	Sept. 7
Oct. 10	Syracuse, N. Y.	Sept. 7
	Adv. Sept. 7 and 14.	

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Sept. 22	Trenton, N. J.	Sept. 7

BRIDGES

Bids Close		See Eng. News-Record
Sept. 18	Ft. Worth, Tex.	Sept. 7
Sept. 18	Cambridge, Mass.	Sept. 7
Sept. 18	Indiana	Sept. 7
Sept. 20	South Norwalk, Conn.	Sept. 7
Sept. 20	Lowell, Mass.	Sept. 14
	Adv. Sept. 14.	
Sept. 21	Appleton, Wis.	Sept. 14
Sept. 26	Alabama	Aug. 31
Sept. 26	Toledo, O.	Sept. 7
	Adv. Sept. 7 and 14.	
Sept. 29	Los Angeles, Calif.	Sept. 14
Oct. 1	Siam	July 13
Oct. 6	Seattle, Wash.	Sept. 7
Oct. 16	Sacramento, Cal.	Sept. 14
Oct. 31	Sydney, Australia	Jan. 12
Sept. 1, 1923,	Sydney, New South Wales, Australia	Aug. 3

EXCAVATION, DREDGING, IRRIGATION

Bids Close		See Eng. News-Record
Sept. 18	Plainfield, N. J.	Sept. 7
Sept. 18	New York, N. Y.	Sept. 14
Sept. 19	Ft. Lauderdale, Fla.	Sept. 14
Sept. 20	Nevada, Ia.	Sept. 14
Sept. 21	St. James, Minn.	Sept. 7
Sept. 21	Ravenwood, Mo.	Sept. 14
Sept. 22	Wynne, Ark.	Sept. 7
Sept. 22	Merced, Calif.	Sept. 14
Sept. 27	Delaware	Sept. 14
	Adv. Sept. 14.	

STREETS AND ROADS

Bids Close		See Eng. News-Record
Sept. 14	New York, N. Y.	Sept. 14
Sept. 16	Marion, Ind.	Sept. 14
Sept. 16	Noblesville, Ind.	Sept. 14
Sept. 18	Steubenville, O.	Sept. 7
Sept. 18	Charleston, Miss.	Aug. 24
Sept. 18	Minnesota	Aug. 31
Sept. 18	New Haven, Conn.	Sept. 14
Sept. 19	New Orleans, La.	July 6
Sept. 19	Quebec	Sept. 7
Sept. 19	Woodbury, N. J.	Sept. 7
	Adv. Sept. 7 and 14.	
Sept. 19	Maryland	Sept. 7
	Adv. Sept. 7 and 14.	
Sept. 19	Virginia	Sept. 7
Sept. 19	Michigan	Sept. 14
Sept. 19	Wyoming	Sept. 14
Sept. 19	Munhall, Pa.	Sept. 14
Sept. 19	York, S. C.	Sept. 14
Sept. 20	Denver, Colo.	Sept. 7
Sept. 20	New York	Sept. 7
	Adv, Sept. 7 and 14.	
Sept. 20	Michigan	Sept. 14
Sept. 20	Maple Heights (Bedford P. O.), O.	Sept. 14
Sept. 21	West Roxbury (Boston P. O.), Mass.	Sept. 14
Sept. 22	Duluth, Minn.	Sept. 7
Sept. 22	Missouri	Sept. 14
Sept. 22	Vermont	Sept. 14
	Adv. Sept. 14.	
Sept. 22	Winters, Tex.	Sept. 14
Sept. 25	California	Sept. 7
Sept. 25	Ellsworth, Wis.	Sept. 14
Sept. 25	Lindsay, Calif.	Sept. 7
Sept. 26	Alabama	Aug. 31
Sept. 26	Connecticut	Sept. 14
	Adv. Sept. 14.	
Sept. 26	Colorado	Sept. 14
Sept. 27	Wellington, Kan.	Sept. 7
Sept. 27	New Jersey	Sept. 14
	Adv. Sept. 14.	
Sept. 27	Baltimore, Md.	Sept. 14
Sept. 27	Michigan	Sept. 14
Sept. 28	New Mexico	Sept. 7
Sept. 29	Tulsa, Okla.	Aug. 24
Sept. 29	Iola, Kan.	Sept. 7
Oct. 2	Noroton Heights, Conn.	Sept. 14
	Adv. Sept. 14.	
Oct. 3	Anderson, S. C.	Aug. 31
Oct. 3	Washington	Aug. 31
Oct. 6	Wellington, Kan.	Sept. 14
Oct. 6	Alabama	Sept. 14
Oct. 13	Iola, Kan.	Sept. 14

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Sept. 19	Detroit, Mich.	Sept. 7
Sept. 25	Springfield, Mo.	Sept. 14
Sept. 26	Corinth, Miss.	Sept. 14
	Adv. Sept. 14.	
Oct. 1	Williamsport, Pa.	Sept. 14
Oct. 5	Marshall, Ill.	Sept. 14

BUILDINGS

Bids Close		See Eng. News-Record
Sept. 18	Glens Falls, N. Y.	Aug. 31
Sept. 18	Cleveland, O.	Aug 31
Sept. 18	Saratoga Springs, N. Y.	Aug. 31
Sept. 18	San Antonio, Tex.	Sept. 7
Sept. 18	St. Paul, Minn.	Sept. 14
Sept. 18	Albany, N. Y.	Sept. 14
Sept. 19	Detroit, Mich.	Sept. 7
Sept. 19	Pittsburgh, Pa.	Sept. 14
Sept. 20	Dearborn, Mich.	Aug. 31
Sept. 20	Wash., D. C.	Sept 14
Sept. 22	Brooklyn, N. Y.	Sept. 14
Sept. 23	Port Huron, Mich.	Sept. 7
Sept. 23	Findlay, O.	Sept. 14
Sept. 25	Clark Summit, Pa.	Sept. 14
Sept. 26	Glens Falls, N. Y.	Sept. 14
Sept. 27	Wash., D. C.	Sept. 7
Sept. 28	Ithaca, N. Y.	Sept. 7
	Adv. Sept. 7 and 14.	
Sept. 30	Duluth, Minn.	July 13
Oct. 1	Duluth, Minn.	Aug. 3
Oct. 2	Cedar Rapids, Ia.	Sept. 14
Oct. 3	Sacramento, Calif.	Sept. 7
Oct. 6	Brookville, O.	Sept. 14

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Sept. 15	Buildings—Broadview (Bellewood P. O.), Ill.	Sept. 14
Sept. 18	Barges—Florence, Ala.	Aug. 24
	Adv. Aug. 24 to Sept. 14.	
Sept. 18	Turbine—Florence, Ala.	Aug. 24
	Adv. Aug. 24 to Sept. 14.	
Sept. 20	Chimney — Quantanamo, Cuba,	Sept. 14
Sept. 20	Quarters — Langley Field, Va.	Aug. 31
Sept. 21	Jetty Repairs—Jacksonville, Fla.	Aug. 24
	Adv. Aug. 24 to Sept. 14.	
Sept. 22	Cast Iron Mains, etc. — Fitzsimons, Colo.	Aug. 31
Sept. 26	Repairing Walls—Savannah, Ga.	Aug. 31
	Adv. Aug. 31 to Sept. 14.	
Sept. 27	Quarters — Ft. Bayard, N. M.	Aug. 31
Sept. 27	Portland Cement—Memphis, Tenn.	Sept. 14
	Adv. Sept. 14.	
Sept. 28	Dredging—Buffalo, N. Y.	Aug. 31
	Adv. Aug. 31 to Sept. 14.	
Sept. 28	Extension, etc.—Alexandria, La.	Sept. 7
Sept. 29	Post Office—Eureka, Utah	Sept. 7
Oct. 4	Telephone System—Tuskegee, Ala.	Sept. 14
	Adv. Sept. 14.	
Oct. 5	Dredging — New York, N. Y.	Sept. 7
	Adv. Sept. 7 and 14.	
Oct. 6	Dredging — Wilmington, Del.	Sept. 7
	Adv. Sept. 7 and 14.	
Oct. 6	Post Office — Charlestown, W. Va.	Sept. 14
	Adv. Sept. 14.	
Oct. 10	Towboat—Mobile, Ala.	Sept. 14
	Adv. Sept. 7 and 14.	
Oct. 16	Earthwork—Yuma, Ariz.	Sept. 14
	Adv. Sept. 14.	
Oct. 31	Dredging—Honolulu, H. T.	Aug. 31
	Adv. Aug. 31 to Sept. 14.	

MISCELLANEOUS

Bids Close		See Eng. News-Record
Sept. 21	Pipe, etc. — New York, N. Y.	Sept. 14
Sept. 21	Clam Shell Bucket—New York, N. Y.	Sept. 14
Sept. 22	Heating and Ventilating Apparatus—Brooklyn, N. Y.	Sept. 14
Sept. 22	Heating and Ventilating Apparatus, etc. — Elmhurst, (Flushing, P. O.), N. Y.	Sept. 14
Sept. 23	Crane—Aberdeen, Wash.	Sept. 7
	Adv. Sept. 7 and 14.	
Sept. 27	Snow Plow—Delaware	Sept. 14
	Adv. Sept. 14.	
Oct. 2	Pier—Vancouver, B. C.	Sept. 7
Oct. 10	Steam Turbine, etc.—New Orleans, La.	Aug. 17
	Adv. Aug. 17 to Sept. 14.	
Nov. 4	Transformers, etc. — Melbourne, Australia	Aug. 17

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

La., Alexandria—Having plans prepared and soon takes bids for mains and equipment for water reservoir. $95,000.

Tenn., Memphis—Bd. Comrs. of Artesian Water Dept. soon takes bids rein.-con. reservoir and rein.-con. substructures of pumping station, iron removal plant and aerator, designated as Contr. 6, incl., 80,000 cu.yd. excav., 15,000 cu.yd. concrete, 700 ton reinforcing, 220 ton c.i. pipe and specials, seventy-five 4-48 in. valves and sluice gates, five 30-42 in. Venturi meters, 8 filter rate controllers. Fuller & McClintock, 421 Produce Exch. Bldg., Kansas City, Mo., engrs.

O., Greenville—Water Dept. plans purification and softening plant. $150,000. C. D. Hankins, Serv. Dir.

Wis., Sturgeon Bay—Voted $26,000 bonds for waterworks plant for new drinking water system, incl. rein.-con. reservoir. Engineer not selected.

Ia., Villisca—For 100,000 gal. steel tank and 60 ft. tower, to Pittsburg-Des Moines $6,261. Noted Aug. 24.

Tex., Teague — Making plans for new plant. $100,000. E. B. St. Clair, Teague, engr.

Wash., Tacoma—Plans laying 20 in. c.i. main from South 35th St. to South 54th Sts., partially on J and K Sts., 9,456 ft. of 20 in. and 1,392 ft. of 6 in. c.i. pipe. $78,757. W. A. Kunigk, 402 City Hall, engr.

BIDS DESIRED

N. Y., New York—Sept. 19, by Bd. Purch., Municipal Bldg., furnishing, delivering, unloading, stacking and storing high pressure c.i. pipe and special castings, to Dept. Water Supply, Gas & Electricity.

N. Y., Poughkeepsie—Sept. 28, by Bd. Pub. Wks., Eastman Park Mansion, laying c.i. mains and appurtenances. Hazen, Whipple & Fuller, 30 East 42nd St., New York, consult. engrs.; adv. this issue.

N. C., Greensboro—Oct. 10, by City Council, building filtration plant and appurtenances P. C. Painter, city mgr. J. L. Ludlow, Winston-Salem, consult. engr.; adv. this issue. Noted May 11.

Waterworks (Continued)

Mich., North Muskegon (Muskegon P. O.)—Sept. 18, by E. D Prescott, city clk., waterworks plant, incl. pumping station, receiving well, machinery, filtration gallery, mains, etc., also separate bids for 7 receiving wells, pumping equipment, c.i. mains, valves, hydrants, 2 motor driven centrifugal pumps, one 350 gal. and one 500 gal. per minute against 165 ft. head, also separate bids on 70,000 gal. steel tank, on 100 ft. tower. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engrs.

O., Columbus—Sept. 23, by Franklin Co., 18,740 ft. 6-12 in. c.i. mains in Sewer Dist. Clinton 2, Clinton Twp., incl. four 12 in., four 8 in. and forty-four 6 in. gate valves, etc. $33,000. E. G. Bradbury, 406½ South High St., engr.

Ill., Hinsdale — Village Clerk receiving bids 12,400 ft. 12 in. and 800 ft. 10 in. class C c.i. pipe, fire hydrants and additional piping in pumping station.

Ill., Marshall—Oct. 5, by Mayor and City Council, removing old pumps from pumping station, new concrete floor, waterproofing floors and walls, furnishing and installing 2 motor driven triplex pumps, 350 g.p.m. each, furnishing and erecting transmission line incl. transformers and lighting fixtures from power house to pumping station (about 2 mi.). F. L. Wilcox, Chemical Bldg., St. Louis, Mo., engr.

BIDS RECEIVED

O., Cleveland—Cuyahoga Co., 18,900 ft. 6-10 in. c.i. mains in Co. Sewer Dist. Impvt. 16, from G. J. Zeigiob, 1138 Bolivar Rd., $55,835; E. Pesa & Son, 2462 Baldwin Rd., $57,234; T. P. Egan, 720 Caxton Bldg., $61,162.

CONTRACTS AWARDED

Mass., Mansfield—E. E. Lothrop, town mgr., water system extension, 10,100 ft. 6 and 8 in. pipe, in East Mansfield, and 8,700 ft. c.i. pipe in West Mansfield: pipe, to Allen & Reed, 178 Dorrance St., Providence, R. I., Universal pipe, 6 in., at $0.9345 per ft., 8 in. $1.3125 per ft.; laying pipe, to M. A. Gammino, Valley St., Providence, R. I., Contr. 1, $6,760, Contr. 2, $6,280; valves and hydrants, to Eddy Valve Co., Waterford, N. Y. Engrs. est. $40,000. Noted Aug. 10.

R. I., Scituate—Water Supply Bd., Providence, building tunnel portion of Scituate Aqueduct, to Keystone State Constr. Co., 210 South 13th St., Phila., $1,318,340. Noted Sept. 7.

N. Y., Brooklyn—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Ocean Parkway, Concourse Dr. and Surf Ave., etc., here, to C. De Blasio, 339 7th Ave., Mt. Vernon, $22,919. Noted Sept. 7.

N. Y., St. George—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Bloomfield, Cannon, Drake, Hughes, Meredith, Morrill and South Aves., etc., here, to N. De Stefano, 257 Glenn Ave., Tompkinsville, $66,669. Noted Sept. 7.

N. Y., Waterville—Bd. Water Comrs., concrete spillway and rein.-con. flume, to L. D. Hokerk, Washington Mills $11,174. Noted Aug. 31.

Fla., Quincy—Improving water and light plant to Burford, Hall & Smith, 3rd Natl. Bank Bldg., Atlanta, Ga., $40,000. Noted Aug. 1.

O., Cleveland—Underpinning filters at Division Ave. pumping station by placing 18,690 lin.ft. premolded sectional concrete piles, to Stange & Walsh, Baldwin Reservoir, $66,897. Noted Sept. 7.

O., Lyndhurst (near Cleveland)—Furnishing and laying 10,077 ft. 12-16 in. c.i. mains, to Martin & McDace, 1452 West 98th St., Cleveland, $51,754. Noted Sept. 7.

Ill., Martinsville—Bd. Local Impvts., 8 mi. of 4-6 and 8 in. c.i. mains, incl. valves, specials and fire hydrants, to Foulkes Contg. Co., 705 Ohio St., Terre Haute, Ind., $54,363. Noted Aug. 3.

Wis., Benton—For 30,000 gal. steel water tank on stone tower incl. pipe and valve connections, to Chicago Bridge & Iron Co. 37 West Van Buren St., Chicago. Engrs. est. $25,000. Noted June 22.

Wis., Madison—Pumping and sewage disposal machinery and equipment for pump house in Monona Park, to Duro Sales Co., 6 South Jefferson St., Dayton, O. Noted Aug. 3.

Wis., Platteville — Will build 1 story, 50 x 95 ft. boiler and pump house at water works, brick and steel, plain foundation, by day labor. $40,000. H. Kleinhammer, Platteville, archt.

Minn., Royalton—Deep well pump and accessories, to J. G. Robertson, 2542 University Ave., St. Paul, $3,124. Noted Aug. 24.

Mo., Eldon—Complete water system, to Dwight Chaplin, Wichita, Kan., (street address not available). $64,494.

Mo., Versailles—Complete water system, to Burt & Tripp, Herrington, Kan., $55,780. Noted May 11.

Que., Montreal—Water Works Bd. plans 12,750 ft. of 42 in. steel force main from St. Gabriel pumping station to Clarke Ave. H. A. Terreault, dir. pub. wks.

Ont., Port Credit—Slow sand filter, reservoir, and pumping station, to B. G. Moogk, Weston; c.i. mains, to Natl. Iron Corp., Cherry St., Toronto; chlorinating equipment, to Wallace & Tiernan, 73 Adelaide St. E., Toronto; overhead tank, to Des Moines Steel Co., Chatham. Total est. $45,000. Noted Aug. 17.

Ont., Port Elgin—Dredging and improving harbor, to W. Birmingham, Center St., Kingston. Engrs. est. $45,000.

Sewers

PROPOSED WORK

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., received no bids Sept. 8, repairs to outlet flume from Jamaica sewage disposal plant to creek flowing into Jamaica Bay. Noted Sept. 7.

Mich., Cadillac—Prepared plans sewage disposal plant, 1,000,000 gal. daily capacity, incl. 6 septic tank and 6 contact filter units, also miscellaneous minor structures. $25,000. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engrs.

Neb., Lincoln—Plans 3,700 ft. of 54 in. brick and segmental block sewers north of fair grounds. $45,000. City will probably build by day labor. G. W. Bates, city engr.

Neb., Silver Creek — Plans sanitary sewers. $28,000. D. F. Davis, clk. Bruce & Grupe, Finance Bldg., Omaha, engrs.

Que., Outremont—Soon takes bids building sewers. $69,807. E. T. Sampson, city clk.

Ont., Burlington—Plans storm sewers in Brant St. $35,000. Prices wanted on materials. MacKay & MacKay, Home Bank Bldg., Hamilton, engrs.

Ont., Fort Erie—Plans sewerage system. $45,000. Prices wanted on all materials. A. E. Seaton, town engr.

BIDS DESIRED

N. Y., Rye—Sept. 20, by Village Trustees, certain pipe sewers and disposal works. G. Everett Hill, 45 7th Ave., New York, engr.; adv. this issue. Noted July 27.

N. J., Asbury Park—Sept. 15, by Twp. Com. of Neptune Twp., 75 South Main St., furnishing, delivering and constructing about 2,125 lin.ft. 6-8 in. vitr. sewers, also furnishing and laying about 236 lin.ft. 4 in. vitr. sewers; also by Sewerage Comrs. of Sewerage Dist. 2, Neptune Twp., 75 South Main St., furnishing, delivering and constructing about 21,267 lin.ft. 6-10 in. vitr. sewers, also furnishing and laying about 2,415 lin.ft. 4 in. vitr. sewer connections from main sewers to sidewalk lines. N. Rogers, engr.

Miss., Corinth—Sept. 26, at office of M. T. Sharp, city clk., complete electric light and power plant. T. E. Henry, mayor; adv. this issue.

O., Columbus—Sept. 23, by Franklin Co. sewers in Sewer Dist. Marion 1, Marion Twp., 3,134 ft. 24 in. vitr. or concrete pipe, 1,883 ft. 15 and 18 in. vitr. pipe, 16 manholes, etc., $25,000; Sewer Dist. Clinton 2, Clinton Twp., Contr. 12, 7,636 ft. 8 in. vitr. pipe and 26 manholes, $12,000; Sewer Dist., Clinton 2, Clinton Twp., Contr. 13, 36,724 ft. 8-24 in. vitr. pipe, 108 manholes, 60 cu. yd. concrete, etc., $65,000. E. G. Bradbury, 406½ South High St., engr.

Ind., Chesterton—Sept. 29, by Town Bd., constructing 6 mi. 6-30 in. pipe sewer. $160,000. Moore & Cole, South Bend, consult. engrs.; adv. this issue.

Wis., Ellsworth—Sept. 25, by Village Bd. constructing sewerage system. Druar & Milinowski, 500 Globe Bldg., St. Paul, Minn., consult. engrs.; adv. this issue.

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., opened bids Sept. 8, sewer in Brown Pl. from Grand St. to Whitlock Ave. N., from J. F. Clancy, Inc., 460 Lockwood St., Astoria, $27,433; Gustin Morris Contg. Co., Anabel Ave. and Creek St., $32,679; H. J. Mullen Contg. Co., Jamaica Ave. and 144th St., Jamaica, $35,947. Noted Sept. 7.

Pa., Phila.—Opened bids Sept. 7, sewerage pumping plant, from Jackson & Co., 119 South 4th St., $153,900; G. F. Dobbins Co., Phila., (street address not available), $230,000; McLean Contg. Co., Commercial Trust Bldg., $244,000.

Mich., Detroit—Opened bids (1) Gallagher Ave. Arm of Seven Mile Rd. Sewer, in Gallagher Ave. from Seven Mile Rd. to State Fair Ave., (2) Third Ave. Relief Arm in 3rd Ave. from Edison Ave. to alley north of Virginia Park, from J. Winterbottom, 18,524 John R St., (1) $118,828, R. D. Baker, 1631 Elmhurst Ave., (1) $97,796 (2) $58,126; J. Porath, 745 Griswold St., (1) $125,874; W. Blanck & Co., 823 Ford Bldg., (2) $54,800, J. A. Mercier, 216 Hammond Bldg., (2) $54,882.

Mich., Detroit—Opened bids 11,396 ft. Connors Ave. and Public Park Site Sewer from Warren Ave. to Lynch Rd. Sewer, (1) double barrel section, (2) arch section, from T. A. Gillespie, 50 Church St., New York, (1) $1,246,028 (2) $1,113,466; Nash Bros., 10 South LaSalle St., Chicago, (1) $1,517,895 (2) $1,253,546; Walbridge-Aldinger Co., 2356 Penobscot Bldg., (1) $1,618,660; Lennane & McIlvenna, 1205 Book Bldg., (2) $1,244,520.

Mich., Lincoln Park (Wyandotte P. O.)—For 8,030 ft. vitr. crock sewer in Emmons Blvd., incl. 8, 12, 15, 18, 24, 42 and 48 in. pipe, from Callahan & Grosse, Lincoln Park, $38,191; Hammen & Co., 4612 Woodward Ave., Detroit, $38,654.

CONTRACTS AWARDED

N. Y., Rye—Village Trustees, c.i. main sewer, to B. Pizzimenti, Hyattsville, Md., $45,975. Noted Aug. 24.

N. J., Little Falls—Little Falls Twp., extending sewerage system, to Sanitary Constr. Co., 66 Beckwith Ave., Paterson, $4,196; enlarging sewage disposal works and pumping station, to Mahlon Averill, 196 Woodside Ave., Newark, $18,939 and $9,137 respectively. Noted Aug. 31.

N. J., Newark—Passaic Valley Sewerage Comrs., 128 Market St., Saybrook Pl. Local Sewer connection, to O'Gara Constr. Co., 242 Market St., $74,150. Noted Aug. 10.

Md., Baltimore—See "Buildings."

Mich., Springwells—For Sect. 15 trunk sanitary sewer, 3,068 ft., to J. Porath, 745 Griswold St., Detroit. $70,743. Noted Sept. 7.

Wis., Madison—See "Waterworks."

Wis., Milwaukee — Intercepting sewer from Humboldt Ave. and Lake St. to Adams Ave. on Port Washington Rd., to Wenzel & Henoch Co., 498 27th St., $269,183. Noted Aug. 31.

Wis., Rice Lake—West Side sewerage system, incl. 10,637 lin.ft. 8-18 in. vitr. pipe, thirty-one 5 ft. manholes, twenty 4 ft. extra depth manholes, 1 concrete outlet, one Imhoff tank and one sludge bed, to Pastoret Constr. Co., 308 Sellwood Bldg., Duluth, Minn., $21,000. Noted Aug. 17.

Wis., Two Rivers—Furnishing pipe and laying sanitary and storm sewers in Washington, Monroe and 19th Sts., to Van Doeselaar-Cevol Co., 1712 North 2nd St., Sheboygan, $26,127. Noted Aug. 24.

Minn., Staples—Sewerage system, 15,000 lin.ft. pipe, to Roise Constr. Co., 2208½ West 2nd St., Duluth, $25,000.

N. D., Bismarck—Trunk line sanitary sewer in Front St., to F. G. Grambs, Bismarck, 380 ft. 30 in. pipe $6.46 per ft., 4,480 ft. 36 in. pipe $6.95 per ft.

Mo., Aldon—Complete sewerage system, to James & Anderson, Woodriver, Ill., $19,469. Noted April 6.

Wash., Kelso—See "Streets and Roads."

Que., Montreal—To R. Ottavi, 91 Benoit St., 709 yd. 2 x 3 brick sewer Des Marteaux St. from Souligny to Marseille Aves. $9,980, 716 yd. 2 x 3 brick sewer in Bernard Blvd. from Souligny to Marseille Aves. $9,788; to A. Thezand, 885 St. Catherine St. E., 705 yd. 2 x 3 brick sewer in Taillon St. from Souligny to Marseille Aves. $9,168; to Toussaint Bros., 383 St. Denis St., 976 yd. 2 x 3 ft. brick sewer and 34 yd. 30 in. sewer in Paul Pau Ave. from Notre Dame to Marseille Aves., $16,523.

Bridges

PROPOSED WORK

Ky., Independence — Montgomery Co. Comrs. soon take bids 2 deck girder bridges on Coffeyville, Cherryvale Rd., Federal Aid Project 37, Sect. E, one to have two 50 ft., two 60 and one 70 ft. spans, other two 40 ft. spans. $55,000. H. K. Hibbard, co. engr.

Ohio—W. H. Duffy, dir. Pub. Serv., Columbus, rejected bids opened Sept. 5, (because of technicality) for Rathbone Bridge, 1,100 ft. long, across Scioto River in Concord Twp., Delaware Co.. New Legislature necessary. Noted Aug. 24.

O., Akron—Plans steel girder bridge with 2 roadways total width 84 ft., and 2 sidewalks, on Exchange St. over tracks of Baltimore & Ohio and Erie Railroads, etc., $350,000. This is part of Akrons $6,000,000 grade elimination program. Railway engineers and city officials approved plans submitted by L. Trimble, engr. of Erie R.R., 50 Church St., New York City, for above project; also steel girder encased in concrete, to carry 5 tracks over Forge St., 3,000 cu. yd. concrete, $245,000. City, Pennsylvania and Baltimore & Ohio Railroads will ap-

Bridges (Continued)

propriate toward cost of latter project and bids for same will be received early in 1923. E. A. Kemmler, Delaware Bldg., engr.

Mich., Port Huron—Pere Marquette Ry., Union Depot, Detroit, plans bridge over Black River, one 133 ft. truss span, one 82 ft. through plate girder and one 39 ft. deck plate girder span, concrete abutments, one 8 x 35 ft. and one 7 x 30 ft. pier. F. H. Alfred, pres.

Wis., Appleton—Making new plans rein.-con. or steel bridge on Lawe St., $60,000, Harrington, Howard & Ash, 1012 Baltimore St., Kansas City, Mo., engrs.; also 1,200-1,500 ft. steel and concrete viaduct on Cherry St.

Calif., San Anselmo—Election soon to vote on $70,000 bonds constructing 6 rein.-con bridges.

Que., Montreal—Voted $50,000 bonds for preliminary survey work of the St. Lawrence River prior to construction of Montreal-Longueil Bridge, to cost $5,000,000. W. L. McDougall, chn. Bd. Harbor Comrs. R. Harvie, ch. engr.

BIDS DESIRED

Mass., Lowell—Sept. 20, by Bd. of Pub. Service, City Hall, rebuilding Lundberg St. Bridge over Boston & Maine R.R. Fay, Spofford & Thorndike, 200 Devonshire St., Boston 9, engrs.; adv. this issue.

Connecticut—See "Streets and Roads."

S. C., York—See "Streets and Roads."

Wis., Appleton—Sept. 21, by Harrington, Howard & Ash, engrs., Orear Leslie Bldg., Kansas City, Mo., Lawe St. Bridge over Fox River, 409 ft. long, with thirteen 31 ft. 5 in. spans, 20 ft. roadway, one 6 ft. sidewalk; Cherry St. Bridge over Fox River, 860 ft. long, 32 ft. roadway, 7 ft. sidewalk.

Colorado—See "Streets and Roads."

Calif., Los Angeles—Sept. 29, by Bd. Harbor Comrs., Room 312, Byrne Bldg., superstructure of double leaf bascule bridge on concrete piers, Badger Ave., incl. 3 truss double leaf heel trunnion type Strauss bascule span, 220 ft. c. to c. of main trunnions with 50 ft. tower at each end, will carry 2 railroad tracks, 2 roadways and 1 sidewalk, and connect Terminal Island with mainland at Los Angeles Harbor. Spec. 402. J. W. Ludlow, acting harbor engr.

Calif., Sacramento — Oct. 16, by Bd. Supervs. Sacramento Co., constructing Steamboat, Slough Bridge, 601,000 lb. structural steel, 49,530 lb. machinery for bascule span, 294 cu.yd. 1-3-6 concrete for counterweights, 14,400 lb. reinforcing, 936 cu.yd. 1-2½-5 concrete in piers and abutments, etc.; Paintersville Bridge, 1,019,500 lb. structural steel, 55,500 lb. machinery, 308 cu.yd. concrete for counterweight, 15,000 lb. reinforcing, 1,060 sq.yd. flooring, 110 cu.yd. Class A 1-2-4 concrete, 500 cu.yd. earth fill, 1,124 yd. Class A 1-2½-5 concrete, etc. H. W. Hall, clk.

BIDS RECEIVED

North Carolina—State Hy. Dept., Raleigh, rein.-con. bridges and culverts on (1) State Project 528, Davidson Co., (2) State Project 589, Rockingham Co., (3) State Project 858, Mitchell Co., (4) State Project 882, Cleveland Co., (5) State Project 784, Wilkes Co., (6) State Project 712, Ashe Co., (7) State Project 673, Rowan and Davidson Counties, (8) State Project 608, Anson Co., (9) State Project 157 B, Martin Co., (10) State Project 157 A, Martin Co., from J. A. Peterson, Montgomery, Ala., (street address not available), (1) $65,556, (2) $96,091, (8) $69,234; J. A. Brinkeley, Thomasville, (1) $67,887; Atlantic Bridge Co., Roanoke, Va., (1) $68,819, (2) $95,293, (3) $47,103, (8) $77,723, (9) $45,480; Cornell-Young Constr. Co., 210 South Tryon St., Carlotte, (2) $103,467, (7) $179,688; R. M. Thurmond, Lynchburg, Va., (3) $38,471; Booz-Lloyd & Co., Marion, (3) $48,831; J. A. Kreis, Holston Bank Bldg., Knoxville, Tenn., (4) $39,045; Batson Cook Co., West Point, Ga., (4) $39,811, (9) $37,845, (10) $35,911; Austin Bros. Bridge Co., Hurt Bldg., Atlanta, Ga., (4) $40,077; D. J. Brookshire & Co., North Wilkesboro, (5) $29,492; E. P. Robinson, North Wilkesboro, (5) $29,537; Stearns Bros. Co., Statesville, (5) $31,990; J. T. Plott, Greensboro, (6) $81,324; Luten Bridge Co., 405 East 4th Ave., Knoxville, Tenn., (6) $83,016, (7) $169,524; Williams Bros. Constr. Co., Roanoke, Va., (6) $87,720; Hardaway Constr. Co., Charlotte, (street address not available), (7) $159,180; General Roads & Drainage Constr. Co., Liberty Bank Bldg., Columbia, S. C., (8) $79,115; J. A. Marrow, Clarksville, Va., (9) $40,215, (10) $34,161; Boner & Hostitler, Williamston, (10) $40,884. Noted Aug. 17.

Ohio—See "Streets and Roads."

BRIDGE—BALLSTON SPA, NEW YORK

Following are lowest three bids opened Aug. 16, by Bd. Supervs. Saratoga Co., for constructing steel highway bridge at north end of Saratoga Lake, (A) Brann & Stuart Co., Inc., 310 Commercial Trust Bldg., Phila. (awarded contract); (B) Independent Bridge Co.; (C) T. F. McGovern. The unit bids were as follows:

	A	B	C
Removal of old structure (lump sum)	$2,200.00	$2,000.00	$1,500.00
300 cu.yd. concrete in pier bases	33.30	42.00	54.00
275 cu.yd. concrete in pier shafts	43.56	20.00	40.00
250 cu.yd. concrete in abutments	31.24	30.00	40.00
4,000 lin.ft. piles below bases	0.55	1.25	1.00
1,500 lin. ft. pile cut-offs	0.30	0.30	0.25
940,000 lb. structural metal	.0657	0.07	0.06
380 cu.yds. concrete slabs	25.00	22.00	25.00
65,000 lb. reinforcing steel	0.048	0.03	0.65
Removal of debris (lump sum)	2,095.00	1,000.00	500.00
Extended totals	$111,102	$111,460	$113,700

BRIDGE—ROCHESTER, N. Y.

Bids were opened Aug. 9, by city, for constructing South Avenue Bridge, (A) Engineer's Estimate; (B) Seneca Eng. Co., Carter Bldg., (awarded contract); (C) A. Fredericks & Sons, 710 Lake Ave.; (D) T. Holahan, 1568 East Main St.; (E) Whitmore, Rauber & Vicinus, Inc. The unit bids were as follows:

	A	B	C	D	E
Removing present bridge (lump sum)	$1,000.00	$500.00	$1,000.00	$5,000.00	$1,000.00
300 cu.yd. removing present abutment and walks	5.00	4.00	5.00	4.00	5.00
2,000 cu.yd. earth excavation	1.25	1.35	1.50	1.00	1.25
200 cu.yd. rock excavation	4.50	3.50	4.00	4.00	4.50
150 cu.yd. underpinning abutment masonry	19.00	17.00	21.00	16.00	19.00
10 cu.yd. class "A" concrete in place	25.00	25.00	26.00	25.00	25.00
350 cu.yd. class "B" concrete in place	19.00	19.00	20.00	16.00	19.00
1,000 cu.yd. class "C" concrete in place	10.00	11.00	9.75	9.00	10.00
150 cu.yd. class "D' concrete in place	8.00	8.00	8.00	7.00	8.00
405,000 lb. structural steel in place	0.0425	0.0485	0.05	0.06	0.051
10,000 lb. reinforcement steel in place	0.0425	0.045	0.0425	0.06	0.0425
1,000 lb. castings in place	0.07	0.07	0.07	0.08	0.07
800 sq.yd. asphalt paving and binder course	1.65	1.65	1.75	1.10	1.65
220 sq.yd. new medina stone paving including sand foundation in place	4.10	4.00	4.40	3.50	4.10
500 sq.yd. relaying stone pavement in approach	1.50	1.50	1.50	1.20	1.50
140 lin.ft. medina curb in place	1.75	1.75	2.00	1.50	1.75
100 lin.ft. medina curb relayed	1.00	1.00	1.00	0.90	1.00
1,000 sq.ft. side walk except on bridge, including grading in place	0.20	0.22	0.20	0.17	0.20
Maintaining traffic (lump sum)	5,000.00	2,500.00	2,000.00	6,000.00	5,500.00
Changing end post L.V.R.R. bridge (lump sum)	2,000.00	1,200.00	1,900.00	2,100.00	2,000.00
Extended totals all items (32 items)	$57,867	$56,642	$58,795	$60,735	$61,809

FILTRATION PLANT—SACRAMENTO, CALIF.

Following is Engineer's Estimate and lowest three bids opened Aug. 24 by city for constructing rapid sand filtration plant and appurtenances, Contr. No. 24 (A) Engineer's Estimate; (B) Mathews Constr. Co., Forum Bldg.; (C) R. McLeran & Co., Hearst Bldg., San Francisco; (C) K. E. Parker Co., and Healy-Tibbitts Co., 519 California St., San Francisco.

	A	B	C	D
Sedimentation basins, coagulation tanks and appurtenances—structures (lump sum)	$261,675.00	$218,825.00	$246,523.00	$244,000.00
Sedimentation basins, coagulation tanks and appurtenances—equipment (lump sum)	50,554.00	48,461.00	46,583.00	45,000.00
Head house and filters—structures (lump sum)	168,710.00	140,100.00	166,293.00	156,000.00
Head house and filters—equipment (lump sum)	86,040.00	92,756.00	93,022.00	95,000.00
Sump—structure (lump sum)	19,662.00	18,758.00	17,687.00	23,000.00
Coagulant building—structure (lump sum)	44,665.00	49,615.00	48,800.00	55,000.00
Coagulant building—equipment (lump sum)	43,800.00	47,951.00	42,615.00	47,000.00
Outside piping (lump sum)	42,563.00	25,492.00	26,000.00	25,000.00
Outside wiring and lighting (lump sum)	9,418.00	14,100.00	14,640.00	13,000.00
General fill (lump sum)	75,000.00	82,750.00	97,335.00	100,000.00
Grading (lump sum)	13,000.00	12,380.00	19,720.00	22,000.00
Gutters, curbs, roads, walks and miscellaneous structures (lump sum)	24,760.00	20,769.00	24,100.00	35,000.00
Total of items 1-12 inclusive	$839,847.00	$771,957.00	$843,318.00	$860,000.00
Extra excavation (per cu.yd.)	$2.50	$2.25	$1.50	$1.50
Extra rolled fill (per cu.yd.)	4.00	4.25	1.75	4.00
Extra concrete—class A (per cu.yd.)	10.50	16.00	13.00	25.00
Extra concrete—class B (per cu.yd.)	9.50	14.00	12.00	20.00
Extra forms (per sq.ft.)	0.18	0.43	0.20	0.18
Extra reinforcing steel (per lb.)	0.05	0.06	0.05½	0.06
Structures ready for fill	Mar. 15, 1923	June 30, 1923	Aug. 1, 1923	Dec. 1, 1923
All fill completed by	Sept. 1, 1923	Oct. 31, 1923	Dec. 1, 1923	Feb. 1, 1924
All structures ready for operation	Oct. 15, 1923	Nov. 30, 1923	Dec. 15, 1923	Feb. 15, 1924

Calif., Mariposa—Mariposa Co., 180 ft. steel span, concrete piers and abutments, alternate bids on (a) 108 ft. timber or (b) concrete approaches and floor, from Security Bridge Co., Ogden, Utah (street address not available), (a) $19,988, (b) $23,500; Union Constr. Co., Balfour Bldg., San Francisco, (a) $22,171, (b) $23,783; A. W. Kitchen Co., 110 Market St., San Francisco, (a) $23,805, (b) $28,767.

CONTRACTS AWARDED

Mass., Attleboro—Dept. Pub. Wks., constructing 2 concrete bridges, one on Bank St. over Bungay River, other on Water St. over Ten Mile River, to Engineering Service & Constr. Co., 220 Devonshire St., Boston. Noted Aug. 10.

Mass., West Warren—Warren Cotton Mills, one 50 ft. rein.-con. span, to replace old wooden bridge over raceway, at plant, to Newton & Haley, Springfield. Engrs. est. $30,000.

N. Y., La Salle—Niagara Town Bd., 100 ft. steel girder bridge, 32 ft. roadway, over Cayuga Creek, to Standard Eng. Co., Toledo, O. (street address not available), $25,775. Engrs. est. $25,000. Noted Aug. 17.

N. Y., Richland—Town Clerk of town of Richland in village of Pulaski, rein.-con. arch and steel girder bridge across Salmon River, to G. W. Thompson, Gurney Bldg., Syracuse, $61,300. Noted Aug. 17.

N. J., Camden—Philadelphia & Reading R.R., Reading Terminal, Phila., reconstructing bridge, 5,000 ton stone, 3,000 cu. yd. sand and 150 ton reinforcing bars, Jackson St. and Philadelphia & Reading R.R., here, to C. T. Bower, Tulip and Somerset Sts., Phila. Engrs. est. $35,000.

North Carolina—State Hy. Dept., Raleigh, rein.-con. bridges and culverts on State Project 888, Yancey Co., to The Luck Co. Sylva, $42,980. Noted July 6.

Ohio—Dept. Highways and Pub. Wks., Columbus, bridges in following counties:

Guernsey Co., Sect. "I" National Rd., concrete beam, to Noble Bridge Co., Mt. Vernon, $9,076.

Guernsey Co., Sect. "K" National Rd., rein.-con. slab and approaches, to Noble Bridge Co., Mt. Vernon, $9,565.

Crawford Co., Sect. "G" Bucyrus-Cresline Rd., concrete arch and approaches, to Le Hainey & Auth, Toledo, (street address not available), $12,487.

Bridges (Continued)

Butler Co., Sect. "C" Hamilton-Scipio Rd., concrete beam to V. F. Hughes, Hamilton, $4,169.

Butler Co., Sect. "J" Hamilton-Middletown Rd., concrete girder, to C. C. Johns, Middletown, $1,797. Noted Sept. 7.

Mich., Marine City—State Hy. Dept., Lansing, Bridge 770901, substructure for 134 ft. 4 in. swing bridge, 24 ft. roadway. incl. 1,020 cu.yd. rein.-con., 99,220 lb. reinforcing, to Lyons Constr. Co., Dearborn, $48,641. Noted Aug. 24.

Mich., Mottville — State Hy. Dept., Lansing, Bridge 781102, with three 90 ft. concrete girders, 20 ft. roadway, to Smith & Nichols, Hastings, $33,420. Noted Aug. 10.

Wis., Wauwatosa—City and Milwaukee Co., 80 ft. rein.-con. arch span, 40 ft. roadway, two 11 ft. sidewalks, over West Main St., to Stein Constr. Co., 204 Grand Ave., Milwaukee, $34,370. Noted Aug. 31.

Ia., Oskaloosa—Mahaska Co., 21 culverts and extensions, to D. B. Russell, Oskaloosa, $11,225, concrete figures $21.88 per cu.yd.; 1 high truss, one I-beam, 2 pony trusses, to L. R. Gabriel Co., Muscatine, $32,288, concrete figures $18.84 per cu.yd.; 17 culverts and extensions, to C. A. Dickey, Hedrick, $9,200, concrete figures $17.75 per cu.yd.

Ia., Scott City—Scott Co., 1 high truss to Des Moines Steel Co., 5th and Tuttle Sts., Des Moines, $11,982, concrete figures $27.12 per cu.yd.; 31 culverts and extensions, to Federal Bridge Co., 1002 Bankers Trust Bldg., Des Moines, $20,593, concrete figures $26.54 per cu.yd.; 18 culverts and extensions, 1 pony truss, to Lundgren-Reis Co., 65 College St., Des Moines, $25,790, concrete figures $26.09 per cu.yd.

Minn., Two Harbors—See "Streets and Roads."

Calif., Riverside—Bd. Supervs. Riverside Co., 5 span ornamental concrete bridge over Santa Ana River at foot of Mt. Rubidoux, to De Waard & Cobham Constr. Co., San Diego, (street address not available), $99,500.

Ont., Baden—Waterloo Co., steel superstructure, concrete abutments in Wilmot Twp., steel work to J. J. Hill, Mitchell; concrete work to A. Fraser, New Hamburg. Engrs. est. $35,000.

Dams

PROPOSED WORK

S. D., White River—Voted $25,000 bonds for dam in White River, 100 lin.ft. long, 12 ft. high, concrete or logs and stone, with 200 ft. dike, also power house and hydro-electric plant. T. H. Green, city clk.

CONTRACTS AWARDED

Wis., Oconto Falls—Union Mfg. Co. concrete and steel dam to increase power, to W. E. Ule, 603 Clark St., Stevens Point. Engrs. est. $25,000.

B. C., Elko—See "Industrial Works."

Excavation, Drainage, Irrigation

PROPOSED WORK

La., Alexandria—Soon takes bids building drainage system and improving 7th St. ditch. $100,000.

Wis., Calamus—Dodge Co. Drainage Bd. making plans 3 mi. tile drain, 1 mi. each of 8, 12 and 18 in. drain tile, incl. 6,000 acres. $30,000. L. M. Schindler, 717 Clark St., Appleton, engr.

Calif., Rio Vista—Recl. Dist. 2060 having surveys made raising levees, 4 mi. bank protection, constructing drainage ditches. Plan to purchase Hastings Tract Co. lands and make above improvements. H. S. Bonte, Balfour Bldg., San Francisco, engr.

Ont., Barrie—Simcoe Co. plans to dredge Nottawasaga River and reclaim 20,000 acres flooded lands. $50,000. Engineer, c/o Provincial Dept. Pub. Wks., Toronto.

BIDS DESIRED

N. Y., New York—Sept. 18, by J. H. Delaney, comr. Docks, Pier "A" foot of Battery Pl., North River, dredging Chelsea Piers, Manhattan Boro.

Delaware—Sept. 27, by State Hy. Dept., Dover, excavating at Camden, Contr. CK-8A; adv. this issue.

Fla., Ft. Lauderdale—Sept. 19, by City Council, 8,400 lin.ft. canal, 35 ft. bottom, 81,000 cu.yd. earth and 9,000 cu.yd. rock excav. $47,500. H. C. Davis, Ft. Lauderdale, engr

Ia., Nevada—Sept. 20, by M. R. Purkhiser, aud. Story Co., constructing D. D. 3, 53,840 lin.ft. 8-28 in. tile, 30 inlets, for Story and Marshall Counties. $25,000. W. A. Olson, Nevada, engr.

Mo., Ravenwood—Sept. 21, by F. H. Casteel, secy. Jackston Twp. D.D. at Platte Valley Bank, constructing main ditch 456,000 cu.yd., 8 laterals, 61,700 cu.yd. and 60 acres clearing. C. E. Jacoby Eng. Co., 527 Shukert Bldg., Kansas City, engr.

Calif., Merced—Sept. 22, by Dirs. Merced Irrigation Dist., constructing Fairfield Canal system, 7.4 mi. laterals and 8.4 mi. main canal, 67,300 cu.yd. excav. and 36,700 cu. yd. borrow. R. C. Starr, Merced, ch. engr.

CONTRACTS AWARDED

N. J., South Amboy—Pennsylvania R.R., Broad St. Sta., Phila., dredging 180,000 cu.yd. South Amboy Harbor, to Morris & Cummings Dredging Co., 17 State St., New York City, $0.195 per cu.yd.

Ill., Bloomington—Trustees Bloomington Normal Sanitary Dist., 404 Unity Bldg., constructing open channel work, to W. F. Sternberg Co., Piper City, $22,000. Noted July 20.

Ia., Garner—Hancock Co., D. D. 114, 10,300 lin.ft. open ditch, 54,216 cu.yd. excav., 29,454 lin.ft. 6-24 in. tile, to E. L. Hatten, Britt, excav. $0.20 per cu.yd.; Clement Products Co., Mason City, tile $16,420; C. Hampe, Britt, tile labor $11,899.

Mont., Great Falls—Canals, etc.—U. S. Recl. Service, Sun River Project, 118,000 cu.yd. canal excav., 21,000 cu.yd. excav. for structures, 1,850 cu.yd. rein.-con., 2,500 lin.ft. vitr. and concrete pipe, 171,000 lin.ft. lumber, etc. to J. B. Roberts, Simms, H. M. Morris, Ft. Shaw, Jenkins Bros., Fort Shaw, E. L. Burgess, Ft. Shaw and F. Coolidge, Laramie, Wyo., total $60,000. Noted June 29.

Ore., Grants Pass—Grants Pass Irrigation Dist., excavating main canal, 4 mi. new canal and enlarging old canal 2 mi., 167,000 cu.yd. dry earth and 13,000 cu.yd. dry rock excav., to P. Welch, Medford, $73,580. Engrs. est. $100,000. Noted Aug. 17.

Calif., Marysville—Dredging Ellis Lake, 130,000 cu.yd. excav., to J. D. Hutchison, Rio Vista, $29,000. Noted June 29.

Calif., Oroville—Drainage Dist. 200, to G. Pollock Co., Forum Bldg., Sacramento, 4 or 5 mi. main canal, 5 to 6 ft. deep, 15 ft. wide, and 5 mi. main canal, 5 to 6 ft. deep, 10 ft. wide, at $0.23; 5 mi. laterals, $0.19. Work involves 261,465 cu.yd. excav.

Streets and Roads

PROPOSED WORK

New York—H. S. Sisson, comr. State Hy. Dept., Albany, received no bids Aug. 29, improving 3.57 mi. Highway 8133 Morehouseville-Piseco, Part 3, Hamilton Co., $128,918; repairing 2.5 mi. Repair Contr. 3021 Highway 742, Steuben Co., $77,273. Noted Aug. 17.

N. Y., Auburn—Plans paving Lake Ave., Logan, Lansing and Franklin Sts., $25,000; also 1,000 ft. culvert for Wood Creek in 9th Ward, $12,000-$14,000. M. F. Dullea, city engr.

N. Y., Lackawanna—Plans paving Abbott Rd. $54,000. B. McDonnell, comr. Pub. Wks.

N. Y., Niagara Falls—City Manager soon takes bids paving 958 ft. James Ave. from Lewiston Rd. to Washington St., 30 ft., granite, wood block, sheet asphalt, brick or asphaltic concrete, $26,400. W. B. Bennett, city engr.

N. Y., Niagara Falls—Plans paving 2,039 ft. alley from Niagara to Ferry Aves., 15 ft., granite, wood block, asphalt, sheet asphalt, asphaltic concrete or brick, $31,575, estimate based on granite block; 627 ft. South Ave., 24 ft., $14,125. W. B. Bennett, city engr.

N. Y., Seneca Falls—Plans paving Beryl Ave., Bridge extension, South Park and Daniel Sts., over 1 mi. long. $45,000. W. S. Lozier, Rochester, (street address not available), engr.

Fla., West Palm Beach—Bd. Comrs. Palm Beach Co. rejected bids unopened shell paving Ocean Blvd. on Jupiter Island and resurfacing road from county line to Sewells Point, total length 8½ mi. New bids will be called. R. F. Goodman, West Palm Beach, engr. Noted July 27.

Fla., West Palm Beach—Comrs. Palm Beach Co. rejected bids constructing 5 mi. Dixie Highway north of Jupiter Bridge. New bids and specifications will be called. R. F. Goodman, West Palm Beach, engr.

O., Dayton—Plans paving 1,800 ft. Dow St. from Riverview to Grand Aves., 30 ft., 3,000 lin.ft. cement curb and gutter, 5,000 sq.yd. vitr. brick, concrete or Kentucky rock asphalt on concrete. $28,601. I. E. Houk, city engr.

Ind., Indianapolis—Marion Co. plans concrete paving 2.8 mi. S. A. Furner Rd., 20 ft., 26,895 sq.yd. concrete, 10,200 cu.yd. excav., 3,300 cu.yd. fill, 199 cu.yd. concrete for concrete bridge, etc. $83,638. J. J. Griffith, Indianapolis, engr.

Mich., Detroit—Plans paving 4,060 sq.yd. Leuschner Ave. from Hamtramck city limits to Mt. Elliott Ave., $20,300, 3,400 sq. yd. Bordeau Ave. from Belleterre to Nardin Aves., $17,220, 2,800 sq.yd. Marcus Ave. from Mt. Elliott to Foster Aves., $13,770, 4,350 sq.yd. Wyoming Ave. from Grand River to Fullerton Aves. $21,700, 4,000 sq. yd. Genesee Ave. from Joy Rd. to Chicago Blvd., $20,120, 4,600 sq.yd. Brentwood Ave. from Woodward to Charleston Aves., $28,240, all with 3½ in. sheet asphalt on 8 in. concrete, also 5 alleys with one course concrete, totaling $19,270. J. W. Reid, city engr.

Mich., Holland—Plans grading and paving 4,000 ft. Main St., 10,575 sq.yd. sheet asphalt, 3,470 cu.yd. excav. $45,000.

Wis., Johnson Creek—Rejected bids received Aug. 11, concrette paving Milwaukee and Watertown Sts. Will readvertise later. Parsons & Orbert, 216 West Water St., Milwaukee, engrs. Noted Aug. 3.

Kan., El Dorado—Butler Co. Comrs. soon take bids graveling 6.258 mi. road from Augusta to Gordon, Sect. A, Federal Aid Project 124, 18 ft. $75,000. H. D. Barnes, co. engr. Noted June 15.

Neb., Harvard—Plans 75,000 sq.ft. paving. Grant, Fulton & Letton, Bankers Life Bldg., Lincoln, engrs.

Neb., Lincoln—Lancaster Co. soon takes bids curbing, guttering and paving with vertical fiber brick, asphalt, concrete or asphaltic concrete 4,000 lin.ft. O St. from 44th to 56th Sts. A. H. Edgren, co. engr.

Missouri—State Hy. Dept., Jefferson City, plans 10.6 mi. road north Kansas City to Liberty, 24 ft., Federal Aid Project 99, Clayton Co., 21,200 cu.yd. roadway excav., 113,341 sq.yd. 1 course concrete pavement, 18 ft. wide, 7 in. at center and edges; 12.32 mi. road from Gallatin southwest and northwest, 24 ft., State Aid Project 20.206, Davies Co., 54,497 cu.yd. earth excav., 10,261 cu.yd. borrow, 562.96 cu.yd. concrete masonry, etc.; 2.381 mi. road from Lin Creek northwardly, 24 ft. State Aid Project 20.195 Camden Co., 13,155 cu.yd. earth excav., 1,219 cu.yd. borrow, 5.4 cu.yd. concrete masonry, etc.; 10.378 mi. road from Buffalo northwest and northeast, 24 ft., State Aid Project 20.183, Dallas Co., 34,828 cu.yd. earth and 800 cu.yd. rock excav., 9,565 cu.yd. borrow, 505.6 cu.yd. concrete masonry, etc.; 4.543 mi. road from Ava southeastwardly, 24 ft., State Aid Project 20.196, Douglas Co., 25,113 cu.yd. earth and 1,915 cu.yd. rock excav., 41.7 cu.yd. concrete masonry, etc.; 3.138 mi. road south of Lindell, 24 ft., State Aid Project 20.170, Grundy Co., 13,836 cu.yd. earth excav., 1,692 cu.yd. borrow, 237.5 cu.yd. concrete masonry; 0.94 mi. road from Richmond northwardly, 24 ft., State Aid Project 20.202, Ray Co., 5,914 cu.yd. earth and 694 cu.yd. rock excav., 200 cu.yd. borrow, 33.9 cu.yd. concrete masonry, etc. B. H Piepmeier, state highway engr

Mo., Springfield—Plans paving Kickapoo St. from Elm to Grand Sts., 20,000 sq.yd. tarvia on stone, G. W. Culler, 998 North Jefferson St., engr.

Calif., Bakersfield—Had plans prepared improving Kern St. between Jackson and Lake Sts., 813 lin.ft. concrete curb, 2,672 sq.ft. concrete gutter, 33,952 sq.ft. 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete; Oregon St. between Baker and Beale Sts., 3,259 sq.ft. concrete gutter, 48,121 sq. ft. 1½ in. warrenite bitulithic on asphaltic concrete; portions of B, F, G, H, I, 7th, 10th, 14th and 16th Sts., Dist. 459, 4,032 lin.ft. concrete curb, 23,883 sq.ft. concrete walks. W. D. Clark, city engr.

Calif., Bakersfield—Rejected bids improving Oak St. New proceedings will be started under specifications to provide 1½ in. warrenite bitulithic on 4 in. asphaltic concrete. W. Clark, city engr. Noted July 27.

Calif., Chico—Plans surfacing 30 to 40 blocks, probably asphaltic concrete. F. S. Robinson, city engr.

Calif., Daly City—Had plans prepared improving various streets 87,910 sq.ft. 1½ in.

Streets and Roads (Continued)

topeka on 4 in. concrete, 6,349 lin.ft. concrete curb and gutter, 2,165 lin.ft. 4 in. vitr. lateral sewers, 880 sq.ft. cement walks, 4,000 cu.yd. grading. G. A. Kneese, City Hall, Redwood City, engr.

Calif., Fresno—Had plans prepared improving Mono St. between Van Ness and P Sts., 91,759 sq.ft. grading, 85,879 sq.ft. asphaltic pavement, 5,645 sq.ft. concrete gutter, 3,339 lin.ft. concrete curb, etc. W. Stranahan, city engr.

Calif., Oroville—Supervs. Butte Co. received no bids Aug. 31, surfacing ¾ mi. Neal Rd. with crushed rock, surfacing Laurel St., Stirling City, asphalt macadam on 2 in. base. H. H. Hume, co. surv. Noted Aug. 24.

Calif., Rio Vista—Soon takes bids improving various streets in Dist. 1, 2 and 3. To exceed $25,000. C. E. Sloan, Santa Fe Bldg., San Francisco, engr.

Calif., San Diego—Having plans prepared grading, curbing, laying sidewalks and paving Lincoln St. from Oregon to Bancroft Sts., 4,871 lin.ft. cement curbing, 22,441 sq. ft. cement sidewalks, 16,188 sq.yd. bituminous macadam 1½ in. thick; Granada and Redwood Sts., 523 lin.ft. cement curbing, 1,952 sq.ft. cement sidewalks, 11,105 sq. yd. 1½ in. asphaltic concrete on 2½ in. bituminous. F. A. Rhodes, City Hall, engr.

Calif., San Francisco—City and San Francisco Co. had plans prepared improving 27th, 28th, 29th and 30th Aves. between Ulloa and Vicente Sts., 6,101 cu.yd. excav., 1,706 cu.yd. fill, 570 lin.ft. 8 in. vitr. sewers, 4,800 lin.ft. concrete curb, 10,000 sq.ft. concrete and 86,000 sq.ft. asphaltic concrete pavement. $40,000. M. M. O'Shaughnessy, city engr.

Calif., Stockton—San Joaquin Co. having plans prepared improving Austin Rd., 5,000 cu.yd. grading, 7,600 ton rock, 770 bbl. asphaltic oil; Central Ave. in Sumner House Tract, 2,500 cu.yd. grading, 4,200 ton rock, 308 bbl. asphaltic oil; Duncan Rd. between Waterloo and Linden Rds., 2,500 cu.yd. grading, 4,300 ton rock, 736 bbl. asphaltic oil; Louise Ave. in Sumner House Tract, 4,500 cu.yd. grading, 8,500 ton rock, 736 bbl. asphaltic oil; Bixler Rd. 444, 6,500 cu. yd. grading; Graham Rd. from Waterloo Rd. ¾ mi. east of Tokay School, 3,500 cu.yd. grading, 4,050 ton gravel; Quinsby Ave. between Lodi and Kettleman Lane, 2,500 cu.yd. grading, 5,472 ton rock, 525 bbl. asphaltic oil. F. E. Quail, co. surv.

Que., Montreal—Plan concrete sidewalks as follows: 569 ft. on Jules Verne Ave. $2,300, 285 ft. Baldwin Ave. $157, 3,700 ft. Dixon Ave. $1,931, 6,892 ft. St. Lawrence Ave. $43,472, 555 ft. Lacasse St. $1,766, 820 ft. Gounod St. $3,886, 245 ft. Des Voltigeurs St. $830, 761 ft. Bourbonniere Ave. $2,628, 520 ft. Villeray Ave. $2,676. Cement slab sidewalks 150 ft. on Henri Julien Ave. $131, 275 ft. DeNormanville Ave. $141, 416 ft. Goulet Ave. $208, 1,190 ft. Forbin-Janson St. $644, 360 ft. Lafontaine St. $203, 4,119 ft. Lyall Ave. $2.030, 3,712 ft. Azilda Ave. $1,987, 1,856 ft. Baldwin Ave. $1,016, 7,680 ft. DesOrmeaux Ave. $6,468, 346 ft. Beaugrand Ave. $1,525, 1,610 ft. Lebrun Ave. $830, 1,310 ft. Souligny St. $1,078, 840 ft. Deteck Ave. $420, 6,000 ft. Birman Ave. $4,298, 3,060 ft. Ogilvy Ave. $2,464, 3,060 ft. Abraham Ave. $2,464, 3,060 ft. Hopper St. $2,464, 1,130 ft. Sherbrooke St. $863, 1,200 ft. Duquesne Ave. $644, 2,000 ft. Baldwin St. $1,725, 1,865 ft. Bordeaux St. $1,540, 1,227 ft. St. Zotique St. $1,155, 4,376 ft. Marquette St. $3,619, 382 ft. Boucher St. $323, 902 ft. Masson St. $770, 1,049 ft. Papineau Grove $924, $5,214 ft. Molson Ave. $4,235, 2,772 ft. Poupart Ave. $2,271, 1,808 ft. Beaubien St. $1,732, 4,794 ft. St. Zotique St. $4,235, 925 ft. Delormier Ave. $806, 4,760 ft. Iberville St. $4,158, 5,200 ft. Parthenais Ave. $4,466, 1,879 ft. Bellechasse Ave. $1,694, 1,296 ft. Garnier St. $1,078, 1,952 ft. Des Ecores St. $1,607, 2,300 ft. Des Carrieres Ave. $2,156, 4,091 ft. Marquette Ave. $3,388, 1,951 ft. Bordeaux Ave. $1,617, 1,463 ft. Kingsbury Ave. $1,232, 16,898 ft. Chabot Ave. $13,244, 9,614 ft. Delormier Ave. $7,623. Asphalt pavements on 4,102 ft. DeVilliers Ave. $50,216, 1,450 ft. St. Emelie St. $3,145, widening 7,500 ft. Cremazie Blvd. from 30 to 80 ft., $80,000. Concrete pavement on 677 ft. of land between Mansfield and McGill College Ave. to Burnside St. $4,043. Waterbound macadam on 1,390 ft. St. Clothilde St. $5,670. H. A. Terreault, dir. pub. wks.

Que., Outremont—Plans grading, paving and macadamizing streets, $126,967; also permanent sidewalks, $45,547. E. T. Sampson, city clk.

Ont., Galt—Plans to lay concrete pavements on Dundas and East Main Sts. $35,000. Prices wanted on materials. J. D. Black, city engr.

BIDS DESIRED

Vermont—Sept. 22, at office T. W. Dix, state highway comr., Montpelier, gravel surfacing 3.24 mi. road in Barton; adv. this issue.

Mass., West Roxbury (Boston P. O.)—Sept. 21, by Metropolitan Dist. Comn., 1 Ashburton Pl., Boston, improving West Roxbury Parkway from Centre to Weld Sts., 400 cu.yd. grading, 1,500 cu.yd. fill, 200 cu.yd. loam surfacing, 200 sq.yd. concrete sidewalk, 7,100 sq.yd. concrete road, 120 lin.ft. edge stone, etc. $50,000. J. R. Rablin, Massachusetts Park Eng. Dept., 1 Ashburton Pl., Boston, Engr.

Connecticut—Sept. 26, by C. J. Bennett, state highway comr., Hartford, surfacing 4,270 lin.ft. North Main St., Essex; 8,000 lin.ft. Hadlyme Rd., Lyme; 6,075 ft. Pendleton Hill Rd., North Stonington; 4,050 ft. Pendleton Hill Rd., Voluntown; 5,300 ft. Bethlehem-Washington Rd., Bethlehem; all foregoing 7 in. native stone macadam; 17,150 ft. New Haven-New London Rd., Branford, 26,256 ft. Housatonic River Rd., Kent, both plain cement concrete; also 2 span concrete deck girder bridge over Quinnipiac River, in North Haven; adv. this issue.

Conn., New Haven—Sept. 18, by G. X. Amrhyn, supt. Park Dept., paving drives at East Rock Park, 11,350 sq.yd. bituminous macadam. $25,000-$30,000. E. S. Nettleton, Bureau of Engineering, city engr.

Conn., Noroton Heights—Oct. 2, at office H. J. Seeley, Soldiers Home, Noroton, constructing drives, curbing and catch basins on grounds of Fitch's Home, here. Adv. this issue.

N. Y., New York—Sept. 14, Dept. Parks, Municipal Bldg., repaving roadway of bridge over tracks of New York, New Haven and Hartford R.R., at Bronx and Pelham Parkways, asphalt blocks.

New Jersey—Sept. 27, by State Hy. Deept., Trenton, constructing Route 14, Sect. 7, Petersburg-Greenfield, Cape May Co.; removing present wood block pavement and concrete on Passaic River Bridge, Route 1, Lincoln Highway, and replacing same with rein.-con. base and wood block pavement, etc. A. L. Grover, ch. clk.; adv. this issue.

Pa., Munhall—Sept. 19, grading, paving and curbing McClure St., Blake, Brush and Boon Alleys, 1,300 cu.yd. excav., 3,000 sq. yd. concrete. $25,000. H. I. McClay, boro. clk.

Maryland—Sept. 19, by State Rds. Comn., Baltimore, grading, paving, curbing and removing old material, 2,200 ft. Columbia Ave. from Munroe St. to Gwynns Falls. J. N. Mackall, Garrett Bldg., Baltimore, chn.

Md., Baltimore—Sept. 27, by Bd. of Awards, grading, curbing and paving with 1½ x 1½ sheet asphalt on 6 in. concrete, 1-3-6 mix. Lombard St. from East to Ellwood Ave., Harvey St. from Lawrence to Jackson Sts., Wolfe St. from Pratt to Baltimore Sts., East Ave. from Thames St. to Eastern Ave., Calverton Rd. from Frederick Rd. to Hollins St., 15,000 sq.yd. asphalt, 2,600 lin.ft. concrete and 5,700 lin. ft. old stone curbing, 3,000 cu.yd. earth excav., 15,000 sq.yd. concrete base, Contr. 225 OC-NA. R. K. Compton, 214 East Lexington St., engr.

Alabama—Oct. 6, by W. S. Keller, state highway engr., Montgomery, grading, surfacing and constructing bridge on 1.13 mi. road from Livingston south, 1 acre clearing, 32,328 cu.yd. common excav. and borrow 2,000 cu.yd. rock excav., 294.96 cu.yd. concrete, 14,286 lb. reinforcing, 12,000 sq.yd. 2½ in. bituminous macadam, penetration method, 2,485 cu.yd. slag base, one 120 ft. steel span, 865 lin.ft. creosoted timber trestle with 1,873 sq.yd. ¾ in. cold mix surfacing, etc.

S. C., York—Sept. 19, by Bd. Comrs. York Co., grading and surfacing 2.57 mi. York-Smyrna Rd., 21,497 cu.yd. common and 250 cu.yd. rock excav.; 782 cu.yd. topsoil, etc.; bridge over Bullocks Creek on above road, 100 cu.yd. dry and 200 cu.yd. wet excav., 2,900 lin.ft. piling, 608 sq.yd. bituminous surfacing.

O., Maple Heights (Bedford P. O.)—Sept. 20, by Village, grading and laying sidewalks on Center Rd., Ellen Blvd., Raymond and Summit Aves. To exceed $25,000. F. J. Lander, Court House, Cleveland, engr.

Ind., Marion—Sept. 16, by Comrs. Grant Co., grading and gravel surfacing 3.5 mi. Daniel Stuber Rd., 16 ft. $27,000. G. Swisher, Marion, engr. Noted Sept. 7.

Ind., Noblesville—Sept. 16, by Comrs. Hamilton Co., grading and gravel surfacing 3 mi. John Rupe Rd., 18 ft., $25,500; 3 mi. Henry Brehm Rd., 18 ft., $26,000. J. S. Shannon, Noblesville, engr. Noted Sept. 7.

Michigan—Sept. 19, by State Hy. Dept., Lansing, grading and surfacing 3.01 mi. State Trunk Line Rds., 24-17, Sects. A and B, and 54-6, Sect. B, Neewaygo Co., 10,000 cu.yd. excav., 28,000 sq.yd. gravel. F. F. Rogers, state highway comr.

Michigan—Sept. 20, by State Hy. Dept., Lansing, grading and surfacing 5 mi. State Trunk Line Rd. 39-3, Ionia Co. $30,000. F. F. Rogers, state highway comr.

Michigan—Sept. 27, by State Hy. Dept., Lansing, grading and surfacing 12.062 mi. Federal Aid Project 80, Sects. A and B, Machinac Co., 73,522 cu.yd. excav., 127,209 sq.yd. gravel or stone gravel. F. F. Rogers, state highway comr. Noted Aug. 31.

Kan., Iola—Oct. 13, by Allen Co. Comrs. paving 4.046 mi. Fort Scott Wichita Highway, Federal Aid Project 125-A, 18 ft. $150,000. A. Stroup, co. engr.

Kan., Wellington—Oct. 6, by Comrs. Sumner Co., grading 8.426 mi. Meridian Rd., Sects. D and E, Project 35, 29½ ft. $40,000. Former bids rejected. J. W. Mavity, co. engr. Noted Aug. 17.

Wyoming—Sept. 19, by State Hy. Comn., Cheyenne, grading and placing 18 ft. bituminous wearing surface on concrete on 7 mi. Casper-Salt Creek Rd., alternate 18 mi., 9 ft., Federal Aid Project 19, Natrona Co., $300,000; grading, surfacing and constructing culvert on 5.6 mi. Yellowstone Highway north of Cheyenne, 24 ft., Federal Aid Project 134, Laramie Co., $28,653; surfacing 12.2 mi. Lincoln Highway from Rock River west, 24 ft., Federal Aid Project 122, Albany Co., $103,104; 6.2 mi. Lincoln Highway from Lookout to Rock River, 24 ft., Federal Aid Project 123, Albany Co., $40,383; grading, constructing culvert, 95 ft. steel, 54 ft. steel truss and 16 ft. I-Beam spans on 8.8 mi. state highway from Crowheart west, 20 ft., Federal Aid Project 172, Tremont Co., $87,042. J. F. Seiler, state highway engr.

Missouri—Sept. 22, by State Hy. Dept. at div. office Hermitage, 3.069 mi. road from Hermitage westwardly, 24 ft., Federal Aid Project 86 A, Hickory Co., 8,862 cu.yd. earth and 2,395 cu.yd. rock excav., 12,817 cu.yd. borrow, 54.1 cu.yd. concrete masonry, 21,886 sq.yd. specification C gravel pavement, etc. B. H. Piepmeier, Jefferson City, state highway engr.

Tex., Winters—Sept. 22, by Mayor, paving, curbing, guttering and preparing subgrade, etc. on 3 blocks, Main and Post Office Sts., 67 ft., 8,060 sq.yd. vitr. brick or concrete, 1,530 ft. concrete curb. $25,000. U. Stephens, Ballinger, engr.

Colorado—Sept. 26, by State Hy. Dept., Denver, gravel surfacing 5.296 mi. Spanish Trail on highway between Hesperus and Mancos, Federal Aid Project 213-B, La Plata and Montezuma Counties, 18 ft., 322 cu.yd. concrete, 48,600 cu.yd. common, 5,300 cu.yd. rock and 17,000 cu.yd. borrow fill excav., 23 acres clearing, 14,000 sta.yd. overhaul, 55,924 sq.yd. gravel surfacing, 23,865 lb. reinforcing, 1,100 lin.ft. 15-24 in. corrugated metal pipe, $69,747, 3.609 mi. Spanish Trail beginning 5½ mi. west of Durango and extending west toward Hesperus, Federal Aid Project 71-B, La Plata Co., 18 ft., 167 cu.yd. concrete, 18,400 cu.yd. common, 6,900 cu.yd. rock and 12,800 cu.yd. borrow fill excav., 13 acres clearing, 900 sta.yd. overhaul, 38,114 sq.yd. gravel surfacing, 11,870 lb. reinforcing, $54,099; grading 10.731 mi. Platteville-Greeley Rd., beginning 2 mi. north of Platteville and extending northeast parallel to Union Pacific R.R. tracks through La Salle toward Greeley, Federal Aid. Project 226-C, Weld Co., 16 ft., 13,400 cu.yd. common, 58,400 cu.yd. borrow fill excav., 783 cu.yd. concrete, 35,870 lb. reinforcing and 30,530 lb. structural steel, etc., $46,071; grading and graveling 7.474 mi. Cochetopa Pass Rd. beginning at point about 6 mi. west of Saguache and extending west toward Cochetopa, Federal Aid Project 119-B, Saguache Co., 16 ft., 12,400 cu.yd. common, 1,000 cu.yd. rock and 24,600 cu.yd. borrow fill excav., 398 cu.yd. concrete, 19,250 sq.yd. crushed rock surfacing, 20,063 lb. reinforcing, includes 40 ft. concrete bridge sta. 283 and 53, 242 cu.yd. concrete, 17,087 lb. reinforcing, $48,827. L. D. Blauvelt, State Office Bldg., Denver, engr.

BIDS RECEIVED

Maine—State Hy. Dept., Augusta, bituminous macadamizing (a) 2.64 mi. State Highway B, Project 58, in Brighton, (b) 1.004 mi. State Highway D, Project 54, in Rockport and Camden; gravel surfacing (c) 5.8 mi. State Highway F, Project 59, in Turner, (d) 3.16 mi. State Highway N, Project 61, in Perry, (e) 3.67 mi. State Highway W, Project 55, in Rome and New Sharon, (f) 3.36 mi. State Highway W, Project 56, in New Sharon; cement concrete paving (g) 3.78 mi. State Highway K, Project 52, in Presque Isle, from Arborio Road Constr. Co., 408 Main St., Hartford, Conn., (a) $56,377, (b) $20,853, (d) $65,268, (f) $43,785; J. Arborio, 82 Church St., New Haven, Conn., (a) $58,497, (c) $73,861,

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(e) $52,557, (f) $50,579; A. D. Bridges Sons, Inc., Hazardville, Conn., (a) $66,836, (b) $18,107, (c) $68,823, (g) $150,189; R. Ingalls, Bar Harbor, (b) $21,831; R. and J. McGregor, Rumford, (c) $75,048; H. A. Day, 284 Parkview Ave., Bangor, (d) $68,883; A. V. Leo Constr. Co., Thompson, Conn., (d) $69,075, (e) $54,045, (f) $49,375; F. B. Hastings, 1335 Wood Ave., Bridgeport, Conn., (e) $54,728; Frissell Eng. Co., Gardner, Mass., (g) $143,381; McCabe & Giovanni, 24 East Concord St., Boston, Mass., (g) $157,577. Noted Aug. 17.

New York—H. S. Sisson, comr. State Hy. Dept., Albany, opened bids Aug. 29, improving 6.48 mi. Highway 8132 Whitehall-Dresden Center, Part 3, Washington Co., engrs. est. $316,026, from J. L. Hayes Constr. Co., Inc., 70 Main St., Yonkers, $296,916, Masterson Constr. Corp., 15 East 40th St., New York, $297,218, Ward & Tully, Inc., 189 Montague St., Brooklyn, $306,471; 0.59 mi. Highway 8134, Warsaw Village: East Buffalo St., Wyoming Co., engrs. est. $102,442, from Miller Constr. Co., Punxsutawney, Pa., $86,542, M. H. Ripton, Rochester, (street address not available) $89,894, Wieberg Bros., Forks, $90,581. Noted Aug. 17.

N. Y., Richmond Hill—Dept. Parks, Municipal Bldg., New York, opened bids Sept. 7, improving main drive in Forest Park, from H. E. Kordes, 2577 Cooper St., Brooklyn, $72,931; Boro Asphalt Co., 1301 Metropolitan Ave., Brooklyn, $76,897; Peconca Eng. & Contg. Co., $78,419. Noted Aug. 31.

Pa., Phila.—Opened bids Sept. 8, paving (1) Ardleght St. from Price to Haines Sts., Lebanon St. from 54th to 53rd Sts., Stafford St. from Ardleigh to Anderson Sts., (2) 23rd St. from Allegheny Ave. northerly, Cherry St. from Conestoga to 55th Sts., (3) Torresdale Ave. from Lewis to Kinsey Sts., (4) Torresdale Ave. from Gillingham to Kennedy Sts., (5) 4th St. from Porter to Shunk Sts., 20th St. from 65th to 66th Aves., Lebanon Ave. from Bryn Mawr to 53rd Sts., (6) Rising Sun Ave. from Roosevelt Blvd. to Olney Ave., (7) Glen Echo Rd. from McCallum St. to Mt. Pleasant Rd., Roanoke St. from Springfull Ave. to Moreland St., 66th Ave. from 5th to Fairhill Sts., from Eastern Paving Co., Colonial Trust Bldg., (1) $26,020, (2) $5,746, (3) $29,083, (4) $37,773, (5) $26,563; Barber Asphalt Paving Co., Land Title Bldg., (1) $27,563, (2) $5,673, (3) $31,076, (4) $38,954 (5) $27,988; M. J. McCrudden, Real Estate Trust Bldg., (6) $119,743; F. Mark Constr. Co., Commercial Trust Bldg., (6) $127,563, (7) $4,863; J. J. McHugh, 1430 South Penn Sq., (6) $116,850; J. F. Nolen & Sons, 63rd and Grovers Lane, (7) $4,676.

North Carolina—State Hy. Dept., Raleigh, grading and concrete or asphaltic paving (1) 3.88 mi. State Project 615, Cabarrus Co., (2) 3.4 mi. State Project 765, Surry Co., (3) 0.59 mi. State Project 673, Davidson and Rowan Counties, (4) 4.83 mi. State Project 876, Rutherford Co., (5) 9.81 mi. State Project 589, Rockingham Co., (6) 9.87 mi. State Project 460, Orange Co., (7) 2.1 mi. State Project 590, Rockingham Co., (8) 10.24 mi. State Project 528, Davidson Co., (9) 2.52 mi. State Project 785, Wilkes Co., (10) 9.55 mi. State Project 658, Mecklenburg Co., (11) 7.03 mi. State Project 328, Columbus Co., (12) 7.88 mi. State Project 608, Anson Co., (13) 7.57 mi. State Project 901, Buncombe Co., grading and topsoiling (14) 12.4 mi. State Project 157 A, Martin Co., (15) 12.45 mi. State Project 157 B, Martin Co., grading and topsoiling or gravel surfacing (16) 3.84 mi. State Project 847, McDowell Co., (17) 11.06 mi. State Project 712, Ashe Co., grading, rein.-con. structures and topsoiling (18) 4.97 mi. State Project 784, Wilkes Co., (19) 15.8 mi. State Project 882, Rutherford Co., grading, rein.-con. structures, concrete or asphaltic paving (20) 8.8 mi. State Project 412, Durham Co., (21) 1.58 mi. State Project 821, Cleveland Co., (22) 10.47 mi. State Project 822, Cleveland Co., (23) 2.22 mi. State Project 761, Surry Co., grading, penetration or waterbound macadam paving (24) 8.98 mi. State Project 380, Pender Co., clearing, grading and topsoiling (25) 7.12 mi. State Project 106, Bertie Co., grading, reconstructing old macadam and asphaltic surfacing (26) 10.64 mi. State Project 351, New Hanover Co., from Thompson-Caldwell Constr. Co., Mooresville, (1) $89,763, (10) $227,536; Simmons Constr. Co., Charlotte, (street address not available), (1) $90,656; Campbell Constr. Co., Georgia Home Bldg., Columbus, Ga., (2) $102,442; Fiske-Carter Constr. Co., Masonic Temple Bldg., Greenville, S. C., (2) $111,597, (4) $132,968, (9) $76,386; Elliott & Sons, Spartanburg, S. C., (3) $32,332, (22) $329,882; J. A. Kreis, Holston Bank Bldg., Knoxville, Tenn., (3) $33,910, (5) $343,754; W. F. McCanless, Charlotte, (street address not available), (3) $34,875; Bolton Constr Co., Marion, (4) $142,216; Rumer-Graeber Co., Shamokin, Pa., (4) $155,209; Chitwood & Driscoll, Reidsville, (5) $294,352; Public Service Production Co., Terminal Bldg., Newark, N. J., (5) $309,663, (8) $325,192; R. M. Hudson Co., Salisbury, (6) $269,850, (11) $206,680, (12) $250,473, (22) $340,744; L. L. Tindall, Waterford, Wis., (6) $280,967, (11) $199,428, (20) $229,629, (24) $205,397; Dawkins Constr. Co., Paul-Gale-Greenwood Bldg., Norfolk, Va., (6) $290,117, (26) $221,705; G. R. Martin, Salisbury, (7) $59,063, (23) $67,396; G. T. Franklin Co., Bassett, Va., (7) $66,115; Hagedorn Constr. Co., Thomasville, (8) $322,832, (12) $251,112; R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, (8) $327,796; D. J. Brookshire & Co, North Wilkesboro, (9) $71,548; Hyde & Baxter, 1311 G St, N. W., Wash., D. C., (9) $77,995; Union Paving Co., 30th and Locust Sts., Phila., (10) $222,833; Lampton & Burks, Cornelius, S. C., (10) $232,180, (12) $249,930; C. D. Riggsbee, Durham, (11) $205,287, (20) $229,214; L. J. Smith Constr. Co., Charlotte, (street address not available), (13) $185,494; A. J. Wardrep, Holston Bank Bldg., Knoxville, Tenn., (13) $196,742; J. F. Mulligan Constr. Co., North Wilkesboro, (14) $43,620, (15) $44,333, (17) $112,891, (18) $48,714, (25) $31,141; Jamison Bros., High Point, (14) $43,852, (15) $45,463; J. P. Dicus, Robbinsville, (14) $46,270; J. A. Marrow, Clarksville, Va., (15) $47,903, (25) $32,775; C. W. Lacy, Wilmington, (16) $65,374, (24) $147,466; Olliver & Costello Bros., Knoxville, Tenn., (street address not available), (16) $74,436; W. H. Anderson Constr. Co., Johnson City, Tenn., (16) $74,652; J. T. Plott, Greensboro, (17) $98,392, (18) $49,545; Albert Bros., Shawsville, Va., (17) $110,273; E. P. Robinson, North Wilkesboro, (18) $52,234; C. R. Willard & Son, Spartanburg, S. C., (19) $67,874; J. C. Jobnist, Monroe, (19) $69,532; Ross Bros. Constr. Co., Andres, (19) $70,628; Porter & Boyd, Realty Bldg., Charlotte, (20) $226,507, (23) $81,350; Davis Wilcox Constr. Co., Bessemer City, (21) $52,150, (22) $347,731; Leaksville Lumber Co., Leaksville, (23) $72,210; Southern-Willite Paving Co., Real Estate Exch. Bldg., Richmond, Va., (26) $181,824. Noted Aug. 3, 10 and 17.

Kentucky—State Hy. Dept., Frankfort, grading 2.2 mi. Jenkins-Whitesburg Rd., State Project 6, Sect. B, Letcher Co., (a) vitr. pipe, (b) c.i. pipe, (c) rein.-con. pipe, from Dempster Constr. Co., 721 North Central St., Knoxville, Tenn., (a) $41,674, (b) $42,246, (c) $41,625; Cohen Constr. Co., Knoxville, Tenn., (street address not available), (a) $47,535, (b) $48,235; Walton-Sudduth, Bluefield, W. Va., (a) $57,691, (b) $57,785, (c) $57,785.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids Sept. 8, grading 2 mi. Sect. "L" Mt. Gilead-Mansfield Rd., Morrow Co., from O. Johnson, West Mansfield, $25,494, F. H. Gibben, Prospect, $26,265, D. M. Roach, Defiance, $28,994; bridge on Sect. "S" Salineville-Yellow Creek Rd., Columbiana Co., from Cox & Heflop, Kensington, $5,474, H. C. Armstrong, Lisbon, $5,717.

O., Akron—W. C. Peters, dir. Pub. Serv., opened bids Sept. 6, grading, laying sidewalks and paving with (a) brick, (b) asphalt on (1) 2,200 ft. Aqueduct St., 28 ft., 3,750 lin.ft. stone curb, 1,060 sq.yd. brick gutter, 800 sq.yd. 4 in. cement sidewalk, 2,400 cu.yd. earth excav., 7,160 sq.yd. vitr. brick or 6,100 sq.yd. asphalt, engrs. est. (a) $36,392, (b) $36,206, (2) $2,800 ft. North Main St., 54 ft., 2,525 lin.ft. stone curb, 1,400 lin.ft. brick gutter, 31,500 sq.ft. sidewalk, 7,500 cu.yd. earth excav., 12,100 sq.yd. vitr. brick on 6 in. concrete or 10,700 sq.yd. asphalt, etc., engrs. est. $84,460, (3) 1,000 ft. Middlebury St., 24 ft., 1,750 lin.ft. stone curb, 445 sq.yd. brick gutter, 1,425 cu.yd. earth excav., 1,930 sq.yd. asphalt or 2,375 sq.yd. vitr. brick on 6 in. concrete, engrs. est. (a) $12,573, (b) $12,410, resurfacing (4) 325 ft. South Case Ave., 30 ft., 250 lin.ft. stone curb, 1,920 sq.ft. sidewalk, 810 sq.yd. sheet asphalt, 265 sq.yd. 6 in. concrete base, 125 ton binder, engrs. est. $5,518, grading and laying sidewalks on (5) 1,850 ft. Wall St., 18,420 sq.ft. 4 in. cement sidewalk, 2,900 cu.yd. earth excav., 950 cu. yd. gravel, engrs. est. $9,178, grading, laying sidewalks and graveling (6) 750 ft. Linden St., 8,450 sq.ft. 4 in. cement sidewalk, 1,700 cu.yd. earth excav., 400 cu.yd. bank gravel, engrs. est. $4,141, (7) 1,660 ft. Glenwood Ave., 16,620 sq.ft. cement sidewalk, 2,600 cu.yd. earth excav., 800 cu. yd. gravel, engrs. est. $9,364, (8) 2,200 ft. Lakemont Ave., 22,050 sq.ft. 4 in. cement sidewalk, 7,500 cu.yd. earth excav., 1,150 cu.yd. bankgravel, engrs. est. $13,943, (9) 3,500 ft. Englewood Ave., 40,200 lin.ft. 4 in. cement sidewalk, 3,000 cu.yd. earth excav., 2,100 cu.yd. cinders or gravel, engrs. est. $16,217, from

Columbus Asphalt Paving Co., Buckeye Bldg., (1a) $38,031, (1b) $34,941, (2a) $91,005, (2b) $86,223, (3a) $13,927, (3b) $12,976, (4) $6,013.

T. E. McShaffrey Constr. Co., 171 South

ROAD WORK—MAINE

Bids were opened by State Highway Comn., Augusta, Aug. 25, for constructing 3.78 miles State Highway "K," Presque Isle Project No. 52, (A) Frissel Eng. Co., Gardner, Mass.; (B) A. D Bridge's Sons, Inc., Hazardville, Conn.; (C) McCabe & Giovannin, 24 East Concord St., Boston. The unit bids were as follows:

	A	B	C
10,868 cu.yd. earth excavation	$1.60	$1.25	$1.70
175 cu.yd. rock excavation	8.00	4.00	6.00
1,200 cu.yd. borrow	1.25	1.25	1.80
9,000 cu.yd. gravel base	2.90	2.80	2.65
33 cu.yd. class "A" concrete	30.00	30.00	35.00
96 cu.yd. class "B" concrete	25.00	25.00	30.00
64 lin.ft. 12-in. C.M. pipe	1.50	1.00	1.50
32 lin.ft. 14-in. C. M. pipe	1.75	1.25	1.50
30 lin.ft. 18-in. C. M. pipe	2.00	1.50	2.00
28 lin.ft. 12-in. C.I. pipe	1.75	1.25	3.00
196 lin.ft. 16-in. C. I. pipe	2.00	1.50	4.00
168 lin.ft. 18-in. C.I. pipe	2.25	1.75	5.00
34 lin.ft. 24-in. C.I. pipe	2.75	2.50	6.00
242 sq.yd. cobble gutter	2.50	1.50	3.00
80 cu.yd. gravel road	4.00	4.00	3.00
7,763 cu.yd. one-course cement concrete surface	9.50	11.50	11.00
345,400 lb. steel reinforcement	.05	.04¼	.055
534 lin.ft. wood guard rail	1.00	0.60	1.00
Extended totals	$143,381	$150,189	$157,577

Following are lowest bids opened Aug. 25, by State Highway Comn., Augusta, for constructing 5.80 mi. State Highway "F," Turner Project No. 59, (A) A. D. Bridge's Sons, Inc., Hazardville, Conn.; (B) J. Arborio, 82 Church St., New Haven, Conn.; (C) R. & J. McGregor, Rumford. The unit bids were as follows:

	A	B	C
16,000 cu.yd. earth excavation	$.85	$1.00	$1.15
50 cu.yd. rock excavation	2.00	1.00	4.00
3,600 cu.yd. borrow	.90	1.00	1.15
50 cu.yd. stone fill	2.00	3.00	2.75
50 cu.yd. gravel base	3.00	2.50	2.45
2,690 cu.yd. stone base, gravel finish	2.75	3.00	3.00
515 cu.yd. gravel sub-base	2.50	2.50	2.45
10 cu.yd. side underdrain	4.00	3.00	2.45
44 cu.yd. class "A" concrete	25.00	25.00	28.00
150 cu.yd. class "B" concrete	25.00	25.00	22.00
10 cu.yd. dry rubble masonry	10.00	10.00	8.00
672 lin.ft. 14-in. C.M. pipe	.75	1.00	1.00
382 lin.ft. 16-in. C.M. pipe	.75	1.00	1.10
58 lin.ft. 18-in. C.M. pipe	.70	1.00	1.25
188 lin.ft. 20-in. C.M. pipe	.70	2.00	1.50
70 lin.ft. 24-in. C.M. pipe	1.00	2.00	2.00
100 sq.yd. cobble gutter	1.50	1.00	1.50
13,900 cu.yd. gravel road	2.55	2.50	2.45
4,160 lin.ft. wood guard rail	.50	.75	.55
Extended totals	$68,823	$73,861	$75,048

Streets and Roads (Continued)

Forge St., (1a) $37,678, (1b) $35,503, (2a) $83,535, (2b) $78,860, (4) $6,044.

E. and W. McShaffrey Co., 574 Rhodes Ave., (1a) $36,094, (3a) $13,549.

E. H. Rawle, 839 Bloomfield Ave., (3a) $13,279.

Timms Clark Co., 437 2nd Natl. Bldg., (5) $8,425, (6) $3,838.

Di Foti Constr. Co., 72 Furnace St., ([illegible]) $7,984, (6) $4,491, (7) $8,238, (8) $13,545, (9) $14,985.

Crano & Lombardi, 274 Crosby St., (5) $10,102, (6) $4,806, (7) $11,631.

H. Gilbert, 19 South Martha Ave., (7) $12,427, (9) $15,756.

H. G. Baltes, Akron (street address not available), (9) $16,931. Noted Aug. 31.

O., Akron—Summit Co. opened bids Sept. 7, grading and paving 1.19 mi. Richfield-Rd. 19 Sect. A, bituminous macadam, from A. F. Wible, 859 Chalker St., $26,001; 1.23 mi. Brittain-Massillon Rd. 49 Sect. B-2, rein.-con., from V. Olson Contg. Co., Herberich Bldg., $44.925, H. Gilbert, 19 South Martha Ave., $45,537, T. E. McShaffrey Constr. Co., 171 South Forge St., $45,895. Noted Aug. 31.

O., Cleveland—Cuyahoga Co. paving Bean Rd. 1, 14,500 lin.ft. 4 in. sewer pipe gutter, 7,400 cu.yd. earth excav., 12,900 sq.yd. concrete, from Freshwater Constr. Co., Natl. Bldg., $48,167; W. McDowell & Son, 10309 Miles Ave., $48,195; River Constr. Co., Schofield Bldg., $48,680.

O., Cleveland Heights (Warrensville P. O.)—Opened bids Aug. 28 paving (1) Greyton and Nela View Rds., (2) Cedar Rd. (3) Inglewood and Roanoke Rds., from Spence Bros., c/o Pavers Exch., Society for Savings Bldg., Cleveland, (1) $41,393; Rieley Bros., The Arcade, Cleveland, (1) $46,704 (2) $69,500 (3) $41,889; Cleveland Trinidad Paving Co., The Arcade, Cleveland, (2) $68,845 (3) $42,339. Work involves 16,100 lin.ft. stone curb, 15,500 lin.ft. 4 in. tile drain gutter, 13,700 cu.yd. earth excav., 125,400 sq.ft. vitr. brick, 17,100 sq.ft. asphaltic concrete and 269,400 sq.ft. concrete base. Noted Aug. 24.

Ind., Hammond—Comrs. Lake Co opened bids Aug. 28, crushed stone surfacing 14,530 ft. Leo Bixeman Rd., 10 ft. wide, 8 in. thick, 6,664 cu.yd. fill, 3,600 cu. yd. crushed stone, 900 cu.yd. screening, 7232 cu.yd. excav., from See Teaming & Supply Co., Hammond, $27,400; Courtright, Hiney & Wheeler, Gary, $27,500; United Constr. Co., Hammond, $31,890. Noted Aug. 17.

Mich., Detroit—Opened bids paving (1) Malvern Ave. from Van Dyke to Maxwell Aves., (2) Arlington Ave. from Six Mile Rd. to Stender Ave., (3) Central Ave. from Warren to Tireman Aves., (4) Dakota Ave. from John R to Brush Sts., (5) 14th Ave. from Chicago to Boston Blvds., (6) Minnesota Ave. from John R to Brush Sts., (7) Montana Ave. from Woodward to John R Sts., (8) Quincy Ave. from Gladstone to Hazelwood Aves., (9) Stoepel Ave. from Southfield to Westfield Aves., (10) 12th St. from Pilgrim to Puritan Aves., from Detroit Asphalt Paving Co., 20 McGraw Bldg., (1) $8,388 (2) $12,988 (3) $40,451 (4) $17,571 (5) $7,002 (6) $17,604 (7) $27,020, (8) $4,306 (9) $17,202 (10) $16,850; Cleveland Trinidad Paving Co., 402 Hammond Bldg., (1) $8,871 (2) $13,289 (3) $43,341 (4) $18,740 (5) $7,139 (6) $18,784 (7) $26,607 (8) $4,588 (9) $17,899 (10) $16,264; G. R. Cooke, 1260 Penobscot Bldg., (2) $12,734 (4) $17,305 (6) $17,333 (7) $26,607.

Wis., Beloit—Paving State St. incl., 3,200 lin.ft. combined concrete curb and gutter, 12,000 sq.yd. brick pavement, 4,600 cu.yd. excav., from G. Welch, 206 East Water St., $57,166. Noted Aug. 17.

Neb., York—Paving various streets, from Roberts Constr. Co., 404-5 1st Natl. Bank Bldg., Lincoln; A. A. Dobson, 809 1st Natl. Bank Bldg., Lincoln; Ammerman and Jackson, Wichita, Kan. Noted Aug. 24.

Wash., Seattle — Opened bids Sept. 2, paving, etc., Terry Ave. et al., 5,100 sq.yd. brick block, 16,500 sq.yd. 6 in. asphaltic concrete, 2,275 sq.yd. 7 in. concrete, 6,780 lin.ft. 16 in. asphaltic concrete curbing, 4,500 cu.yd. earth excav., etc., from J. L. Smith, Pioneer Bldg., $105,936, R. G. Stevenson, 1327 North 34th St., $106,386, D. H. Traphagen, Walker Bldg., $107,201; concrete walks on Atlantic St., et al., 17,300 lin.ft. 2 course concrete sidewalk, 1,150 cu.yd. concrete cross walks, 4,000 lin. ft. 3 in. sewer pipe, from D. H. Traphagen, Walker Bldg., $31,532, Coluccio & Erickson, 517 22nd St. S., $34,384, C. L. Creelman, 1079 25th St. N., $34,700.

CONTRACTS AWARDED

Connecticut—State Hy. Dept., Hartford, paving 7,552 ft. Sprague State Rd., 18 ft., in Sprague, 7 in. waterbound macadam on local stone or traprock base, to L. Longhi & Bro., 43 Center St., Torrington, $39,375. Noted Aug. 24.

New York—H. S. Sisson, comr. State Hy. Dept., Albany, improving 2.56 mi. Highway 1649, East Aurora-Lancaster, Part 1, Erie Co., to Hessell & Son, East Aurora, $93,644, engrs. est. $105,778; 6.45 mi. Highway 8129, Merrills Corner-Collins Corner-Clinton Co. line, Franklin Co., to R. Hopkins Co., 824 2nd Ave., Troy, $193,974, engrs. est. $213,523; 6.47 mi. Highway 8130, Natural Bridge-Harrisville, Part 1, Lewis Co., to F. H. Wells, Savannah, $231,676, engrs. est. $234,730; 4.06 mi. Highway 1648, Montgomery-Bullville, Part 2, Orange Co., to Armstrong & Trowbridge, Middletown, $93,105, engrs. est. $115,666; 5.27 mi. Highway 6131 Malta-Bemis Heights, Part 2, Saratoga Co., to Eastover Constr. Co., Herkimer, $206,998, engrs. est. $207,148; reconstructing 2 mi. Repair Contr. 1353 Highway 5250, Oswego Co., to Standard Bitulithic Co., 50 Church St., New York, $47,647, engrs. est. $47,700; 1.14 mi. Repair Contg. 1348 Highway 1115, Rensselaer Co., to P. H. Murray, 321 Cutler Bldg., Rochester, $40,332, engrs. est. $40,557; 2.91 mi. Repair Contr. 1349, Highways 714 and 715, Livingston Co., to A. Yesu & Son, 27 Carroll St., Binghamton, $85,573, engrs. est. $92,368; 2.36 mi. Repair Contr. 3024, Highway 726, Madison Co., to Ross Bros. & Griffiths, Copenhagen, $64,235, engrs. est. $69,339. Noted Aug. 17.

N. Y., Buffalo—Paving (a) Sect. 1 (b) Sect. 2 of Bailey Ave., 40 ft., specification B standard asphalt on concrete, to H. P. Burgard Co., 1968 Fillmore Ave., (a) $3,256 (b) $35,552. Noted July 13.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing and laying sidewalks on Potter Ave., from Van Alst to Goodrich Sts., to F. J. Clancy, Corona, $11,899; 101st St., to Kennedy & Smith, 93 Amity St., Flushing, $40,195; grading and paving Potter Ave. from Barclay St. to 2nd Ave. and grading, laying sidewalks and paving Shaffee St., to Cleveland Trinidad Paving Co., Flushing, $36,916 and $6,386 respectively; curbing and laying sidewalks on Opdyke St., to R. A. Hess, Inc., Corona, $4,263. Noted Sept. 7.

N. Y., New York—Park Bd., Municipal Bldg., repaving heavy traffic road Southern Blvd. in southwesterly portion of Botanical Garden, Bronx Boro, to C. D. Beckwith, 2875 Bway., $24,841. Noted Sept. 7.

N. Y., Niagara Falls—Paving 24th St. from Pine to Ferry Aves., 3½ in. vertical fibre brick, to J. F. McKinney Corp., Gluck Bldg., $31,466. Noted Sept. 7.

N. Y., Rochester—Bd. Contr. & Supply resurfacing (1) 4,000 ft. North St. from Portland Ave. to East Main St., (a) asphalt on present medina blocks (b) laying new medina blocks between car tracks, engrs. est. $102,320 (2) 3,600 ft. Clifford Ave. from end of present pavement to Culver Rd. (a) new asphalt (b) medina block between car tracks, to T. Holohan, 162 Lewis St., (1a) $29,959 (2a) $21,306; New York State Rys., 343 State St., (1b) $57,500 (2b) $22,390. Noted Aug. 17.

N. Y., Rochester—Paving Clifford Ave., Paige St. and resurfacing Erion Crescent, all asphalt, to T. Holohan, Rochester (street address not available), $21,306, $11,489 and $2,039 respectively; grading Highland Ave., to W. E. Kinney Co., Rochester (street address not available) $13,595; West High Athletic Field retaining wall, to Whitmore, Rauber & Vicinius, Rochester (street address not available) $2,049.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, reconstructing roadway, Richmond Turnpike, etc., to J. Johnson Sons, 455 Bway., West New Brighton, $126,856. Noted Sept. 7.

New Jersey—State Hy. Dept., Trenton, constructing Route 7, Sect. 1, Corlies Ave., Neptune Twp., Monmouth Co., 18,765 sq. yd. concrete, to East Jersey Bridge Co., 175 Smith St., Perth Amboy, 102% of engineers estimate ($95,207). Noted Aug. 24.

N. J., Highland Park—Mayor and Boro Council, 10 North 2nd Ave., pavements on Montgomery and Johnson Sts., Cedar, Adelaide and South 6th Aves., also sewer in Cedar Ave., to Utility Constr. Co., 5 Spring St., New Brunswick, $60,304. Noted Aug. 31.

N. J., New Brunswick—Paving Albany and French Sts. from Water to Alexander Sts., 17,014 sq.yd. asphalt blocks, to Utility Constr. Co., 5 Spring St., $122,644.

N. J., Somerville—Somerset Co., Court House, constructing State Highway Route 9, Sect. 7-A from Grove St. through East Main St., North Gaston and Union Aves., etc., 12,450 sq.yd. concrete, to New Jersey Constr. Co., Dock St., Hackensack, $77,549. Noted Aug. 17.

Pa., Oil City—Resurfacing 7 streets with asphalt, to D. A. Grant Co., Veach Bldg., $103,292. Noted July 13.

Pa., Youngsville—A. White, clk. Warren Co., paving 3,616 ft. Main St., concrete, (Countys share of work), to W. Martin and F. J. Kaltenbach, Girard, $25,994. Noted Aug. 17.

Md., Baltimore—See "Buildings."

W. Va., Mullens—Paving units 4, 5, 10, 11, 12, 13, 14, 15, 22 and 23, vitr. brick, to G. T. Fogle & Co., Charleston, $39,320.

North Carolina—State Hy. Dept., Raleigh, improving 15.22 mi. State Project 888, Yancey Co., to The Luck Co., Sylva, $166,565. Noted July 6.

Fla., Tavares—Comrs. Lake Co., resurfacing, widening roadbed, building shoulders, etc., on 17.6 mi. Sect. Rd. G, 22,000 cu.yd. sand-clay, 20,000 cu.yd. excav., 30 acres clearing, 1,720 lin.ft. culverts, 11,000 cu.yd. overburden excav., to Bryson Live Stock Co., Jacksonville, (street address not available), $40,290.

Fla., West Palm Beach—Palm Beach Co. paving with marl rock and surfacing with oil 10 mi. Military Trail-Lake Worth Rd., to E. P. Maule, Ojus, $35,300. Noted July 6.

Kentucky—State Hy. Dept., Frankfort, to R. G. Hill & Co., Knoxville, Tenn., (address not available), paving with bituminous penetration macadam on sandstone base, vitr. pipe 7.7 mi. Catlettsburg-Louisa Rd., State Project 6, Sect. B, Boyd Co., $202,539; to Dempster Constr. Co., 721 North Central St., Knoxville, Tenn., grading and draining (rein.-con. pipe) 9.3 Salyersville-Paintsville Rd., Federal Aid Project 76, State Project 34, Sect. A, Johnson Co., $161,139, 7.2 mi. Beattyville-Irvine Rd., State Project 29, Sect. A, Magoffin Co., rein-con. pipe, $82,- mi. Jenkins-Whitesburg Rd., State Project 6, Sect. A, Letcher Co., rein.-con. pipe, $45,103, 6.7 mi. Salyersville-Paintsville Rd., Federal Aid Project 75, State Project 34, Sect. A, Magoffin Co., rein.-con. pipe, $82,997, 1.2 mi. Pikeville-Williamson Rd., Federal Aid Project 80, State Project 36, Sect. B, Pike Co., $41,451; to U. S. Tackett, Mt. Sterling, grading and draining (standard vitr. pipe) 1.7 mi. Hyden-Hazard Rd., State Project 28, Sect. A, Leslie Co., $57,240; to Costello Bros. & Co., Henson Bldg., Knoxville, Tenn., grading and draining (rein.-con. pipe) 6 mi. Central City-Calhoun Rd., State Project 10, Sect. B, Muhlenberg Co., $42,911, 6 mi. Greenville-Nortonville Rd., State Project 10, Sect. C, Muhlenberg Co., rein.-con. pipe, $42,054; to T. E. Price, Lexington, grading 3.8 mi. Carlisle-Sharpsburg Rd., Federal Aid Project 61, Sect. A, Nicholas Co., $33,858.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties:

Hancock Co., Sect. "Arcadia" Lima-Sandusky Rd. 0.461 mi., rein.-con., to Scioto Constr. Co., Kenton, $30,118.

Marion Co., Sect. "H" grade separation in Tully Twp., 0.131 mi., paving with brick, to Malloy & Seckel, Marion, $10,660.

Ashland Co., Sect. "D" Mansfield-Wooster Rd., 3.508 mi., grading additional width and paving with brick, to P. H. Agerter, 114 South McDonald St., Lima, $54,807.

Huron Co., Sect. "G-1" Oberlin-Norwalk Rd., 1.746 mi., widening foundation and paving with brick, to Hill & Hill Elyria, (street address not available), $52,477.

Huron Co., Sect. "N" Oberlin-Norwalk Rd., 1.32 mi., constructing concrete curb, to Hill & Hill, Elyria (street address not available), $7,106.

Huron Co., Sect. "O" Oberlin-Norwalk rd, 1.28 mi., constructing concrete curb, to Hill & Hill, Elyria, (street address not available), $6,636.

Huron Co., Sect. "J-2" Bellevue-Norwalk Rd., constructing concrete curb, Hill & Hill, Elyria (street address not available), $4,693. Noted Sept. 7.

O., Akron—W. C. Peters, dir Pub. Serv. grading, laying sidewalks and paving 740 ft. School St., 24 ft., engrs. est. $18,153 and 500 ft. Carpenter St., 24 ft., engrs. est. $8,203, to E. and W. McShaffrey Co., 574 Rhodes Ave., $19,141 and $9,068, respectively; 900 ft. Nieman St., 24 ft. engrs. est. $15,499, to Columbus Asphalt Paving Co., Buckye Bldg., $16,371. Noted Aug. 31.

O., Akron—W. F. Peters, dir. Pub. Serv., grading, laying sidewalks and graveling 1,300 ft. McKinley Ave., engrs. est. $6,139, 3,000 ft. Pitkin Ave., engrs. est. $17,238, and 1,200 ft. Carlysle St., engrs. est. $7,761, to G. J. Stubbs, 30 West State St., $6,391, $16,664 and $7,421 respectively; grading, laying sidewalks and paving 150 ft. Wilbeth Rd., 26 ft., engrs. est. $5,675, to T. E. McShaffrey Constr. Co., 171 South Forge St., $5,809; repaving 500 ft. Kenmore Blvd., 20 ft., engrs. est. $7,896, to E. H. Rawle, 839 Bloomfield Ave., $8,000. Noted Aug. 31.

O., Cleveland—Paving Kipling and Halliday Aves., to Gould & Maybach, 823 East 150th St., $31,851; East 55th St., to Enterprise Paving & Constr. Co., 8444 Bway., $6,495. Work involves 4,380 lin.ft. stone curb and 4 in. drain tile gutter, 4,870 cu. yd. earth excav., 50,650 sq.ft. vitr. brick on 6 in. concrete. Noted Sept. 7.

O., Cleveland—Cuyahoga Co., paving

Streets and Roads (Continued)

Royalton Rd. 5, to Lake Erie Constr. Co., Hickox Bldg., $34,951; Lee Rd. 4, to Freshwater Constr. Co., Natl. Bldg., $140,672. Noted Sept. 7.

O., Columbus—Franklin Co., grading and paving 10.3 mi. Alkire Rd., 16 ft., asphaltic macadam, to W. M. Gray, 408 Fairwood Ave., $224,871. Noted Sept. 7.

Ind., South Bend—St. Joseph Co., concrete paving 3.8 mi. C. A. Carlisle Rd., 16 and 18 ft., to Rieth-Riley Constr. Co., Goshen, $103,800. Engrs. est. $92,000. Noted Aug. 17.

Michigan—State Hy. Dept., Lansing, grading 4.731 mi. State Trunk Line Rd. 51-2, Sect. A, Ottawa Co., 50,075 cu.yd. excav., to Kemme & Deipeirhorsh, Zeeland, $24,734.

Michigan—State Hy. Dept., Lansing, grading and surfacing 5.921 mi. State Trunk Line Rd. 35-3, Delta Co., to Stephenson & Martelle, Gladstone, incl. 26,495 cu. yd. excav. $0.55, 104.7 cu.yd. 1:2:4 concrete $20, 62.1 cu.yd. 1:3:6 concrete $18, 53,662 sq.yd. waterbound macadam $0.75, total $60,952; 2.75 mi. State Trunk Line Rd. 12-42, Iron Co., to Iron Co. Rd. Comn., Crystal Falls, 5,200 cu.yd. excav. $0.65, 115.3 cu.yd. 1:2:4 concrete $20, 29,040 sq. yd. bituminous macadam $1.45, total $52,682; 5.996 mi. Assessment Dist. Rd. 207, Huron and Tuscola Counties, to A. McDonell, Omer, 13,327 cu.yd. excav. $0.35, 181 cu.yd. 1:2:4 concrete $15, 138.1 cu.yd. 1:3:6 concrete $13, 56,183 sq.yd. gravel $0.82, total $56,826; 8.862 mi. State Trunk Line Rd. 28-9, Sect. B, Baraga Co., to Heranen Salonen, Herman, 67,570 cu.yd. excav. $0.48, 158.9 cu.yd. 1:2:4 concrete $18, 109.2 cu.yd. 1:3:6 concrete $16, total $58,914; 4.258 mi. State Trunk Line Rd. 25-4, Luce Co., to Hill Bros., Chatham, $26,328; 1.986 mi. State Trunk Line Rd. 11-7, Manistee Co., to Manistee Co. Rd. Comn., Ludington, $35,234.

Mich., Detroit—To J. Porath, 745 Griswold St., paving 2,300 sq.yd. alley between Morrell, Ferdinand, Christiancy and Dix Sts., $5,711, 800 sq.yd. alley between Fern Pl., Butler and Page Sts., $2,220; W. Tatti, 1337 Three Mile Dr., 2,100 sq.yd. alley between Belvidere, McClellan, Sylvester and Canfield Sts., $4,707; G. Nunn, 6409 3rd Ave., 1,500 sq.yd. alley between 12th, Wilson, Euclid and Philadelphia Sts., $3,828, 1,580 sq.yd. alley between 3rd, 2nd, Alexanderine and Willis Sts., $3,965, 1,440 sq.yd. alley between West Grand Blvd., Churchill, Wilson and Bethune Sts. $3,599; to Otis Cement Constr. Co., 806 Hammond Bldg., 1,520 sq.yd. alley between Crane, Rohns, Goethe and Mack Aves., $3,573, 1,100 sq.yd. alley between St. Aubin, Dubois, Erskine and Pierce Sts. $2,583, 1,380 sq.yd. alley between Concord, Canton, Kercheval and Waterloo Sts., $3,463, 670 sq.yd. alley between Chene, Grandy, Ferry and Palmer Sts., $1,659; to R. J. Powelson Co., 6415 Iroquois Ave., 1,420 sq.yd. alley between John R. Brush, Bethune and Smith Sts., $3,551, 1,260 ft. alley between Iroquois, Seneca, Gratiot and Medbury Sts., $3,160.

Wis., Beloit—Paving, etc., Portland Ave., 12,600 sq.yd. concrete, 1,500 lin.ft. combined curb and gutter, 4,000 cu.yd. earth excav., to Clayton Constr. Co., 397 Farwell Ave., Milwaukee, $29,058. Noted Aug. 17.

Wis., Mellen—Paving Main and Bennett Sts., 11,700 sq.yd. concrete, to Woodrich Constr. Co., 837 Metropolitan Life Bldg., Minneapolis, Minn., $38,470. Noted Aug. 31.

Wis., Superior—Paving 1,860 ft. 5th St. from Tower to Weeks Aves., bitulithic on 1 course concrete, 30 ft., incl., 32,000 lin.ft. concrete curb, to E. Johnson & Sons, 572 West 5th St., $32,709.

Ia., Ft. Dodge—Paving 10 blocks 11th St. S. W., asphaltic concrete, to Rasmussen & Horrabin Constr. Co., Ft. Dodge, $2.99 per sq.yd. Noted Aug. 31.

Minnesota—State Hy. Dept., St. Paul, 12 mi. State Project 13-01, Federal Aid Project 294, LeSueur Co., 266,780 cu.yd. excav., to Nelson, Fulton & Nelson, Temple Court, Minneapolis, and Nolan Bros., 18 North 2nd St., Minneapolis, $63,000. Bridges and culverts in connection with above job not yet awarded. Noted Aug. 10.

Minn., Skakopee—Grading 10 mi. road from New Prague to St. Patrick, 24 ft., Scott Co., to Nolan Bros., 18 North 2nd St., Minneapolis, and Nelson, Fulton & Nelson, 355 Temple Court, Minneapolis, $21,005; culverts to Lyle Culvert & Road Equipment Co., 171 27th Ave. S. E., Minneapolis.

Minn., Two Harbors—Lake Co., grading 39.5 mi. State Project 1-01, Federal Aid Project 282, between Little Marais and Two Harbors, 549,000 cu.yd. excav., portable and monolithic culverts, Bridge 3457, 150 ft., Bridge 3459, 380 ft., Bridge 3460, 80 ft., Bridge 3582, 220 ft., Bridge 3586, 60 ft., Bridge 3587, 50 ft., Bridge 3588, 60 ft., Bridge 3590, 40 ft., Bridge 3887, 23 ft., to A. Guthrie & Co., Inc., 366 Jackson St., St. Paul, $623,000. Noted Aug. 23.

Kan., Salina—Paving, curbing and guttering Elm, Ash, 11th and 12th Sts., Penn and Iron Aves., curbing and guttering only Jamestown Ave., to Smith Graham Constr. Co., Wichita, (street address not available), $105,958. Noted Aug. 24.

Kan., Valley Falls—For 7,000 yd. brick paving, 2,100 lin.ft. curb and gutter, 460 lin.ft. stone sewer, to Southwest Paving Co., Wichita, (street address not available), $26,978. Noted Aug. 24.

Missouri—State Hy. Dept. at div. office Bloomfield, 9.943 mi. road from Cairo to Poplar Bluff, 24 ft., Federal Aid Project 118 B, Stoddard Co., to Novaculite Constr. Co., Marion, Ill., $28,950. Noted Aug. 24.

S. D., Sioux Falls—Paving 8,969 sq.yd. 8th St. from Cliff to Asylum Aves. cement concrete, to C. H. Atkinson Paving Co., Watertown, $2 per sq.yd.; 10,815 sq.yd. 2nd Ave. from 10th St. to Chicago, St. Paul, Minneapolis & Omaha Ry. cement concrete, to S. L. Norlin, Sioux Falls, $2 per sq.yd. Noted July 20.

Tex., Beaumont—Jefferson Co. paving with 2 in. asphalt on 6 in. concrete base, to Smith Bros., 313 Sumpter Bldg., Dallas, 3 mi. Spindle Top Rd., 16 ft., 27,034 sq.yd. asphalt on concrete, 9,652 cu.yd. earth and borrow excav. $106,678, engrs. est. $117,345 incl. 10% for engineering and contingencies; 4½ mi. Port Neches Rd., 16 ft., 42,240 sq.yd. asphalt on concrete, 17,721 cu.yd. earth excav., $167,446, engrs. est. $184,000 incl. 10% for engineering and contingencies; 4½ mi. Franklin St., 16 ft., 46,933 sq.yd. asphalt on concrete, 20,133 cu.yd. earth and borrow excav., $200,086, engrs. est. $220,000 incl. 10% for engineering and contingencies; 2 mi. 60th St., 16 ft. 20,184 sq.yd. asphalt on concrete, 9,114 cu.yd. earth excav., $84,825, engr. est. $93,000 incl. 10% for engineering and contingencies; 3 mi. 7th St., 16 ft., 33,308 sq.yd. asphalt on concrete, 7,950 cu.yd. earth and borrow excav., $132,993, engrs. est. $146,000 incl. 10% for engineering and contingencies. Noted Aug. 31.

Tex., Coleman—Coleman Co. grading and graveling 10.58 mi. Highway 7 A, Federal Aid Project 303, 16, 18 and 30 ft., to Scarbrough & Davis, Gaston Bldg., Dallas, $85,848; drainage structures on 6 mi. South Anna-Rockwood Rd., concrete and timber, to Womack Constr. Co., Sherman, $6,176. Noted Aug. 17.

Tex., Ft. Worth—Topping ¾ mi. Vickery Blvd, 50 ft., (a) 22,000 sq.yd. 1 in. top cold Uvalde Rock Asphalt on graveel, (b) 7,920 lin.ft. concrete curbing, to Genl. Constr. Co., Cotton Exch. Bldg., (a) $1 per sq.yd., (b) $0.55 per lin.ft. Engrs. est. $27,000.

Tex., Seguin—Guadalupe Co. (a) grading and gravel surfacing (b) rein.-con. drainage structures, on 3.39 mi. State Highway 3,657 cu.yd. concrete, 86,240 lb. reinforcing, 10,538 cu.yd. roadway excav., 9,157 cu.yd. gravel surfacing (at pits), 13,194 cu.yd. borrow, to Ruby & Co., Blanco, (a) $9,305; to Gonzales Cement Wks., Gonzales, (b) $16,520. Engrs. est. $28,408 incl. 10% for engineering and contingencies.

Colorado—State Hy. Dept., Denver, improving 7.53 mi. Empire-Jones Pass Sect., Berthoud Pass Forest Rd. Project, Clear Creek Co., 18 ft., to Dooling Bros. & Hoffman, 305 Bank Bldg., Denver, $110,659.

Colo., Denver—Paving 11 blocks West 44th Ave. Paving Dist., concrete and asphalt, to Western Paving Co., 601 1st Natl. Bank Bldg., $25,063, 12 blocks Capitol Hill Paving Dist. 1, 36 ft., asphalt, to Gibbons & Lawrence, 4680 Vine St., $38,899. Noted Aug. 24 and 31.

Ariz., Phoenix—Maricopa Co. Highway Comn., grading, building structures and surfacing 5 mi. Project 54, 8,000 cu.yd. excav., 46,960 sq.yd. waterbound macadam, to S. B. Shumway, Mesa, $31,752.

Wash., Kelso—Bitulithic paving, and laying sanitary and storm sewers, L. I. D. No. 41, to United Constr. Co., Everett, $37,628.

California—State Hy. Comn., Sacramento, grading 13.1 mi. highway between Anderson Canyon and Sur River, Monterey Co., to G. Pollock Co., Forum Bldg., Sacramento, 910,000 cu.yd. excav. at $0.67, 3,600 cu.yd. Class A Portland cement concrete (culverts, retaining walls and monuments) $30, 2,850 cu.yd. dry rubble (retaining walls), $8, etc., total $786,805; 9.06 mi. highway between Saugus and ¾ mi. northwest of Castaic School, Los Angeles Co., to S. Hunter, 122 West Valerio St., Santa Barbara, 5,950 cu.yd. Class A Portland cement concrete (shoulders) at $9.75, total $58,012; grading and paving on corrugated metal pipe basis 10.9 mi. highway between Colusa and Long Bridge, Colusa and Sutter Counties, to Bonnell, Savage & Fenn, Tacoma, Wash., (street address not available), $113,765; grading 9.3 mi. and gravel surfacing 7.6 mi. highway between westerly boundary and Central House, Amador Co., to Blumenkranz & Vernon, Stockton, (street address not available), $102,378. Noted Aug. 10 and Sept. 7.

Calif., Belvedere — Surfacing various streets, plain asphalt, to P. L. Burr, 512 Mission St., San Francisco, $33,980. Noted Sept. 7.

Calif., Merced—Grading, curbing and paving 21st and 22nd St. from P to R Sts., 13th, 14th and 15th Sts., alleys in Blocks 84 and 112, to Valley Paving & Constr. Co., Visalia, 287,335 sq.ft. grading at $0.04 per sq.ft.; 271,603 sq.ft. 1½ in. warrenite on 3½ asphaltic concrete $0.219; 15,732 sq.ft. 1½ in. warrenite on 2½ in. aphaltic concrete $0.20; 8,606 lin.ft. concrete curb $0.80; 1,300 ft. special designed curb $0.75; 1,600 ft. wooden curb $0.20. Noted Aug. 3

Calif., Oakland—Improving 14th St. from Market to Poplar Sts., to Oakland Paving Co., 5000 Bway., 127,792 sq.ft. grading at $0.054, 774 ft. concrete curb with steel guard $1.08, 3,339 lin.ft. concrete curb without steel guard $0.95, 4,423 ft. concrete gutfor $0.315, 117,369 sq.ft. asphaltic concrete pavement $0.28, etc. Noted Aug. 31.

Calif., Oroville—Supervs. Butte Co., asphalt macadam paving 4.8 mi. Oroville-Pentz Rd., also improving Oroville-Bangor Rd., Sect. B, Route 25, 2,650 ton broken stone, surfacing 272 ton Grade E asphaltic oil, to Heafey, Moore & McNair, 2030 High St., Oakland, $34,000 and $21,600 respectively; grading and asphalt macadam paving 6.4 mi. Oroville-Pentz Rd., Sect. 22, Route C, to M. C. and T. H. Polk, Chico, $49,650; grading and graveling 3 mi. Middle Honcut Cross Rd., to S. D. Miller, Manteca; grading $0.60 per cu.yd., graveling $0.80. County furnishes material on above roads. Noted Aug. 24.

Calif., San Diego—To G. R. Daley, 4430 Boundary St., improving Exchange Pl., Soledad and Mar Aves., 574.5 cu.yd. excav. at $1.50, 56 cu.yd. earth embankment $0.10, 98,970 sq.ft. 5 in. portland cement concrete paving $0.289, 1,056 lin.ft. portland cement curb $0.70, etc., total $30,504. Noted May 25.

Que., Montreal—Pave 3,000 ft. Notre Dame St. from Atwater St. to Place St. Henry, 30 ft., $44,173; 3,000 ft. from Place St. Henry to Cote St. Paul, 50 ft., $73,167; 1,750 ft. from Cote St. Paul to city limits, 35 ft., $36,632; 2,250 ft. from Fulford to Atwater Sts., 40 ft., $37,357; 1,125 ft. from McGill to Francis Xavier Sts., 25 ft., $20,514, by day labor. E. Blanchard, engr. roads.

Ont., Cobourg—Asphalt pavements to Warren Bituminous Paving Co., 54 University Ave., Toronto, $75,000. Noted Aug. 24.

Ont., Whitby—Asphalt pavement on Brock St., to Warren Bituminous Paving Co., 54 University Ave., Toronto. $66,000.

Industrial Works

PROPOSED WORK

Mass., Dorchester (Boston P. O.)—E. H. Blake, 18 Harvard Ave., soon lets contract 1 story, 100 x 120 ft. brick and concrete garage and repair shop, Harvard Ave. $40,000.

Mass., West Lynn (Lynn P. O.)—General Electric Co. had plans prepared 4 story, 122 x 157 ft. brick and rein.-con. factory addition. $200,000. Private plans.

Conn., Bridgeport—Huber Ice Cream Co., 800 Seaview Ave., plans 3 story and basement, brick and rein.-con plant, Seaview Ave. $150,000. Fletcher-Thompson, Inc., 542 Fairfield Ave., archts. and engrs.

Conn., Danbury—Danbury Mfg. Co., 7 New St., had plans prepared by Sunderland & Watson, archts., 248 Main St., 3 story, 60 x 100 ft. factory, brick and steel, Liberty St. $50,000.

Conn., Norwich—Amer. Thermos Bottle Co., off Laurel Hill Ave., plans large factory and warehouse. Architect not selected.

N. Y., Buffalo—Air Reduction Co., 342 Madison Ave., New York, having plans prepared by Francisco & Jacobus, archts. and engrs., 511 5th Ave., New York, brick, steel and concrete plant, plain foundation here. $50,000.

Pa., Charleroi—West Penn Power & Traction Co., Hartje Bldg., Pittsburgh, plans power station, here. $1,000,000.

Pa., Dunmore (Scranton P. O.)—H. M. Spencer having plans prepared by Duckworth Bros., archts., c/o owners, 2 story, 40 x 300 ft. rein.-con. garage and auto exchange, Drinker St. $100,000.

Pa., Jeannette—Amer. Window Glass Co., Farmers Bank Bldg., Pittsburgh, having plans prepared twelve 1 story additions to plant, here. $1,500,000. Private plans.

Pa., Lancaster—Black Strap Fuel & Potash Products Co., 505 Chestnut St., Phila., purchased 40 acres here and plans to erect factory buildings.

Industrial Works (Continued)

Pa., New Castle—Westmoreland Paint & Color Co., Hobart St. S. S., plans large additions to factory. Architect not announced.

Pa., Pittsburgh—Fairmount Creamery Co., 301 Ferry St., having plans prepared by J. J. Howley, archt., 411 Traders Bldg., Scranton, 5 story and basement 62 x 72 ft. warehouse and 1 story and basement 38 x 72 ft. garage, 25th and Smallman Sts. $150,000.

W. Va., Nitro—Viscose Co., Marcus Hook, Pa., having plans prepared by Ballinger Co., engrs., 12th and Chestnut Sts., Phila., 1 and 2 story, 75 x 300 ft. and 42 x 82 ft., brick and steel factory, here. $500,000.

N. C., Shelby—Dover Mill Co. plans cotton mill. $400,000. J. R. Dover, pres.

Fla., Vero—Voted $50,000 bonds for addition to power plant. Carter & Damrow, city engrs.

La., Alexandria—Town having plans prepared and soon takes bids gas plant and distribution system. $110,000, also fire station and equipment, $53,000.

O., Cleveland—W. E. Grimm, 3383 De Sota Ave., had plans prepared 1 story, 40 x 100 ft., brick and timber factory, 3703 East 93rd St. $40,000. Private plans.

O., Cleveland—See "Buildings."

Ind., Sheridan—Indiana Condensed Milk Co., c/o E. W. Stout, Fletcher Amer. Bank, Indianapolis, plans 2 story, brick and steel factory. $75,000. Architect not selected.

Mich., Detroit—Amer. Car & Fdry. Co., 165 Bway., New York, soon takes bids 1 story, 175 x 275 ft. rein.-con. and brick foundry, plain foundation, Russell St., here.

Mich., Detroit—Dept. of Street Rys., Shoemaker and St. Jean Aves., plans 1 story, rein.-con., brick and steel shop, plain foundation, Woodward Ave. $100,000. W. C. Markham, 312 Marquette Bldg., engr.

Mich., Grand Rapids — Valley City Creamery Co., 666 Lake Dr., S. E., had plans prepared by H. L. Mead, archt., Grand Rapids, (street address not available), 2 story and basement, 40 x 100 ft. rein.-con., brick, steel and terra cotta creamery. $40,000.

Mich., Hamtramck (Detroit P. O.)—Dodge Bros., Jos. Campau Ave., Detroit, plans 8 story, 160 x 400 ft., rein.-con. and brick addition to auto factory, Jos. Campau Ave., here. $1,500,000. Private plans.

Ill., Chicago—S. M. Earling, 140 South Dearborn St., having plans prepared by T. R. Bishop, archt., 35 South Dearborn St., 1 story, 90 x 160 ft., rein.-con., brick and steel garage, Montrose and Greenview Sts. $50,000.

Wis., Clintonville—Service Auto Co. plans 1 story, 50 x 120 ft., brick, concrete and tile garage, plain foundation. $40,000.

Wis., Green Bay—Brown Co., c/o H. F. Wittig, Court House, plans 1 and 2 story, 62 x 130 ft., brick, rein.-con. and steel laundry, plain foundation. $60,000. Architect not selected.

Wis., Milwaukee—Magnetic Realty Co., 185 Mason St., had plans prepared 2 story and basement, 40 ft. high, 50 x 150 ft., brick and concrete garage, plain foundation, Clybourn St. $50,000. Private plans.

Wis., Milton—Burdick Cabinet Co. having plans prepared by Federal Eng. Co., engrs., 444 Milwaukee St., Milwaukee, 1 story, 80 x 160 ft., addition to factory, concrete and steel, concrete foundation. $45,000. See item under "Miscellaneous, Bids Desired."

S. D., White River—See "Dams."

Mo., Kansas City—Arkansas and Missouri Realty Co., c/o F. E. Faris, 2nd floor, New York Life Bldg., having plans prepared by J. O. Hogg, archt., 22nd and Oak Sts., 2 story, 40 x 208 ft., rein.-con., brick and stone publishing plant, 22nd and Oak Sts.

Mo., North Kansas City—Kansas Flour Mill Co., Postal Telegraph Bldg., Kansas City, having plans prepared by Burrell Eng. Co., archts. and engrs., 403 Scarritt Arcade Bldg., Kansas City, for 3,000 bbl. mill, rein.-con., brick and steel, elevator capacity 300,000 bu., here.

Calif., Atascadero—Doble Steam Motors Co., 714 Harrison St., San Francisco, soon takes bids 1½ story, 100 x 500 ft., rein.-con. factory, here. $100,000. Home Builders Service Bureau, (A. Roth), Atascadero, archts.

Calif., San Francisco—Bothin Real Estate Co., 604 Mission St., having plans prepared by A. S. Bugbee, archt., 26 Montgomery St., 3 story, garage, Natoma-Hunter and Sherwood Sts.

Que., Montreal—Dominion Government, Ottawa, Ont., approved 500 ft. extension to imperial oil plant at Longue Pointe. $250,000. W. L. McDougall, chn. Bd. Harbor Comrs. R Harvie, ch. engr.

Ont., Georgetown—J. N. O'Neil & Son, plan 2 story garage and repair shop. $50,000.

B. C., Burnaby—Phillips-Hoyt Lumber Co. plans mill here. $60,000. Prices wanted on equipment.

BIDS DESIRED

Pa., Williamsport—Oct. 1, by S. T. McCormick, 3rd., Hepburn and West 4th Sts., 1 story and part basement, 100 x 197 ft., brick, steel and concrete garage, Hepburn and Potter Sts. $100,000.

O., Cleveland—F. Svoboda, 5377 Bway., taking bids and opens same about Sept. 22, 2 story, 45 x 139 ft., rein.-con., brick and steel garage, plain foundation, Bway. and Mumford St. $60,000. Private plans. Peck & Horton, 2261 East 14th St., lessees.

Mich., Detroit—E. Gray, Jr., Continental Ave., taking bids and opens same about Sept. 23, 1 story, 34 x 260 ft. rein.-con., brick and steel service station, plain foundation, Continental Ave. $40,000.

Ill., Marshall—Oct. 5, by Mayor and City Council, new power house, 2 A. C. generators direct connected to Corliss engines, switchboard, 2 fire tube boilers, heater and feed pumps, piping, chimney, moving and resetting 1 fire tube boiler, etc.; furnishing and installing ice making machinery, 15 ton per day capacity, distilled water ice plant and erecting ice plant building. F. L. Wilcox, Chemical Bldg., St. Louis, Mo., engr.

Wis., Ashland—C. Walkusch taking bids 2 story, 50 x 95 ft., garage and repair shop, brick and rein.-con., plain foundation. $40,000. Private plans.

Wis., Antigo—Pacific Ice Cream Co. taking bids 2 story, 50 x 64 ft., brick, rein.-con. and steel, factory, plain foundation. $50,000. H. Quackenbush, mgr. Private plans.

Mo., Springfield—Sept. 25, by C. L. Rhodes Produce Co., 443 South Campbell St., 2 story and basement, 84 x 141 ft., produce plant. $50,000. Hecklenlively & Mark, 642 Landers Bldg., archts. $50,000.

BIDS RECEIVED

N. Y., Cohoes—C. L. Cadle, supt. Pub. Wks., Albany, opened bids Sept. 6, power house at Crescent Dam, here, Contr. A-3, from Brown, Lowe & Law Bros., Foster Ave., Schenectady, $329,887; Eastover Constr. Co., Herkimer (street address not available), $334,996; Troy Pub. Wks. Co., U. C. N. Bank Bldg., Utica, $340,474. Engrs. est. $313,189. Contract awarded to lowest bidder. Noted Aug. 17.

N. Y., New York—Dept. Plant & Structures, Municipal Bldg., opened bids Sept. 6, housing station, East 80th St. and East End Ave., for Dept. Street Cleaning, from T. A. Reilly, 48 East 41st St., $67,752; M. Miller, 3 West 103rd St., $69,800; Rosenthal Eng. Contg. Co., 228 Jackson St., Brooklyn, $69,830.

N. J., Trenton—Comr. of Educ., State House, opened bids Sept. 7, 32 x 86 ft., brick, steel and timber power house, etc., for State Normal School, Model Ave., general contract from Wills-Bills Co., 17th and Sansom Sts., Phila., $29,983, Carlton Constr. Co., Longacre Bldg., New York City, $31,537; heating work, from Mechanical Equipment Co., Drexel Bldg., Phila., $29,627, Deckman Power Co., Goff Bldg., Camden, $30,450, Jaehnig & Peoples, 221 13th Ave., Newark, $31,120. Noted Aug. 31.

CONTRACTS AWARDED

N. H., Salmon Falls—Salmon Falls Mfg. Co., 1 story, 30 x 80 ft. brick and rein.-con. power house and hydro-electric plant, 1,800 h.p. capacity, also redevelopment of Salmon Falls, to Central Eng. and Constr. Co., Central Falls, R. I. Engrs. est. $250,000.

Mass., Cambridge — Cambridge Rubber Co., 748 Main St., 4 story, 80 x 102 ft. factory, rein.-con. and brick, to Scully Co., 300 Main St. Archts. est. $75,000.

Mass., Fall River—Stevens Mfg. Co., Hartwell St., 85 x 95 ft. brick addition to bleachery, 45 x 55 ft. kierhouse, 18 x 30 ft. caustic house, and 25 x 36 ft. filter house, all 1 story and basement, to McNally Constr. Co., 84 North Main St. Archts. est. $60,000.

Mass., Housatonic—Monument Mills, 2 story, brick and concrete addition to plant, to F. T. Ley & Co., 499 Main St., Springfield. Archts. est. $60,000.

Mass., Mansfield—Mansfield Bleachery, Sumner St., 3 story, 50 x 136 ft. addition to plant, brick and timber, plain foundation, to E. O. Dexter, Wall St., Attleboro. Archts. est. $50,000.

Mass., Salem—Salem Laundry Co., 51 Lafayette St., 2 story and basement, 80 x 140 ft. brick and concrete laundry and garage, Lafayette St., to Morrison Constr. Co., 297 Bridge St. Archts. est. $125,000.

Mass., West Springfield (Springfield P. O.)—Wico Electric Co., 132 Liberty St., Springfield, 1 story, 90 x 400 ft. factory, brick and steel, (first unit of new plant), here, to F. T. Ley & Co., Inc., 499 Main St., Springfield. Archts. est. $100,000. Noted Aug. 31.

Mass., Worcester—Norton Co., Barbers Crossing, 4 story, 50 x 125 ft. factory, brick and concrete, near Plant No. 6, to E. J. Cross Co., 82 Foster St. Archts. est. $75,000.

Mass., Worcester — Wickwire-Spencer Steel Corp., Webster St., 3 story, 33 x 100 ft. brick and concrete factory, to replace one destroyed by fire, to E. D. Ward Co., 82 Foster St. Archts. est. $45,000.

R. I., Pawtucket—H. & B. Amer. Machine Co., 1 additional story to present 3 story factory, brick and steel, to O. O. Purington Co., 626 Industrial Trust Bldg., Providence. Archts. est. $100,000.

Conn., Devon (Milford P. O.)—Connecticut Light and Power Co., West Main St., Waterbury, 1 story, brick and rein.-con. power plant unit on east side of Housatonic River, here, to J. A. P. Crisfield Constr. Co., c/o J. A. P. Crisfield, Gravers Lane, Germantown, Phila., Pa. Engrs. est. $2,000,000. Noted July 13.

Conn., Norwalk—C. H. Harris, Inc., 116 Main St., 1 story, 111 x 120 ft., brick and steel addition to plant, Main St., to Hewlett Co., 886 Main St., Bridgeport. Archts. est. $45,000.

N. Y., Albany—Electric Supply & Equipment Co., 103 Allyn St., Hartford, Conn., 4 story, 42 x 63 ft., brick and concrete factory, plain foundation, Bway. and Church Sts., here, to Feeney & Shean Building Co., 164 Montgomery St. Archts. est. $50,000. Noted Aug. 31.

N. Y., Long Island City—James Butler, Inc., 390 Washington St., New York, rein.-con. and steel warehouse, concrete pile foundation, Mount St., here, to Amer. Concrete Steel Co., 27 Clinton St., Newark, N. J. Archts. est. $1,750,000. Noted Aug. 17.

W. Va., Beckley—Raleigh Motor Co., will build 3 story, 49 x 146 ft., brick and steel garage, by day labor. $60,000. H. M. Miller, Roanoke, Va., archt. Noted Aug. 10.

O., Cleveland—Cleveland Kraut & Pickle Co., 1191 East 22nd St., 2 story, 60 x 80 ft., brick and steel factory, 3333 Lakeside Ave., to H. G. Slatmyer & Son Constr. Co., 203 Lakeside Ave., N. W. Archts. est. $40,000. Noted July 20.

Mich., Detroit—A. Kahn, archt., 1000 Marquette Bldg., 2 story, 40 x 106 ft. rein.-con. and brick factory, plain foundation, Rose and 16th Sts., to F. N. Cooper, 6370 Gratiot Ave., for Burr-Patterson Co., 4211 Woodward Ave. Archts, est. $40,000. Noted June 29.

Mich., River Rouge (Detroit P. O.)—Ford Motor Co., Highland Park, (Detroit P. O.), 5 story, 60 x 300 ft. rein.-con., brick and steel addition to plant, plain foundation, here, to E. Winters, 752 Book Bldg., Detroit.

Wis., Appleton—W. H. St. John, 205 North Van Buren St., Green Bay, 1 story, 50 x 102 ft., brick and concrete garage, plain foundation, College Ave., here, to E. F. Miller, 1st Natl. Bank Bldg. Engrs. est. $40.000.

Wis., Eagle River—Strong & Manley, 1 story, part basement, 60 x 120 ft., brick and concrete garage, plain foundation, to Hub City Constr. & Lumber Co., Stoughton. Engrs. est. $45,000. Noted Aug. 10.

Wis., Green Bay—Sisters of Our Lady of Charity, c/o Good Shepherd Home, 1 story, 86 x 200 ft. laundry and 36 x 120 ft., boiler house, rein.-con. and brick, plain foundation, to H. Danischefsky, 1484 Humboldt Ave., Milwaukee. Engrs. est. $70,000.

Wis., La Crosse—Nelson Garment Co., 111 South 2nd St., 1 story, 92 x 160 ft., brick, rein.-con. and steel factory, plain foundation, Cameron St., to J. A. Lee, 1903 Liberty St. Engrs. est. $60,000. Noted Aug. 10.

Wis., Oshkosh—Hathaway Buick Co., 25 Church St., 1 story, 60 x 120 ft. repair and machine shop, brick and concrete, plain foundation, Main St., to C. R. Meyer & Sons, 50 State St. Engrs. est. $40,000.

Wis., Peshtigo—Peshtigo Paper Co., J. Sutherland, pres., Schautz and Sorrento Sts., Dayton, O., 68 x 150 ft. unit to paper factory, rein.-con., brick and steel, plain foundation, here, to W. E. Ule, 603 Clark St., Stevens Point. Engrs. est. $70,000.

Wis., Rosendale — Central Wisconsin Canning Co., Beaver Dam, 2 story, 60 x 180 ft. warehouse, 3 story, 50 x 80 ft. manufacturing building, 1 story, 40 x 50 ft. boiler house, 2 miscellaneous buildings each 1 story, 30 x 40 ft., all brick and timber, plain foundation, to Hutter Constr. Co., 128 Western Ave., Fond du Lac. Engrs. est. $75,000. Noted Aug. 10.

Wis., Sheboygan—W. A. Knaak Motor Co., South 13th St. and Georgia Ave., 2 story, 50 x 95 ft., garage and repair shop, brick and rein.-con., plain foundation, Georgia Ave., to C. F. Grasse & Co., 1117

Industrial Works (Continued)

Swift Ave. Engrs. est. $40,000. Noted June 22.

Wis., Sheboygan—Phoenix Chair Co., South 12th St. and Virginia Ave., 1 story, 50 x 60 ft., engine house, (incl. equipment), brick, rein.-con. and steel, plain foundation, 1t2h St., to Jones & Laughlin Steel Co., 440 West Lake St., Chicago. Engrs. est. $40,000.

Wis., Wausau—Ritter & Deutsch Co., 113 3rd St., 3 story, 53 x 69 ft. addition to warehouse, brick and concretee, plain foundation, to F. Krause, c/o Oppenhamer & Obel, archts., Spencer Bldg. Archts. est. $50,000.

Minn., Minneapolis—Franklin Co-operative Creamery Co., 2601 Franklin Ave. E, 2 story and basement, 28 x 152 x 155 ft. barn and garage, rein.-con., brick and tile, 2011 North 2nd St., to Union Investment Co., 325 2nd Ave. S., $70,000.

N. D., Minot—Northern Produce Co., general contract 2 story and basement, 60 x 120 ft. concrete and brick creamery, to Lantz & Mackley, Minot, $40,000.

Ark., Ft. Smith—P. Sheridan, 1107-9-11 Garrison Ave. or 907 East Main St., 2 story, 72 x 140 ft., brick addition to garage and auto service station, to J. H. Reddick Co., 619 North 20th St. Engrs. est. $40,000.

B. C., Elko—Wigwam Pulp and Paper Co., 25,000 hp. power house, concrete dam, also sulphite paper making plant, 100 ton per day, rein.-con., to McDougall & McNeill, Ltd., 514 Standard Bank Bldg., Vancouver, $3,000,000. Total cost $10,000,000.

Buildings

PROPOSED WORK

Mass., Ware—Church—Our Lady of Mt. Carmel Church plans 1 story and basement, 82 x 160 ft. brick and stone. $150,000. J. T. Sheehan, pastor. Architect not selected.

N. Y., Brooklyn—Office—One Hundred Five Court St. Corp., c/o Shampan & Shampan, archts. and engrs., 50 Court St., soon takes bids 6 story, 90 x 100 ft., brick, steel and stone, plain foundation, Court and Schermerhorn Sts. $400,000.

N. Y., New York—Apartment—Calma Realty Co., c/o G. and E. Blum, archts. and engrs., 505 5th Ave., soon takes bids 11 story, 78 x 87 ft., brick, steel and stone, plain foundation, Lexington Ave. and 93rd St. $350,000.

N. Y., New York—Apartment—Sailors Snug Harbor, c/o Helmle & Corbett, archts. and engrs., 132 West 42nd St., soon takes bids 11 story, brick, steel and stone, plain foundation, University Pl.

N. Y., New York—Hotel—Hotel Roosevelt, c/o G. B. Post, archt. and engr., 101 Park Ave., having sketches made 18 story, 215 x 215 ft., brick, steel and stone, plain foundation, Madison Ave. and 45th St. $6,000,000.

N. Y., Olean—School—Bd. Educ. rejected bids opened Aug. 14, 2 story, 105 x 168 ft., brick, Main St. $200,000. Will readvertise. A. W. E. Schoenberg, Olean, archt. Noted May 11.

N. Y., Patchogue—High School—Bd. Educ. having plans prepared by Tooker & Marsh, archts. and engrs., 101 Park Ave., New York, brick, steel and stone, plain foundation. $500,000.

N. Y., Spring Valley—High School—Bd. Educ. having plans prepared by Ernest & Sibley, archts. and engrs., Palisade, N. J., brick, steel and stone, plain foundation. $250,000.

N. Y., Whitehall—School—Bd. Educ. having plans prepared by Tooker & Marsh, archts. and engrs., 101 Park Ave., New York, brick, steel and stone, plain foundation. $150,000.

N. J., Bergenfield—High School—Bd. Educ. having plans prepared by Ernest & Sibley, archts. and engrs., Palisade, brick, steel and stone, plain foundation. $150,000.

N. J., Dumont—High School—Bd. Educ. having plans prepared by Ernest & Sibley, archts., Palisade, brick, steel and stone, plain foundation. $175,000.

N. J., Fort Lee—School—Bd. Educ. having sketches made by E. Sibley, archt. and engr., Palisade, brick, steel and stone. $300,000.

N. J., Maywood—School—Dept. Educ. soon takes bids brick, steel and stone, plain addition. $150,000. Ernest & Sibley, Palisade, archts. and engrs.

N. J., Trenton—Schools—Bd. Educ. having plans prepared by Ernest & Sibley, archts. and engrs., Palisade, Grade School, $150,000; High School 3, $200,000; High School 4, $200,000; all brick, steel and stone, plain foundations.

Pa., Barnesboro—High School—School Dists. of Barnesboro, Spangler, Barr and Susquehanna Twps., plans 3 story, 100 x 120 ft. joint high school. $150,000. G. R. Anderson, Barnesboro, school pres. Architect not selected.

Pa., Erie—Office and Store—H. L. Scott Bldg., having revised plans prepared by C. K. Porter, archt., 73 West Eagle St., Buffalo, N. Y., 6 story, 80 x 120 ft. $150,000.

Pa., New Castle—Temple—Ancient Accepted Scottish Rite Masons, plans 200 x 300 ft. Highland and Lincoln Aves., to exceed $150,000. Architect not announced.

Pa., Royersford—Church—Sacred Heart Roman Catholic Church having plans prepared by F. F. Durang, archt., 1220 Locust St., Phila., 1 story and basement, 34 x 100 ft. church. $150,000.

Md., Baltimore—High School—Bd. Educ. soon takes bids brick, stone and steel, Clifton Park. $500,000. R. D. Kimball, 15 West 38th St., New York iCty, archt.

Va., Richmond — Office — Medical Arts Bldg. Co. having plans prepared by H. T. Barnham, archt., Chamber of Commerce Bldg., and soon takes bids 7 story and basement, 52 x 150 ft., rein.-con. and brick. W. B. Bates, Moore Bldg., Richmond, and Hutton & Schreffler, Citizens Bank Bldg., Raleigh, N. C., engrs.

N. C., Raleigh — Theatre — Raleigh Theatre Co., Raleigh, (street address not available), plans 2 story and basement, 70 x 190 ft., rein.-con. $200,000. J. E. Beaman, Commercial Bank Bldg., mgr. Architect not selected.

Fla., Plant City—Hotel—Plant City Hotel Corp., rejected bids (unopened on account of change of plans) 7 story, 105 x 105 ft., brick and steel, Reynolds and Evers Sts. $150,000. M. L. Elliott, 413 Curry Bldg., Tampa, archt. Noted Aug. 10.

O., Cleveland — Apartment — M. Rubin, Marshall Bldg., having plans prepared by A. F. Janowitz, archt., Permanent Bldg., 3 story, brick and timber, Page Ave. $150,000.

O., Cleveland — Commercial — Standard Drug Co., East 9th St. and Bolivar Rd., plans 3 story, brick, steel and concrete, St. Clair Ave. and East 105th St. $150,000. C. E. Roseman, pres. Architect not selected.

O., Cleveland—Hospital—Dept. Pub. Welfare, 9th and Oak Sts., Columbus, having plans prepared by R. S. Harsh, state archt., Ohio-Hartman Bldg., Columbus, 3 story, brick and concrete, at Cleveland State Hospital, here. $175,000.

O., Cleveland — Office, etc. — Cleveland Desk Co., 1380 Ontario St., plans 3 story, brick, steel and concrete office and warehouse, 1263 Superior Ave. $150,000. J. C. Fassett, pres. Architect not selected.

O., Rock Creek—School—Bd. Educ. having plans prepared by Fulton, Taylor & Cahill, archts., 8120 Euclid Ave., Cleveland, 2 story, brick, steel and concrete. $150,000. H. J. Brown, pres.

Mich., Detroit—Apartment—P. Rosello, archt., 406 Congress Bldg., prepared plans 3 story, 90 x 110 ft. brick and steel, plain foundation, West Phila. Ave. $200,000. Owners name withheld.

Mich., Kalamazoo—Hotel—Park American Hotel, Main St., having preliminary plans prepared by A. M. Worthington, archt., Pratt Bldg., 5 story, 50 x 160 ft. addition to hotel and 3 story, 150 x 200 ft. brick garage, Main St. $250,000.

Mich., Muskegon—College—Bd. Educ. having plans prepared by H. H. Turner, archt., Michigan Trust Bldg., Grand Rapids, 3 or 4 story, rein.-con. and brick, incl. gymnasium, swimming pool, etc. $700,000.

Mich., Traverse City—Hospital—General Hospital having plans prepared by L. W. Frye, archt., Ann Arbor, 3 story 40 x 180 ft. rein.-con. and brick, plain foundation, Elmwood Ave. $150,000.

Ill., Chicago—Apartment—F. J. Campbell, 68th and Merrill Sts., having plans prepared by T. R. Bishop, archt., 35 South Dearborn St., three 3 story, 120 x 125 ft., rein.-con., brick and steel, 68th and Clyde Sts. $450,000.

Ill., Chicago—Apartment—F. J. Campbell, 68th and Merrill Sts., having plans prepared by T. R. Bishop, archt., 35 South Dearborn St., 3 story, rein.-con., brick and steel, Crandon and 68th Sts. $150,000.

Ill., Chicago—Apartment—T. R. Bishop, archt., 35 South Dearborn St., preparing plans and soon takes bids 3 story, 112 x 120 ft., rein.-con., brick and steel, southwest corner 68th and Merrill Sts., for F. J. Campbell, 68th and Merrill Sts. $150,000.

Ill., Chicago—College—St. Xavier's College, 4928 Cottage Grove Ave., having plans prepared by J. W. McCarthy, archt., 139 North Clark St., 3 story, rein.-con., brick and steel, 49th St. and Cottage Grove Ave. $400,000.

Ill., Chicago—Office—Graham, Anderson, Probst & White, archts., 80 East Jackson St., preparing plans 21 story, 150 x 316 ft., fireproof construction, Lawrence St. near Kenmore St. $7,000,000. Owner's name withheld.

Ill., Oak Park—Bank and Office—Hoggson Bros., archts. and engrs., 485 5th Ave., New York City, soon receive bids 3 story, brick, steel and stone, plain foundation, Lake and Marion Sts., here, for Oak Park Trust and Savings Bank. $450,000. Noted June 8.

Wis., Beloit—Lodge—Knights of Columbus, c/o M. F. George, plans 2 story, brick, rein.-con. and stone, plain foundation, West Grand St. $160,000. Architect not selected.

Wis., Hartford—High-Grade School—Bd. Educ., c/o Clerk, plans 2 or 3 story, 70 x 125 ft., brick, rein.-con. and stone, plain foundation. $150,000. Architect not selected.

Minn., Minneapolis—Lodge—St. Anthony Aerie of Eagles, No. 1247, c/o F. A. Pigeon, chn. building com., 19 High St., plans 4 or 5 story and basement, 100 x 165 ft. rein.-con., brick and tile, Central Ave. and 4th St. S. E. $150,000. Architect not selected.

Tex., Corpus Christi—Sanitarium—Sisters of Charity of Incarnate Word, Mother Mary John, Superioress, San Antonio, having plans prepared by A. B. and R. M. Ayres, archts., Bedell Bldg., San Antonio, and let contract about Oct. 1, 3 story, 70 x 130 ft., rein.-con. and brick, Booty Ave. and 3rd St., here. $150,000.

Calif., Oakland—Store and Loft—G. Clark, c/o W. Knowles, archt., Hearst Bldg., San Francisco, had plans prepared 3 story, 100 x 124 ft., rein.-con., Bway. near 15th St., here. $300,000. Roos Bros., Stockton and Market Sts., San Francisco, lessee. E. L. Soule, Rialto Bldg., San Francisco, structural engr. Leland and Haley, 58 Sutter St., San Francisco, mechanical engrs.

Calif., Sacramento—Apartment and Hotel—Rodome Corp., Travelers Hotel, having plans prepared by E. C. Hemmings, archt., Oschner Bldg., 1 story, tile, on 250 x 550 ft. site, Stockton Rd. $200,000. B. F. Hilborn, mgr.

Calif., San Francisco—Store and Club—Loyal Order of Moose No. 26, 105 Jones St., having plans prepared by O'Brien Bros., Inc., archts., 240 Montgomery St., 2 story, Market St. near 12th St.

Que., Montreal — Art School — Provincial Government, Quebec, plans 3 story, brick, St. Urbain St., $150,000. E. Cormier, Drummond Bldg., archt.

Que., Montreal—Exhibit—L. J. S. Morin, 221 Outremont Ave., plans 3 story automobile show building, brick and steel, Park Ave. $150,000.

Que., Montreal—School—Catholic School Comn., 191 Stadacona St., plans 3 story, 75 x 130 ft. rein.-con., brick and stone, St. Joseph Blvd. $175,000. J. M. Manning, secy. Gascon & Parent, 502 St. Catherine St. E., archts.

Ont., Toronto—Office—A. R. Denison, archt., Confederation Life Bldg., soon lets contract 10 story, 53 x 100 ft. concrete and steel, Bay St., for R. Reford Co., Ltd., 20 Hospital St., Montreal, Que. $600,000. Noted April 27.

BIDS DESIRED

N. Y., Albany—Municipal—Sept. 18, by Bd. Contr. & Supply, City Hall, for municipal building, Eagle and Beaver Sts. H. Rogers, 445 Bway., archt. Noted June 22.

N. Y., Brooklyn—Schools—Sept. 22, by C. B. J. Snyder, supt. School Buildings, Concord St., P. S. 193, northerly side of Ave. L from Bedford Ave. to East 26th St.; P. S. 192, southeasterly side of 18th Ave. from 47th to 48th Sts.

N. Y., Glens Falls—School—Sept. 26 (change of date), by Bd. Educ., brick, steel and stone, plain foundation. $250,000. Tooker & Marsh, 101 Park Ave., New York, archts. and engrs. Noted Aug. 31.

N. Y., New York—Apartment—J. Tishman & Sons, Inc., 280 Madison Ave., 9 story, 100 x 100 ft., brick, steel and stone, plain foundation, 146 West 55th St. $1,000,000. Work will be done by separate contracts. Schwartz & Gross, 347 5th Ave., archts. and engrs.

Pa., Clark Summit—School—Sept. 25, by Bd. Educ. 2 story, 154 x 156 ft., brick, Clark Green Highway. $150,000. H. C. Rutherford, 316 North Washington Ave., Scranton, archt.

Pa., Monaca — Hospital — Bd. Comrs. Beaver Co., Court House, Beaver, taking bids 2 story, 30 x 272 ft. hospital, near

Buildings (Continued)

here. $150,000. Carlisle & Sharrer, Jenkins Arcade, Pittsburgh, archts.

Pa., Phila.—Apartment—R. C. Loos, archt., 2218 Chestnut St., taking bids 4 story, 85 x 125 ft., brick and steel, plain foundation, 43rd and Chestnut Sts. $150,000. Owner c/o architect.

Pa., Phila.—Apartment—N. Raidman, 5130 Walnut St., taking bids 4 story and basement, 50 x 100 ft., brick and steel, Pine, 48th and 49th Sts. $250,000. Simon & Simon, 249 South Juniper St., archt.

Pa., Phila.—Stores and Theatre—H. C. Hodgens, archt., 130 South 15th St., taking bids 2 story, 62 x 120 ft., rein.-con., steel and brick, plain foundation, 63rd St. and Woodland Ave., for Stanley Co., 1218 Market St. $200,000.

Pa., Pittsburgh—Apartment Hotel—Sept. 19, by Rutan, Russell & Wood, archts., Century Bldg., 10 story, brick and tile, Forbes, 5th and Bigelow Sts., for Schenley Apts. Co., 3929 Forbes St. $3,500,000. Noted June 15.

Pa., Pittsburg—Cafeteria and Office—Foster Restaurant Inc., 324-328 Diamond St., will build 4 story and basement, 55 x 91 ft., Diamond St. and Cherry Alley. $200,000. Work will be done by separate contract. E. P. Mellon, 350 Madison Ave., New York, archt.

Md., Baltimore—Bank—Graham, Anderson, Probst & White, archts., 80 East Jackson Blvd., Chicago, taking bids 6 story, brick and steel, Light and German Sts., here for Citizens Natl. Bank, Pratt and Hanover Sts., Baltimore. $200,000.

D. C., Wash.—Monastery—Sept. 20 by Sisters of the Visitation, for monastery. Marsh & Peters, 1302 F St., N.W., archts. A. B. Mullett & Co., Union Trust Bldg., associated archts.

D. C., Wash.—Office—Sept. 27 by C. Gilbert, archt., 244 Madison Ave., New York City, stone, brick and steel, here, for U. S. Chamber of Commerce c/o L. A. Skinner, secy., Mills Bldg. $1,500,000. Noted April 6.

O., Brookville—School—Oct. 6, by G. M. Grau, clk. Bd. Educ. of Brookville Village School Dist., 2 story, 80 x 120 ft., rein.-con. and brick, plain foundation. $150,000. Walker & Norwich, 1301 Amer. Bldg., Dayton, archts.

O., Findlay—Bank and Office—Sept. 23, by P. M. Hulskin, archt., 216 West Market St., Lima, 4 story, 42 x 200 ft., brick, steel and concrete, Main and Crawford Sts., here, for Buckeye Commercial Bank. $250,000. R. W. Moore, cashier.

Ill., Chicago—Apartment—E. E. Hall, archt., 123 West Madison St., taking bids 3 story, 120 x 250 ft. rein.-con. and brick, Sheridan and Waveland Rds. $400,000. Owner's name withheld.

Ill., Chicago—Apartment—O. Van Gunten, archt., 800 North Clark St., taking bids 3 story, rein.-con., brick and steel, Juneway Terrace and Ashland St., for J. J. Fairweather, 108 South La Salle St. $300,000.

Ill., Chicago—Store, Office and Apartment—Leichenko & Essear, archts., 38 South Dearborn St., taking bids 3 story, 78 x 130 ft. rein.-con. and brick, Madison and Lockwood Aves. $200,000. Owner's name withheld.

Wis., Milwaukee—Store and Office—C. H. Thoringer, archt., 3328 State St., taking bids 2 story and basement, 100 x 120 ft., brick and tile, plain foundation, North Ave., for Dougherty Bros., 803 Grand Ave. $150,000.

Ia., Cedar Rapids—High School—Oct. 2, by Bd. Educ., c/o J. A. Motejl, secy., 705 1st Ave., 3 story, 160 x 200 ft., rein.-con., brick, tile and stone, 20th St. and Ave. B, E., $475,000. F. Tustison Co., 322 Auditorium Bldg., Minneapolis, Minn., engrs. B. Rugh, 811 Security Bldg., archt. Noted Aug. 31.

Minn., St. Paul—High School—Sept. 18, by H. W. Austin, city purch. agt., 3 story and basement, 150 x 250 ft. with 1 story, 48 x 90 ft. wing, rein.-con., brick and tile, Isabel and Congress Sts. $300,000. Noted Aug. 10.

Kan., Topeka—Temple—Scottish Rite Masons taking bids 3 story and basement, 140 x 204 ft., rein.-con., brick and stone, 10th and Van Buren Sts. $600,000. F. W. Williamson & Co., 312 Central Ave., archts. W. F. Klemp & Co., 2131 Turner St., Chicago, structural engr.

Mo., Kansas City—Hotel—State Hotel Co., 311 Commerce Bldg., taking bids 10 story and basement, 50 x 142 ft., 12th and Wyandotte Sts. McKechnig & Trask, 719 Gloyd Bldg., archt. W. W. Huff, 314 Interstate Bldg., structural engr.

BIDS RECEIVED

N. Y., New York—Museum—Park Bd., Municipal Bldg., opened bids Sept. 7, new wing to be known as southeast wing, and court building known as Hall of Ocean Life, and passage to connect the 2 buildings, for Amer. Museum of Natural History, (1) general contract, (2) plumbing work, (3) steam heating and fume removal apparatus, etc., (4) ventilation and humidifying apparatus, from J. Stewart & Co., 30 Church St., (1) $1,069,900, T. Dwyer, Bway. and 216th St., (1) $1,161,875, Niewenhouse Co., 316 East 161st St., (1) $1,072,250; P. F. Kenny Sons, 33 Old Bway., (2) $23,961, J. D. Duffy, 315 East 23rd St., (2) $31,171, T. E. O'Brien, Inc., 6311 5th Ave., Brooklyn, (2) $32,690; Federal Heating Co., 300 Madison Ave., (3) $66,431, (4) $22,239, Austin Eng. Co., 124 West 42nd St., (3) $67,372, (4) $23,772, Giles & Geoghan, 537 West Bway., (3) $69,090, Baker Smith Co., Inc., 576 Greenwich St., (4) $19,600. Noted Aug. 31.

Pa., Erie—School—School Dist. opened bids general contract for Roosevelt School, 2 story, 203 x 303 ft. concrete brick and steel, from Wagner Constr. Co., Erie, $430,000; steam heating from Becker-Seidel Co., Prospect Ave., N. W., Cleveland, O., $74,900. Noted Aug. 17.

Pa., Phila.—School—Bd. Educ. opened bids Sept. 7, 2 story, 113 x 134 ft., Palmetto and Bleigh Sts., from Kober Constr. Co., 34 South 17th St., $246,779; Monagahan M. Losee, 3016 Chestnut St., $275,663; Barnes & McLaughlin, 17 South 17th St., $278,797.

O., Columbus—Administration, etc.—C. E. Steele, secy. Bd. Trustees Ohio State University, opened bids Sept. 7, (1) 3 story and basement, 100 x 180 ft. administration building, (2) 4 story and basement, 75 x 145 ft. medical science building, both brick, stone and concrete, on campus, from E. H. Latham Co., 60 East Broad St., (1) $376,284 (2) $289,694; Danis-Hunt Constr. Co., 907 Schwind Bldg., Dayton, (1) $385,000; D. W. McGrath & Sons, 255 East Broad St., (1) $386,855 (2) $313,618; E. Elford, 307 East Gay St., (2) $330,000. Above bids rejected, (above architects estimate). Will readvertise. Noted Aug. 17.

Col., Denver—Temple—Colorado Consistory 1, Temple Bldg., general contract 3 story, 125 x 125 ft., (a) stone (b) terra cotta, from F. H. Cowell, Central Savings Bank Bldg., (a) $463,614, (b) $441,286; F. Varnum, Interstate Trust Bldg., (a) $464,672, (b) $451,922; P. Seerie, Interstate Trust Bldg., (a) $474,353; heating from J. P. Pfieffer, 1140 California St., $63,104. Noted Aug. 10.

Calif., Kerman—High School—Kerman Union High School Dist., constructing high school, general contract from Collman & Speidel, Monadnock Bldg., San Francisco, $143,187; J. H. Palm, Kingsburg, $144,800; Trewhitt-Shields Co., Rowell Bldg., Fresno, $146,000, (structure complete $207,000). Noted Aug. 10.

CONTRACTS AWARDED

Mass., Medford—High School—Bd. Educ., 3 story, brick and concrete, plain foundation, Harvard and Yale Sts., to Coblo & Griffith, 46 Cornhill St., Boston. Archts. est. $350,000. Noted June 8.

Mass., Newton (Boston P. O.)—Science—Boston College, 3 story, 140 x 175 ft. brick and stone, Commonwealth Ave. and College Rd., to Walsh Bros. Co., 150 Hampshire St., Cambridge. Archts. est. $400,000. Noted Sept. 22, 1922.

Mass., Springfield—Church and Parish House—Trinity-Grace Church, 37 Edwards St., 1 story and basement, 65 x 110 ft. church, and 2 story 80 x 80 ft. parish house, both brick and stone, Sumner Ave., to E. F. Miner Building Co., 82 Foster St., Worcester. Archts. est. $150,000.

Mass., Worcester—Mercantile—Printers Building Trust, Portland St., 7 story, 100 x 135 ft. brick and rein.-con., Portland St., to E. J. Cross, 82 Foster St. Archts. est. $350,000.

N. Y., Albany—School—Bd. Contr. & Supply, City Hall, P. S. 20, 3 story, 62 x 196 ft. with 32 x 89 ft. wing, brick, North Pearl St., to W. G. Sheehan Constr. Co., 28 Dewitt St., $191,364. Noted Sept. 7.

N. Y., Brooklyn—Apartment—E. Laughan, c/o Cohn Bros., archts. and engrs., 361 Stone Ave., 50 x 100 ft., brick, steel and stone, plain foundation, Chester St., by day labor. $200,000.

N. Y., Brooklyn—Exchange—New York Telephone, 15 Dey St., New York, 2 story, 100 x 100 ft., brick, steel and stone, Coney Island Ave. and Ave. B, here, to E. E. Paul Co., 101 Park Ave., New York. Archts. est. $200,000. Noted Aug. 17.

N. Y., Rochester—School—St. Boniface Church Society, 330 Gregory St., masonry and carpentry contract for 135 x 154 ft., brick, 11 Whalin St., to A. W. Hopeman & Sons Co., 569 Lyell Ave. Archts. est. $200,000. Noted Aug. 24.

Pa., Erie—Home—J. M. Gannon, bishop of Catholic Dioceses, 205 West 9th St., orphan home, 6th St., for St. Josephs Home for Children, to Kirschner Bros., Erie (streets address not available). $346,000. Noted July 27.

Pa., Punxsutawney—Club—B.P.O.E. 301, 3 story, 45 x 125 ft. brick and steel, Finley St., to Powell Bros., Spirit Bldg. Archts. est. $150,000.

Pa., Waynesburg—Bank and Office—Citizens Natl. Bank, 3 story, 60 x 180 ft. brick, steel and stone, plain foundation, High and Washington Sts., to M. Zeisler, 79 Wall St., New York. Archts. est. $275,000.

Md., Baltimore—Hospital—E. H. Glidden, archt., 1210 Amer. Bldg., group of 9 buildings, incl. administration, 3 pavilions, nurses' home, power house, etc., also grading and sewers, for Baltimore City Hospital for communicable diseases, Hillen Rd., to Price Constr. Co., Maryland Trust Bldg., $658,600. Noted Aug. 31.

D. C., Wash.—Office—U. S. Realty & Impvt. Co., 816 Connecticut Ave., N. W., 10 story, Indiana limestone, 17th and H Sts., N. W., to G. A. Fuller Co., Munsey Bldg. Total cost $4,000,000.

La., Baton Rouge—Sanitorium—A. Gassler, pastor, Baton Rouge, general contract 4 story, 91½ x 223 ft. rein.-con., brick and tile, to J. V. and R. T. Burkes, Carondelet Bldg., New Orleans, $162,540; plumbing and heating, to P. Brashear, Alexandria, $31,500. Noted Aug. 17.

O., Cleveland—Apartment—F and S Realty Co., c/o H. Figler, 810 Ulmer Bldg., 3 story, 82 x 115 ft., brick and timber, 1757 Page Ave., to M. Rosen, 3223 East 123rd St. Archts. est. $150,000.

O., Columbus—College of Commerce—Bd. Trustees Ohio State University, 4 story and basement, 120 x 185 ft., brick, stone and concrete, on campus, to E. H. Latham Co., 60 East Broad St., $289,694. Noted Aug. 17.

O., Columbus—School—Bd. Educ., Town and High Sts., 2 story and basement, brick and concrete addition, 11th Ave., to D. W. McGrath & Sons, 255 East Broad St., $127,585. Noted March 9.

O., Elyria—School—Bd. Educ., Roosevelt School, 2 story, brick, steel and concrete, to J. Halpin, Elyria (street address not available), $130,475. Noted Aug. 24.

O., Greenfield—High School—Bd. Educ. 2 story and basement, brick, stone and concrete, to Danis Hunt Constr. Co., 907 Schwind Bldg., Dayton, $2344,000. Noted Sept. 7.

O., Shaker Heights—Grade School—Bd. Educ., 2 story, 136 x 152 ft., brick, steel and concrete, Woodbury Rd., to Parrish Bros., Wick Ave., Youngstown, $198,750. Noted Aug. 10.

Ind., Indianapolis—Sales—Olin Sales Co., 509 North Meridian St., 3 story and basement, 51½ x 195 ft., brick, North Meridian St., to W. P. Jungclaus Co., 825 Massachusetts Ave. Archts. est. $150,000. Noted Sept. 7.

Mich., Detroit—Apartment—Apartment Finance Corp., 555 Equity Bldg., masonry contract for 4 story and basement, 60 x 120 ft. rein.-con., brick and steel, plain foundation, Collingwood Ave., to C. Schollenberger, 4853 Underwood Ave. Archts. est. $175,000.

Mich., Royal Oak (Detroit P. O.)—School—Bd. Educ., 2 story and basement, 20 room, rein.-con., brick and steel, plain foundation, to N. A. Starr, Royal Oak, $230,000.

Ill., Austin—Store and Office—Maccabee Temple of Austin, 2 story, 120 x 125 ft. fireproof, Chicago and Waller Sts., to F. O. Johnson, 4856 Christiana Ave. Archts. est. $150,000.

Ill., Chicago—Recreation—South Park Comm., 57th St. and Cottage Grove Ave., rein.-con., brick and steel recreation buildings, Calumet Park, to E. J. Hardtke, 10604 Ave. G. Engrs. est. $300,000.

Ill., Moline—Church—First Methodist Episcopal Church, 1 story, 90 x 95 ft., rein.-con., brick and steel, 7th and 17th Sts., to T. Stark Co., 118 South 11th St., W., Cedar Rapids, Ia. Archts. est. $150,000.

Wis., Madison—Office—Madison Gas & Electric Co., 120 East Main St., 2 story, 96 x 174 ft., brick, rein.-con. and stone, plain foundation, Mifflin St., to J. H. Findorff & Son, 601 West Wilson St. Engrs. est. $150,000. Noted May 11.

Buildings (Continued)

Wis., Plymouth—Hotel—J. E. Curtiss, 2 story, 80 x 104 ft. brick, rein.-con. and steel, plain foundation, to Van Wagner Bros. Co., Plymouth. Engrs. est. $150,000. Noted July 20.

Ia., Davenport—Lodge—Fraternal Order of Eagles, Davenport Aerie 235, general contract 3 story, 80 x 150 ft., brick, tile and terra cotta, 4th and Scott Sts., to Central Eng. Co., 711 Putnam Bldg., $204,974. Noted April 27.

Minn., Milaca—Courthouse—Mille Lacs Co., 2 story and basement, 75 x 115 ft. rein.-con., brick and tile, general contract, to J. A. McDonald Constr. Co., 750 Builders Exchange, Minneapolis, main bid $115,800, alternate for stone $4,500. Noted Aug. 17.

Minn., Minneapolis — Apartment and Store—J. A. McDonald Constr. Co., 748 Builders Exch. Bldg., will build 2 story and basement, 114 x 116 ft. brick, concrete and stone, 22nd St. and Lyndale Ave., by day labor. $150,000.

Minn., Northfield—Dormitory—Carleton College, 4 story and basement, 52 ft. high, 40 x 140 ft. with 16 x 40 ft. wing, rein.-con., brick and tile, general contract to H. N. Leighton Co., 127 South 10th St., Minneapolis. Total $150,000.

Okla., Bartlesville—Convention Hall—For 2 story and basement, rein.-con., brick and stone, to W. S. Bellows Co., 812 Herskowitz Bldg., Oklahoma City, $207,450. Noted Feb. 2.

Calif., Bakersfield—Lodge—Bakersfield Lodge of Elks, 4 story, rein.-con., general contract to Currie & Dulgar, Bakersfield; plumbing, heating and ventilating, to Burnham Plumbing Co., 2020 Webster St., San Francisco. Noted Mar. 9.

Calif., Fresno — Theatre — W. Harrison, constructing theatre, to T. J. Mooney, Palace Hotel, $150,000. Contractor wants catalogs on theatre equipment.

Calif., Oakland—High School—Bd. Educ., Golden Gate Junior High School, 1 story, brick and tile, general contract to A. Olson, 351 12th St., $66,538. Bids for brick work rejected, new bids. Noted Aug. 10.

Que., Montreal—Hospital—Notre Dame Hospital, Notre Dame St. E., 6 story, 44 x 137 ft., with 44 x 180 ft. wing, both 90 ft. high, brick and stone, to A. Gratton, 142 5th Ave., $450,000; plumbing, heating, ventilating, etc., to Garth & Co., Craig St. W. Total est. $800,000. Noted May 11.

Que., Montreal—School—Catholic School Comn., 87 St. Catherine St. W., 3 story, 75 x 150 ft. brick and stone, Demontigny St., St. James Ward, to A. and D. Boileau, 546 Fabre St., $153,800. Noted Aug. 24.

B. C., Vancouver—Office—J. J. Coughlan, 738 Granville St., 6 story, 50 x 60 ft. brick, steel and terra cotta, Granville St. near Robson St., to F. T. Sherborne, 736 Granville St., cost plus percentage basis. Archts. est. between $150,000 and $175,000. Noted Aug. 31.

Federal Government Work

PROPOSED WORK

R. I., Providence—Dredging—U. S. Engineer plans dredging in Milford Harbor, Conn.

N. Y., Chelsea—Hospital—Treas. Dept., Wash., D. C., soon receives bids for U. S. Veterans Hospital, here.

N. Y., New York—Dredging—U. S. Engineer, 710 Army Bldg., 39 Whitehall St., plans dredging in Newtown Creek.

Fla., Jacksonville—Lock and Dam—U. S. Engineer plans lock and dam at Mass Bluff, Oklawaha River.

Miss., Gulfport—Hospital—Treas. Dept., Wash., D. C., plans U. S. Veterans Hospital, here.

Tenn., Nashville—Dump Scows—U. S. Engineer, Custom House, soon receives bids 3 steel dump scows, 125 cu.yd. capacity. J. R. Slattery, officer in charge.

BIDS DESIRED

W. Va., Charlestown—Post Office—Oct. 6, by Treas. Dept., Wash., D. C., construction incl. mechanical equipment of post office, here. J. A. Wetmore, acting supervising archt.; adv. this issue.

Ala., Mobile—Towboat—Oct. 10, by U. S. Engineer Office, Mobile, one 100 ft. Diesel-Electric towboat; adv. this issue.

Ala., Tuskegee—Telephone System—Oct. 4, by Treas. Dept., Wash., D. C., for automatic telephone system in U. S. Veterans Hospital, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Tenn., Memphis—Portland Cement—Sept. 27, at office Mississippi River Comn., 1st and 2nd Dists., Custom House, 24,000 sacks Portland cement; adv. this issue.

Ill., Broadview (Bellewood P. O.)—Buildings—Sept. 15, by General Supt. Air Mail Service, Room 320, Post Office Dept., Wash., D. C., 1 and 2 story warehouse, factory and assembly buildings, also two 100 x 100 ft. hangars. Entire floor space 78,100 sq.ft.

Ariz., Yuma—Earthwork—Oct. 16, at office U. S. Recl. Service, for earthwork, First Mesa Div., Yuma Auxiliary Project, about 10 mi. south of here. M. Bien, acting dir.; adv. this issue.

Cuba, Quantanamo — Chimney — Spec. 4705—Sept. 20, by Bureau Yards & Docks, Navy Dept., Wash., D. C., rein.-con. chimney, here. Noted Aug. 31.

BIDS RECEIVED

Md., Baltimore — Remodeling — Treas. Dept., Wash., D. C., remodeling U. S. Quarantine Station, here, from Northeastern Constr. Co., Lexington Bldg., $58,900, add $12,950 for nurses quarters, add $3,150 for attendants quarters; J. L. Robinson Const.r Co., 1130 West Lafayette St., $59,900, add $13,659 for nurses quarters, add $2,461 for attendants quarters.

Va., Hampton Roads—Riprap Protection—Spec. 4699—Bureau Yards & Docks, Navy Dept., Wash., D. C., riprap protection for north breakwater, at submarine base, here, (1) work complete, from Arundel Corp., Pier 2, Pratt St., Baltimore, Md., (1) $3.05 (150 days) (2) $2.98 (170 days) (3) $2.96 (180 days); McLean Contg. Co., 1415 Fidelity Bldg., Baltimore, Md., (1) $3.38 (250 days) (2) $3.38 (300 days) (3) $3.38 (325 days); ;R. G. Lassiter & Co., 327 Arcade Bldg., Norfolk, (1) $3.65 (180 days) (3) $3.40 (180 days). Noted Aug. 24.

CONTRACTS AWARDED

Ga., Augusta—Roads and Walks—Treas. Dept., Wash., D. C., sand and gravel roads and walks at U. S. Public Health Service Hospital here, to Hodgson & Jones, Montgomery, Ala., $17,900. Noted Sept. 7.

Tenn., Nashville—Steel Gates—U. S. Engineer, steel gates for Lock F, Cumberland River, to Penn Bridge Co., Beaver Falls, Pa., $22,783. Noted Aug. 3.

Utah, Spanish Fork—Post Office—Treas. Dept., Wash., D. C., constructing post office, here, to G. A. Whitmeyer, 826 25th St., Ogden, $39,800. Noted Sept. 7.

H. T., Pearl Harbor—Quaywalls, etc.—Spec. 4591—Bureau Yards & Docks, Navy Dept., Wash., D. C., quaywalls and pier at Naval operating base, here, to E. J. Lord, McCandless Bldg., Honolulu, $749,160 (450 days). Noted Aug. 21.

Miscellaneous

PROPOSED WORK

Subway Platform—Boston, Mass.—Transit Dept., 1 Beacon St., plans platform subway station, Park St. $250,000. E. R. Springer, 1 Beacon St., ch. engr.

Culvert—Auburn, N. Y.—See "Street and Roads."

Snow Plows, etc.—Rochester, N. Y.—Bd. Supervs. Monroe Co. soon takes bids 16 snow plows and other equipment for attachment to highway trucks, also snow plows and equipment for clearing highways, for use on tractors, owned by county. $1,000. G. C. Wright, co. engr.

Terminal Facilities etc. — Virginia — Chesapeake & Ohio Ry. Co., 61 Bway., New York City, plans to expend $16,500,000 for extending terminal facilities on Hampton Roads, enlarging round houses and making other extensions, also new coal pier at Newport News and enlarging terminal facilities at Norfolk. C. W. Johns, 1006 Park Ave., Richmond, engr. construction.

Coal Tipple—Piedmont, W. Va.—American Coal Co. plans to rebuild coal tipple, recently destroyed by fire. $60,000. Architect not announced.

Tunnels—Detroit, Mich.—City preparing tentative plans rein.-con. tunnels under street car tracks, to have stairways between sidewalks and curb. $75,000. J. W. Reid, City Hall, engr.

Heating Conduit—Camp Douglas, Wis.—Wisconsin Natl. Guard making plans 1,500 lin.ft. heating conduit. H. C. Hengels, 445 Milwaukee St., Milwaukee, engr. $25,000.

Retaining Wall—Kansas City, Mo.—Passed ordinance to construct retaining wall along northwest line of Allen Ave. $50,000.

Amusement Park, etc.—Modesto, Calif.—Garden of Allah Park, c/o Ellery, Frost & Patten, engrs., Merchants Exch. Bldg., San Francisco, having plans prepared 125 x 225 ft. main building, amusement structures, bowling alleys, 23 permanent cottages, swimming tank, etc., all frame and stucco construction. $325,000.

Gas Mains — Montreal, Que. — Montreal Light, Heat & Power Co., Craig St. W., plans 1,640 ft. of 4 in. c.i. pipe in Cote des Neiges from Shakespeare Ave. to Viewpoint Court $5,330, 642 ft. 6 in. c.i. pipe in Riverside St. from Forfar to Mill Sts. $2,395, 5,742 ft. 30 in. c.i. pipe in Bercy St. from Ontario to Davidson Aves. $84,174, 6,813 ft. 24 in. c.i. pipe in Lafontaine St. from Davidson to George V Aves. $81,014, 1,154 ft. 12 in. c.i. pipe in Davidson Ave. from Lafontaine to St. Catherine Sts. $5,766, 546 ft. 8 in. c.i. pipe in Davidson Ave. from St. Catherine to Notre Dame Sts. $2,117.

Harbor Improvements—Montreal, Que.—Dominion Government, Ottawa, Ont., approved following works for Montreal Harbor: extending Jacques Cartier Pier 300 ft., $200,000; extending Alexander Pier, 300 ft., $400,000; extending King Edward Pier 300 ft., $450,000; improving channel approach to Bickerdike Pier, $97,850; paving and extending Harbor Rv. terminals to new wharf levels, east of Sect. 25, $50,000. W. L. McDougall, chn. Bd. Harbor Comrs. R. Harvie, ch. engr.

Replacing Wires — Outremont, Que. — Plans replacing wires, etc., in underground conduits. $72,345. E. T. Sampson, city clk.

Harbor Developments—Hamilton, Ont.—Hamilton Harbor Comn. having plans prepared harbor front development and reclamation of land. Plans to proceed as soon as possible with first unit, costing $1,077,000, mostly reclamation work. Total $13,000,000. A. Guy, chn. E. V. Gray, city engr. Gore, Nasmith & Storrie, Confederation Life Bldg., Toronto, engrs.

BIDS DESIRED

Heating and Ventilating Apparatus, etc.—Brooklyn, N. Y.—Sept. 22, by C. B. J. Snyder, supt. School Buildings, Concord St., installing heating, ventilating and temperature-regulating apparatus, etc., in P. S. 67, easterly side of St. Edwards St. about 325 ft. northerly from Auburn Pl.

Heating and Ventilating Apparatus, etc—Elmhurst (Flushing P. O.) N. Y.—Sept 22, by C. B. J. Snyder, supt, School Buildings, Concord St., Brooklyn, installing heating, ventilating and temperature-regulating apparatus in P. S. 102, southerly side of Van Horn St., between Lewis Ave. and Laconia St., here.

Clam Shell Bucket, etc.—New York, N. Y.—Sept. 21, by Bd. Purch., Municipal Bldg., furnishing and delivering clam shell bucket and combination punch, splitting shear, bar, angle and tee cutter, to Dept. Plant & Structures.

Pipe, etc.—New York, N. Y.—Sept. 21, by Bd. Purch., Municipal Bldg., furnishing and delivering pipe, pipe fittings, valves, also engineers, plumbers' and steamfitters' supplies, to Dept. Pub. Welfare.

Snow Plows—Delaware—Sept. 27, by State Hy. Dept., Dover, two snow plows, Contr. CK-8A; adv. this issue.

Structural Steel—Milton, Wis.—Burdick Cabinet Co. taking bids structural steel for 1 story, 80 x 160 ft., addition to factory, concrete and steel, concrete foundation. Federal Eng. Co., 444 Milwaukee St., Milwaukee, engrs.

Road Oil, Crushed Rock, etc.—Santa Cruz, Calif.—Santa Cruz Co. in market for 50,000 bbl. road oil, 10,000 ton ⅜ to 2½ in. crushed rock, 35,000 ton base rock and 5,000 ton screenings. Former bids rejected. L. Bowman, co. surv.

BIDS RECEIVED

Dumping Platform—New York, N. Y.—J. H. Delaney, comr. Docks, Pier "A" foot of Battery Pl., opened bids Sept. 8, improving Brooklyn Bridge, Manhattan Boro. incl. (1) rein.-con. dumping platform, (2) water supply, from G. B. Spearin, 90 West St., (1) $108,253; McHarg Barton Co., 1328 Bway., (1) $108,391; Northeastern Constr. Co., 101 Park Ave., (1) $116,080; Altman Plumbing Co., 219 East 25th St., (2) $6.585. Noted Aug. 31.

Portland Cement, etc.—St. Paul, Minn.—W. Austin, city purch. agt., opened bids Sept. 5, 3,000 bbl. Amer. Portland cement, from Speakes Co., Griggs and Fuller Sts., $2.69 on track, $2.85 delivered St. Paul Builders Material Co., 605 Ryan Annex, $2.73 on track, Thompson Yards, 1645 Hennepin Ave., Minneapolis, $3.40 (sacks extra) truck delivered; 250 bbl. Atlas white non-staining portland cement, from St. Paul Builders Material Co., 605 Ryan Annex, and Speakes Co., Griggs and Fuller Sts., $8.00 on track and $8.50 delivered, Thompson Yards, 1645 Hennepin Ave., Minneapolis, $8.50 delivered; 1,400 cu.yd. 2 in. gravel, J. L. Shiely Co., 305 Dakota Bldg, $2.65, T. McDonald Contg. Co., Prior Ave. and Cottonwood St., $2.80; 700 cu.yd. washed sand, J. L. Shiely Co., 805 Dakota Bldg., $1.45, T. McDonald

Miscellaneous (Continued)

Contg. Co., Prior Ave. and Cottonwood St., $1.60. Noted Aug. 31.

CONTRACTS AWARDED

Sub-structure and Foundations—Everett, Mass.—Boston Elevated Ry. Co., 108 Massachusetts Ave., Boston, substructures and foundations for two 160 x 300 ft. and two 53 x 56 ft. car repair shops, and 80 x 731 ft. transfer shop, here, to Simpson Bros. Corp., 166 Devonshire St., Boston. Archts. est. $3,000,000 complete. Noted Aug. 31.

Coal Pocket—Woonsocket, R. I.—Lawton Spinning Co., 748 Winter St., rein.-con. coal trestle, 355 ft. long, 15 ft. wide, 14 ft. deep, to Central Eng. and Constr. Co., Central Falls. Archts. est. $25,000.

Passenger Vessels—Buffalo, N. Y.—Detroit-Cleveland Navigation Co., foot of Main St., Buffalo, and foot of 3rd St., Detroit, Mich., two 551 ft. passenger vessels, 58 ft. beam, fitted with sidewheel propulsion, 600 staterooms in each, for use on Lake Erie, to Amer. Shipbuilding Co., foot of West 54th St., Cleveland, O. Engrs. est. $2,500,000 each. Noted June 8.

Ornamental Lights—Long Branch, N. J. Bd. City Comrs., Council Chambers, ornamental lights on Ocean Ave. from Sea View to Brighton Aves., to Central Station Equipment Co., 114 Liberty St., New York, $37,969. Noted Aug. 24.

Steam Mains—Wilkes-Barre, Pa.—Pennsylvania Power & Light Co., laying 2,100 ft. 6 in. steam mains under West Market, North River and West Union Sts., to Amer. Dist. Steam Heating Co., c/o owners; excav., to Phoenix Utilities Co., c/o owners. Total est. $35,000.

Lumber and Cement—New Orleans, La.—Bd. Port Comrs., Canal St., 958 creosoted piles and 506,000 ft. creosoted lumber and timber for sacking plant, to Creosoted Materials Co., Queen and Crescent Bldg., $21,922 and $29,607 respectively; 3,000 bbl. cement, to J. W. Thompson, Canal Commercial Bldg., $9,000.

Bank Protection—Bartlett, Ia.—Fremont Co. D.D. 1, Sidney, 8 retards, 850 ft. long, and 26 Bignell anchor piles, to protect 3 mi. shore line of Missouri River, here, to Woods Bros. Constr. Co., 113 South 13th St., Lincoln, Neb. Engrs. est. $40,000.

Bridge Protection, etc.—Council Bluffs, Ia.—Illinois Central R.R., 135 East 11th Pl., Chicago, 6 standard current retards, 900 lin.ft. long, and 27 Bignell anchor piles, to protect embankment and bridge abutments across Missouri River, here, to Woods Bros. Constr. Co., 113 South 13th St., Lincoln, Neb. Engrs. est. $45,000.

Elevator, etc.—Salina, Kans.—H. D. Lee Flour Mills Co. elevator, tempering bins and cleaner house, Santa Fe Ave., to Jones-Heddelstetter Constr. Co., 706 Mutual Bldg., Kansas City, Mo., $79,600.

Bank Protection, etc. — Caruthersville, Mo.—St. Francis Levee Dist. protection of levees and bank on Missouri River, incl. 6 standard current retards, 1,050 ft. total length, and 35 Bignell anchor piles, to Woods Bros. Constr. Co., 113 South 13th St., Lincoln, Neb. Engrs. est. $60,000.

Shore Protection—Centaur, Mo.—Chicago, Rock Island & Pacific Ry., Railway Exch. Bldg., Chicago, 1,350 ft. standard current retards for protection of river bank on Missouri River, incl. 25 Bignell anchor piles, to Woods Bros. Constr. Co., 113 South 13th St., Lincoln, Neb. Engrs. est. $60,000.

Bridge Protection—East Leavenworth, Mo.—Leavenworth Bridge & Terminal Co., Leavenworth, Kan., protection of embankment and bridge approach, also diverting channel to flow under draw span, incl. one 800 ft. retard and 30 Bignell anchor piles, to Woods Bros. Constr. Co., 113 South 13th St., Lincoln, Neb., $40,000.

Metal Flume—Merced, Calif.—Merced Irrigation Dist. will build metal flume on timber structure with concrete footings, by day labor. R. C. Starr, ch. engr. Noted Aug. 17.

Tunnel, Siphons, etc.—Merced, Calif.—Merced Irrigation Dist., to P. L. Burr, 512 Mission St., San Francisco, 1,300 lin.ft. tunnel, 11 x 10⅓ ft. driven through cemented rock and hard pan, timber lined, at $24 per lin.ft. for tunnel and $55 per ft. for timber lining in place; rein.-con siphons, incl spillway and check structures, $24,700. Noted Aug. 17.

Pipe — Montreal, Que. — Montreal Light, Heat & Power Co., Craig St. W., to Natl. Iron Corp., Cherry St., Toronto, Ont., 300 lengths 12 in. c.i. pipe, 12 ft. long 262,880 lb., $45 per net ton, total $5,910; 250 lengths 8 in. c.i. pipe, 12 ft. long, 130,655 lb., $45 per ton, total $2,940; 615 lengths 20 in. c.i. pipe, 12 ft. long, 1,338,895 lb., $45 per ton, total $30,128.

Quay Walls — Montreal, Que. — Harbor Comrs., extending high quay walls between Sects. 25 and 35, 4,500 ft. long, to Atlas Constr. Co., Belmont St. $450,000.

ROAD WORK—KENTUCKY

Following are lowest bids opened Aug. 15, by State Highway Comn., Frankfort, for constructing State Project No. 29, Sect. "B," Beattyville-Irvine Rd., Lee Co., (A) Dempster Constr. Co., Knoxville, Tenn., (awarded contract); (B) Crippin Constr. Co., Knoxville; (C) Cosell-Byers, Winchester. The unit bids were as follows:

	A	B	C
28 acres clearing and grubbing	$30.00	$40.00	$75.00
10 removing trees and stumps	2.00	3.00	4.50
37,732 cu.yd. earth excavation	.41	.40	.46
95,544 cu.yd. borrow excavation	.39	.30	.47
2,525 cu.yd. excavation, channel change	.45	.40	1.00
37,548 cu.yd. solid rock excavation	.85	1.25	1.10
128 cu.yd. riprap	1.50	2.00	5.00
544.42 cu.yd. cement rubble masonry	10.00	10.50	13.00
10,730 lin.ft. standard cable guard rail	.40	.50	.65
111.35 cu.yd. class A concrete culverts	17.00	26.00	26.00
205 cu.yd. class A concrete bridges	20.00	26.50	28.00
5.74 cu.yd. class D concrete	40.00	80.00	60.00
271 cu.yd. cement rubble masonry, bridges	8.00	10.50	15.00
50,069 lb. reinforcement	.04	.06	.10
200 cu.yd. foundation excavation	1.00	.75	1.50
75 cu.yd. foundation excavation, wet earth	1.75	3.50	4.00
1,010 lin.ft. 18-in standard vitrified pipe	2.00	2.66	2.85
34 lin.ft. 24-in. standard vitrified pipe	2.75	3.50	4.60
932 lin.ft. 18-in. D.S. vitrified pipe	2.10	2.75	3.25
708 lin.ft. 24-in. D. S. vitrified pipe	3.10	4.00	5.70
92.42 cu.yd. 1:3:6 encasing concrete	17.00	20.00	24.00
7 cu.yd. class A concrete, pipe support	17.00	80.00	22.00
107 lb. reinforcement	.04	.06	.10
1,942 lin.ft. 18-in. standard cast iron culvert pipe	4.00	5.50	6.00
742 lin.ft. 24-in. standard cast iron culvert pipe	6.00	8.50	8.00
1,942 lin.ft. 18-in. reinforced concrete pipe	2.80		3.50
742 lin.ft. 24-in. reinforced concrete pipe	3.80		6.70
Extended totals, vitrified pipe	* $115,257	$129,853	$154,061
Extended totals, cast iron pipe	119,517	136,225	159,157
Extended totals, reinforced-concrete pipe	115,554	......	153,048

*Awarded contract.

ROAD WORK—TEXAS

Following are lowest three bids opened by Comrs. Camp Co., Pittsburg, for constructing 16.16 mi. State Highway No. 1-A, Federal Aid Project No. 55, (A) Coke & Turner, Marshall, (awarded contract); (B) F. P. McElwrath, Corsicana; (C) C. W. Burgess, Dallas Co. State Bank Bldg., Dallas. The unit bids were as follows:

	A	B	C
19 sta. light clearing	$2.50	$3.00	$2.00
55 sta. light grubbing	5.00	5.00	3.00
85,773 cu.yd. roadway excavation	.15	.15	.15
1,997 hrs. embankment rolling	1.00	1.50	.10
114,586.8 cu.yd. borrow excavation	.13	.14	.15
51,713.8 cu.yd. overhaul	.02	.03	.03
34,765.8 cu.yd. iron ore gravel base, furnishing and hauling first ¼ mi.	2.60	2.60	2.75
12,087.2 cu.yd. iron ore gravel base, furnishing and hauling second ¼ mi.	.06	.07	.07
8,334.7 cu.yd. iron ore gravel base, furnishing and hauling third ¼ mi.	.12	.14	.14
3,629.4 cu.yd. iron ore gravel base, furnishing and hauling fourth ¼ mi.	.18	.21	.21
173.9 cu.yd. iron ore gravel base, furnishing and hauling fifth ¼ mi.	.24	.28	.28
8,694.9 cu.yd. limestone cover, furnishing and hauling first ¼ mi.	4.50	4.20	5.00
521.8 cu.yd. limestone cover, furnishing and hauling second ¼ mi.	.06	.07	.06½
642.2 cu.yd. limestone cover, furnishing and hauling third ¼ mi.	.12	.14	.13
782.5 cu.yd. limestone cover, furnishing and hauling fourth ¼ mi.	.18	.21	.19½
782.2 cu.yd. limestone cover, furnishing and hauling fifth ¼ mi.	.24	.28	.26
782.6 cu.yd. limestone cover, furnishing and hauling sixth ¼ mi.	.30	.35	.32½
686.6 cu.yd. limestone cover, furnishing and hauling seventh ¼ mi.	.36	.42	.39
4,202.6 cu.yd. limestone cover, furnishing furnishing and hauling eighth ¼ mi.	.42	.49	.45½
20,475.4 cu.yd. limestone cover, furnishing and hauling additional ¼ mi.	.06	.06	.06
4,347.4 M gal. water for sprinkling	.75	1.50	1.50
172,027½ gal. asphaltic oil—class A	.16	.16	.15½
127,989 lb. reinforcing steel	.05½	.05	.04¾
11,466 lin.ft. wood guard fence	.35	.40	.45
1,394.6 cu.yd. structural excavation (wet)	2.00	3.00	2.50
1,322.2 cu.yd. structural excavation (dry)	.75	.75	1.00
1,517.4 cu.yd. concrete—class A	18.00	19.00	18.40
204 lin.ft. concrete rail type C	2.00	1.75	1.90
Extended totals	$246,187	$254,135	$262,449

TUNNEL—PROVIDENCE, R. I.

Following are lowest three bids opened Aug. 30 by Water Supply Bd. for constructing tunnel for Scituate Aqueduct, Contr. No. 21 (A) Keystone State Constr. Co., 210 South 13th St., Phila.; (B) Winston & Co., Inc., 240 Fair St., Kingston, N. Y.; (C) P. McGovern, 50 East 42nd St., New York City. The unit bids were as follows:

	A	B	C
12,000 cu.yd. earth excavation in open cut	$3.00	$1.40	$9.00
5,000 cu.yd. rock excavation in open cut	5.00	4.00	10.60
3,000 cu.yd. refill and embankment in open cut	3.00	1.00	8.00
30 lin.ft. sinking shaft in earth	250.00	250.00	176.85
115 lin.ft. sinking shaft in rock	300.00	300.00	350.00
60,000 cu.yd. excavation in tunnel	12.00	13.50	14.550
200 cu.yd. enlargement of tunnel	16.00	12.00	4.85
150 M.ft., b.m. permanent timbering in tunnel	110.00	80.00	25.00
10 M. ft., b.m. temporary timbering in tunnel	130.00	80.00	95.00
15,340 lin.ft. shaft and tunnel drainage	1.00	5.00	3.00
18,200 lin.ft. forms for masonry lining	2.00	3.70	3.95
25,000 cu.yd. concrete masonry in horseshoe section of tunnel	7.00	8.00	5.00
1,000 cu.yd. concrete masonry in unreinforced circular section of tunnel	10.00	8.00	5.00
2,500 cu.yd. reinforced concrete in tunnel and approaches	11.00	18.00	5.00
200 cu.yd. excess concrete masonry in tunnel	3.00	3.00	3.00
1,500 cu.yd. dry packing	2.00	3.00	2.00
500 lin.ft. drilling holes in rock or masonry	2.00	1.00	0.25
5,000 lin.ft. steel pipe for grouting, etc.	0.40	0.25	0.58
1,000 making connections for grouting	1.50	0.60	0.84
800 tons sand for grout	2.50	1.50	1.70
2,500 cu.yd. grout	15.00	5.00	8.40
40,000 bbl. portland cement	3.00	2.90	2.50
150,000 lb. steel for reinforcing concrete	0.05	0.07	0.0525
5,000 bbl. liquid chlorine	0.20	0.10	0.0875
3 chlorine dosing machines	2,500.00	2,000.00	1,700.00
3 locker houses	4,500.00	5,000.00	3,400.00
Cleaning up (lump sum)	1,000.00	1,000.00	3,500.00
Extended totals	$1,318,340	$1,489,190	$1,537,573

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Oct. 3.

Water Works System and Sanitary Sewer System

Haines City, Fla.

Sealed proposals for furnishing material and constructing a Water Works System and a Sanitary Sewer System for the Town of Haines City, Fla., will be received by the Mayor and Council at the City Hall, until 2 P.M., October 3rd, 1922.

The Water Works System will consist of approximately 4 miles of 4 in., 6 in., 8 in. and 10 in. cast iron pipe, with specials, valves and hydrants, a clear water collecting well, pump station and equipment, and a 100,000 gallon elevated tank.

The Sewer System will consist of approximately 1.7 miles of 8 in., 10 in. and 15 in. vitrified pipe, with manholes, flush tanks, and appurtenances, and a settling tank and tile under-drain system.

Each proposal must be accompanied by a certified check, payable to the Town of Haines City, Florida, to an amount equal to five (5) per cent of the bid, as a guarantee that the contract will be entered into if awarded. A bond of one hundred per cent (100%) of the contract price will be required. Payments will be made on monthly estimates.

Plans and specifications are on file in the office of the City Clerk, at Haines City, Florida, and with Paul H. Norcross, Consulting Engineer, 1404 Candler Building, Atlanta, Georgia.

Bidders may obtain copies from the Engineer by enclosing certified check for twenty-five ($25.00) dollars, payable to the Town of Haines City, Florida. If blue prints are desired they may be had at the cost of printing. If the plans, specifications and blue prints are returned within thirty days after opening bids, the check for twenty-five dollars will be returned.

R. O. PHILPOT,
President City Council.
JED R. YALE,
City Clerk.

PAUL H. NORCROSS,
Consulting Engineer,
1404 Candler Building,
Atlanta, Georgia.

Bids: Oct. 2.

Combined Sanitary and Storm Sewers

Cape Girardeau, Missouri.

Sealed bids will be received until 2:30 o'clock, P.M., October 2nd, 1922, at the Council Chamber by the City Council for the construction of a combined sanitary and storm sewerage system in sewer district No. 5, in accordance with the plans and specifications therefor on file in the office of the City Clerk. Copies of said plans and specifications may be obtained from C. E. Smith & Co., Consulting Engineers, 2073 Railway Exchange Building, St. Louis, Missouri, or Cape Girardeau, Missouri, by depositing $15.00, one half of which will be refunded upon return of the same in good condition within seven days after the award of the contract.

Full information and proposal forms may be obtained from the Consulting Engineers. Estimated cost of work Three Hundred and Fifty-two Thousand Dollars. The right is reserved to reject any or all bids. Bids will be opened at 2:30 o'clock P.M., Monday, October 2nd, 1922.

A. P. BEHRENS,
City Clerk.

OFFICIAL PROPOSALS

Bids: Oct. 10.

Sewage Pumping Station and Grit Chamber

Syracuse, N. Y.

Sealed proposals will be received until 2 o'clock p.m., standard time, October 10, 1922, at the office of the Syracuse Intercepting Sewer Board, 104 City Hall, Syracuse, N. Y., for the machinery and equipment for the Sewage Pumping Station and Grit Chamber now in course of construction at the Sewage Treatment Works of the City of Syracuse.

Equipment included in the contract are the switchboard and control mechanisms, four 24-inch horizontal shaft centrifugal pumps direct-connected to 75 H.P. variable speed A.C. motors, auxiliary vacuum, priming pumps and sump pump, a 10 K.W. motor-generator set, cast iron suction and discharge piping with four 24-inch hydraulically operated gate valves, a 54-inch hydraulically operated sluice gate, three 48-inch by 51-inch electrically operated sluice gates, a 7½ ton hand operated traveling crane, with permission to use same during erection, and a grit cleaning mechanism consisting of tramrail with electrically operated hoist and ½ cubic yard clam-shell bucket; and all necessary wiring and piping connections. All equipment will be erected upon concrete foundations provided by the Board under another contract.

Proposals must be made on blanks to be furnished upon application and must be accompanied by a New York draft or a certified check for $6,000, which is to be deposited therewith as guarantee that the successful bidder will execute the contract within five days after its award.

Drawings, specifications and form of proposals and contracts are on file in the offices of the Board. Copies thereof may be obtained by depositing $10 to insure their return in acceptable condition on or before November 1, 1922.

HARRY J. HAMLIN,
Secretary.

Bids: Sept. 22.

Road Work

Montpelier, Vt.

Sealed proposals will be received at the office of the Commissioner of Highways, Montpelier, Vermont, until 1:30 P.M., September 22, 1922, and then publicly opened and read, for the construction of 3.25 miles of gravel road in the Town of Barton, Vermont.

Plans and specifications may be seen at the office of the State Engineer, at Montpelier, Vermont, and at the Town Clerk's office in Barton, Vermont.

Bidders should satisfy themselves before bidding as to the character of the work and the obstacles to be encountered. The estimated quantities are not guaranteed, but are given as a basis for the comparison of bids.

A certified check for $2,500.00, payable to the State Highway Board, must accompany each bid.

The right is reserved to reject any or all bids.

By order of the State Highway Board.
THURMAN W. DIX,
Commissioner of Highways.
Dated at Montpelier, Vermont,
September 6, 1922.

OFFICIAL PROPOSALS

Bids: Sept. 20.

Pipe Sewers and Disposal Works

Rye, N. Y.

Sealed proposals will be received and opened publicly by the Trustees of the Village of Rye, N. Y., at the Village Municipal Hall, at 8:15 p.m., Wednesday; September 20th, 1922.

Said proposals to cover construction (both materials and labor included) of certain pipe sewers and disposal works, according to plans and specifications filed with the Village Clerk.

Copies of plans and specifications may be seen also at office of City-Wastes Disposal Co., 45 Seventh Ave., New York City. Sets may be borrowed upon deposit of $15.00 of which $10.00 will be refunded if papers are returned in good condition before October 1st, 1922.

Approximately the proposed work consists of:

- About 29,000 feet of 8-inch and 600 feet of 15-inch vtirified pipe sewers, with manholes and flushtanks, much of it in rock excavation;
- About 6,600 feet of iron pipe sewers, siphons and force mains, 8-inch to 16-inch;
- An indeterminate amount of drain-tile laid in sewer trench;
- Sewage tanks, sprinkling filters and sandbeds, with appurtenances.

Each bid must be made on blank forms obtained from the Village Clerk or the Engineer, and must be accompanied by a certified check for $10,000 as a guarantee of good faith.

The Village reserves the right to reject any or all bids.

WILLIAM H. SELZER,
Village Clerk,
Rye, Westchester County,
New York.

G. EVERETT HILL,
Engineer,
45 Seventh Ave.,
New York.

Bids: Sept. 26.

Bridge Work

Toledo, Ohio.

Sealed proposals will be received by the Director of Public Service of the City of Toledo, until Twelve O'Clock noon, September 26, 1922, for the construction of a bridge over Swan Creek, in the line of Hawley Street.

The work will consist of:

1. Removing old structure.
2. Building two abutments approximately 1,800 cubic yards of concrete.
3. Furnishing steel girders—90 feet span.
4. Paving bridge and approaches, approximately 787 square yards.

Proposal forms, plans and specifications can be seen at the office of the Commissioner of Engineering or can be obtained from said office on deposit of $10.00 for each set, which will be refunded provided plans and specifications are returned in good order.

The Director of Public Service reserves the right to reject any or all bids or to accept any bid which he may deem advantageous to the City of Toledo.

W. T. JACKSON,
Director of Public Service.
Attest: GEORGE E. LASKA,
Secretary.

Bids: Sept. 27.

Bridge Paving

Trenton, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commission of New Jersey for the following:

For the removal of present wood block pavement and concrete on Passaic River Bridge, Route No. 1, Lincoln Highway, and replacing of same with a reinforced concrete base and wood block pavement including waterproofing.

The estimated area of roadway surface is 24,000 sq.ft.

Bids for the above will be received at the office of the State Highway Commission, Broad Street Bank Building, Trenton, N. J., on Wednesday, September 27, 1922, at 11:00 A.M., Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, N. J., and office of John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J., and may be inspected by prospective bidders. Plans will be furnished on deposit of ten ($10.00) dollars, for doing this work upon application to John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications for this work; same to be enclosed in sealed special addressed envelopes bearing the name and address of bidder and the work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the State Treasurer for not less than ten (10%) per cent of the amount of the bid, provided that said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelopes will be furnished on application to John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the specifications conditioned for the faithful performance of the provisions of the contract and specifications.

By order o the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: Sept. 25.

Construction of Sewer System

Ellsworth, Wis.

Proposals for the construction of a sewerage system and appurtenances will be received by the Village Board of the Village of Ellsworth, Wis., acting as a Board of Public Works of the said Village up to 5 P.M. on Sept. 25, 1922, and will be publicly opened and considered immediately thereafter. This work comprises approximately the following quantities:

17,000 ft. 8 in. sewer 5-15 ft. deep
4,650 ft. 10 in. sewer 5-13 ft. deep
4,250 ft. 12 in. sewer 5-13 ft. deep
81 ft. Manholes
2 ft. Lampholes
3 ft. Imhoff Tanks, sludge beds, intermittent filers and accessories.

Plans and specifications may be seen at the office of the Village Clerk and at the Office of the Engineers. Copies thereof may be obtained of the Engineers upon the payment of $15.00 per set to cover the cost of reproduction and mailing, ½ of which will be refunded upon their return in good order.

No proposal will be considered unless sealed and marked on the outside with the name of the bidder and a notation of the nature of the work for which bid is made, and filed with the Village Clerk.

Bidders must accompany their bids by a bond with sureties executed on the part of the bidder, which sureties shall justify as to their responsibility, and by their several affidavits show that they are worth in the aggregate at least the amount mentioned in the contract in property not by law exempt from execution, or in lieu of such bond, bidders may accompany their bid with a certified check equal to five per cent of the bid and agree to have inserted in the contract a provision for the retention by the Village of twenty per cent of the estimate made from time to time.

Proposals must be submitted on the blank forms provided by the Engineers, free of charge and must be made on the basis of cash payment for the work. The successful bidder may be required to give bond in the full amount of the contract.

Special attention of the bidders is called to the "Instructions to Bidders" in the proposal form. Bidders are to understand that construction is to commence May 1, 1928.

The right is reserved to reject any or all bids.

Dated at Ellsworth, Wis. this 4th day of Sept. 1922.

R. N. CLAPP,
Village President

ATTEST:
M. D. WOOD,
Village Clerk
DRUAR & MILINOWSKI
Consulting Engineers
500 Globe Bldg.
St. Paul, Minn.

Engineering News-Record Reaches Your Local Contractors

Its distribution among the contractors of any one state is in proportion to the number of contractors situated in that state. The Official Proposal Colums of *Engineering News-Record* offer precisely the same efficient service to municipalities, counties, and state and government departments in every section of the United States.

Bids: Sept. 19.

Sheet Asphalt Resurfacing

Woodbury, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of the County of Gloucester for the resurfacing of Delaware Street, in the County of Gloucester with a sheet asphalt surface upon the present reconstructed foundation, estimated amount of asphalt surface pavement required is 15,056 sq.yd.; of stone for reconstructing foundation is 5,271 tons; and opened and read in public at the Court House, Woodbury, N. J., on Tuesday, the nineteenth day of September, 1922, at 10.30 a.m., Eastern Standard Time.

Drawings, specifications and forms of bids, contract and bond for the proposed work, prepared by William C. Cattell, County Engineer, and approved by the State Highway Commission, have been filed in the office of said engineer at Woodbury, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blueprints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to The Board of Chosen Freeholders of the County of Gloucester and must be accompanied by a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500 nor more than $20,000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of The Board of Chosen Freeholders of the County of Gloucester.

CHESTER N. STEELMAN,
Clerk.
WILLIAM C. CATTELL,
County Engineer.

Bids: Sept. 27.

Drainage and Snow Plows

Dover, Del.

Sealed proposals will be received by the State Highway Department, at its office, Dover, Delaware, until 2 o'clock P. M., Sept. 27, 1922, and at that place and time publicly opened, for the construction of State Highway, involving the following approximate quantities:

Contract CK-8A, at Camden

1700 lin.ft. 15 in. T. C. Pipe (inc. Excav.)
1400 lbs. Castings for Inlets
4 only Manholes
1 only Outlet
4 only Catch Basins, Concrete and Steel

2 Snow-Plows

V-shaped steel snow plow ten (10) feet wide by four (4) feet high, mounted on rollers; hand operated to clear highway twelve (12) inches front and eight (8) inches at rear; for use on 10-ton Holt artillery tractor.

Performance of contract shall commence within ten (10) days after execution of the contract and be completed on or before December 15, 1922.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked "Proposal for the Construction of Cont. CK-8A", or "2 Snow-Plows."

The Contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen and index plans and specifications may be obtained upon deposit of ten dollars (10.00) which amount will be refunded upon return of plans and specifications in good condition at the office of

STATE HIGHWAY DEPARTMENT,
DOVER, DELAWARE.

Bids: Oct. 3.

Construction of Inlet

Ft. Lauderdale, Fla.

Notice is hereby given that the Board of County Commissioners, Broward County, Florida, will receive bids until 11:00 o'clock a.m., on Tuesday, October 3rd, 1922, for the construction of an inlet from New River Sound to the Atlantic Ocean, near Ft. Lauderdale, as per plans and specifications on file in the Clerk's Office, Courthouse Bldg., Ft. Lauderdale, Florida. Such work shall be let in two contracts, being as follows:—

(a) The dredging of 81,000 cubic yards more or less of earth; and the dredging of 5,000 cubic yards more or less of rock;

(b) The furnishing and placing of 6200 cubic yards more or less of riprap and jetty hearting and of 2500 tons more or less of jetty capping, all in riprap and jetty construction.

Separate bids will be received and separate contracts let for each of the two classes of work mentioned Copy of plans and specifications may be secured from the Clerk upon payment of $1.00 to cover cost of printing same.

Each bid shall be accompanied by a certified check in the amount of 3% of the bid, guaranteeing that bidder will make contract and bond within ten days of notice of award.

Bond on each contract will be required in the sum of 50% of the amount bid.

Address all bids to the Board of County Commissioners in care of Frank A. Bryan, Clerk, Ft. Lauderdale, Fla.

The Board reserves the right to reject any and all bids.

By order of the Board. August 22nd. 1922.

H. G. WHEELER,
Chairman.

Attest: FRANK A. BRYAN,
Clerk.
Dated August 22, 1922.

Bids: **Sept. 28.**

Laboratory Building

Ithaca, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work, Addition to Laboratory Building (South Wing—James Law Hall), at the New York State Veterinary College, Cornell University, Ithaca, N. Y., will be received by Mr. C. D. Bostwick, Comptroller, Cornell University, Ithaca, N. Y., until 12 o'clock noon, (Standard Time), on Thursday, September 28, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3472, 3473, 3474 and 3475. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the office of Mr. C. D. Bostwick, Comptroller, Cornell University, Ithaca, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: August 28, 1922.

Bids: Sept. 28.

Laying Cast Iron Water Pipe and Appurtenances

Poughkeepsie, N. Y.

Sealed proposals will be received by the Board of Public Works at its offices in Eastman Park Mansion on or before 4:00 p.m., (Daylight Saving Time), Thursday, September 28th, 1922, for the laying of cast iron water pipe and appurtenances.

Plans, specifications, form of proposal, bond and contract may be obtained at the office of the Superintendent of Public Works, Poughkeepsie, N. Y., and at the office of Hazen, Whipple and Fuller, Consulting Engineers, 30 East 42nd Street, New York City, upon the deposit of Twenty-five ($25.00) Dollars, which amount will be refunded upon the return of the plans and specifications in good condition.

Quantities of work to be done are approximately:

CONTRACT A

Item 1: 4,800 cubic yards of trench excavation in earth.
Item 2: 3,200 cubic yards of trench excavation in rock.
Item 3: Laying 11,100 linear feet of 24" cast iron pipe furnished by the Board.
Item 4: Placing 50 tons of specials furnished by the Board.
Item 5: Placing gates furnished by Board. Lump sum.
Item 6: Making connections to existing pipes. Lump sum.
Item 7: 80 cubic yards of concrete in agate chambers.
Item 8: 12 cubic yards of concrete in trench.
Item 9: 1,600 pounds steel reinforcing.
Item 10: Supporting tracks. Lump sum.
Item 11: Creek crossing. Lump sum.
Item 12: Sheeting left in place.
Item 13: Appurtenances.

CONTRACT B

Item 14: 5,400 cubic yards of excavation in earth.
Item 15: 1,500 cubic yards of excavation in rock.
Item 16: Laying 3,720 linear feet of 20" cast iron pipe furnished by the Board.
Item 17: Laying 5,910 linear feet of 24" cast iron pipe furnished by the Board.
Item 18: Laying 165 linear feet of 30" cast iron pipe furnished by the Board.
Item 19: Placing 45 tons of specials furnished by the Board.
Item 20: Placing gates furnished by the Board. Lump sum.
Item 21: Making connections to existing pipes. Lump sum.
Item 22: 75 cubic yards of concrete in gate chambers.
Item 23: 15 cubic yards of concrete in trench.
Item 24: 1,700 pounds steel reinforcing.
Item 25: Supporting tracks. Lump sum.
Item 26: Creek crossing. Lump sum.
Item 27: Sheeting left in place.
Item 28: Appurtenances.

The proposal shall be accompanied by a certified check drawn upon an incorporated State or National Bank or Trust Company in good credit, within this State, payable to the order of the City of Poughkeepsie for five per cent of the amount of the bid. The successful bidder will be required to give a satisfactory bond for the faithful performance of the agreement in amount equal to fifty per cent of the value of the contract.

The Board of Public Works reserves the right to reject any or all bids.

By order of the Board of Public Works,
THOMAS F. LAWLOR,
Supt.

HAZEN, WHIPPLE & FULLER,
Consulting Engineers,
30 East 42nd Street,
New York City.

South Nyack, New York Saved $2,642.20

Through advertising for bids on a paving contract in *Engineering News-Record.*

This publicity in these Official Proposal Columns is a mighty profitable investment for any community.

It Costs so little, too.

Bids: : **Sept. 25.**

Spavinaw Water Supply Project

Tulsa, Okla.

Sealed proposals for the construction of the major portion of the Spavinaw Water Supply Project for the City of Tulsa, Oklahoma, will be received by the Water Commission of the City of Tulsa, and may be filed at the office of the City Auditor, City Hall, Tulsa, Oklahoma, until 3:00 p.m. Monday, September 25th, 1922, and will be opened and publicly read immediately thereafter at a regular meeting of the Water Commission of the City of Tulsa at 3:00 p.m., Monday, September 25, 1922. Proposals will be received on the following contracts:

Contract No. 1 Telephone Line.
Contract No. 2 Clearing Site of Spavinaw Lake.
Contract N. 3 Spavinaw Dam.
Contract No. 4 60 in. Reinforced Concrete Pipe.
Contract No. 5 Tunnel and Approaches.
Contract No. 6 54 in. Reinforced Concrete Pipe.
Contract No. 7 Mohawk Reservoir.
Contract No. 8 Furnishing Cast Iron or Steel Pipe and Specials.
Contract No. 9 Furnishing Gate Valves.
Contract No. 10 Laying Cast Iron or Steel Pipe.
Contract No. 11 High Pressure Reservoir.

After the reading of the bids on these contracts they will be immediately considered, but in no event will any contract or contracts be awarded earlier than forty-eight (48) hours thereafter.

The principal quantities are approximately as follows:

DAM: Concrete, 79,000 cubic yards. Earth embankment, 182,000 cubic yards.

PIPE: 28 miles of 60 in. and 25 miles of 54 in. pre-cast reinforced concrete pipe. Earth Excavation in trench, 310,000 cubic yards. Rock Excavation in trench, 26,000 cubic yards.

TUNNEL: 7,000 ft. 84 in. Tunnel, 3,050 ft. 84 in. monolithic concrete conduit.

MOHAWK RESERVOIR: 300,000 cubic yards earth embankment.

REINFORCED CONCRETE HIGH PRESSURE RESERVOIR OR RESERVOIRS: 10,000,000 gal. aggregate capacity; 10,000 ft. 36 in. Cast Iron or Steel Pipe; 6,000 ft. 30 in. Cast Iron or Steel Pipe; 8,000 ft. 20 in. Cast Iron Pipe. Specials and Valves.

Each proposal must be accompanied by a certified check on any reputable bank or trust company, payable without reserve to the City of Tulsa, Oklahoma, for five per cent (5%) of the amount of the bid.

All proposals must be made on blank forms furnished by the City of Tulsa and in accordance with the "Requirements for Bidding and Instructions to Bidders."

Proposals may be tendered on one or more contracts or on all of the contracts, but any proposal must include all items under the contract or contracts for which bid is tendered.

Plans, Specifications and Requirements for Bidding and Instructions to Bidders are on file at the Office of the Water Commission at the City Hall and may be seen at the office of Trammell and Holway, Engineers on the Spavinaw Water Supply Project, 329 Kennedy Building, Tulsa, Oklahoma, or at the office of Dabney H. Maury, Consulting Engineer for the said Project, 1445 Monadnock Block, Chicago, Illinois. Complete plans and specifications will be furnished by the Engineers or by the Consulting Engineer, upon the deposit of $50.00 by check payable to Trammell and Holway. Upon return of the plans and specifications in good condition within a reasonable time after the awarding of the contracts, $30.00 will be refunded. Proportionate deposit and refund may be arranged for if bidder desires only parts of the plans.

The Water Commission reserves the right to reject any bid or bids, or all bids, and to waive any informalities.

WATER COMMISSION OF THE
CITY OF TULSA.
A. J. RUDD, Chairman,
G. R. McCULLOUGH,
C. S. AVERY,
H. L. STANDEVEN,
A. L. FARMER,
ROY GARBETT,
City Auditor.

TRAMMELL and HOLWAY, Engineers,
329 Kennedy Building,
Tulsa, Oklahoma.
DABNEY H. MAURY,
Consulting Engineer,
Chicago, Ill.

Bids: Sept. 20.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., advanced standard time, which is twelve o'clock noon eastern standard time, on Wednesday, the 20th day of September, 1922, for the improvement of highways in the following counties:

Franklin...........(one highway: 8.91)
Livingston.........(one highway: 0.99)
Onondaga..........(one highway: 3.47)
Otsego.............(one highway: 1.74)
Rockland....(two highways: 1.48 & 4.08

Also for the reconstruction of the following:

Cortland...........(one contract: 0.54)
Monroe.............(one contract: 4.70)
Ontario.............(one contract: 2.23)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.

J. C. FINCH,
Secretary.

Bids: Sept. 27.

Road Work

Trenton, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commission of New Jersey for the construction of the following:

Route No. 14—Section No. 7—Petersburg-Greenfield, Cape May County; estimated amount of "Borrow Excavation" is 56,606 cubic yards, and of compacted gravel surface 22,926 square yards.

Bids will be received at the office of the State Highwawy Commission at the Broad Street Bank Building, Trenton, New Jersey, on Wednesday, Sept. 27, 1922, at 11:00 A.M., Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars ($10.00) upon application to the State Highway Department, 9th floor, Broad Street Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated therein and as required by the 1922 specifications, same to be enclosed in sealed special addressed envelopes bearing the name and address of bidder and the name and section of the Route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that said certified check shall not be less than $500.00 or more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelopes will be furnished on application. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: Sept. 26.

State Road Work

Hartford, Conn.

Sealed proposals will be received by the State Highway Commissioner, 12 Washington Street, Hartford, Conn., until 2 p.m., Tuesday, DAYLIGHT SAVING TIME, September 26, 1922, for the following sections of State work, in accordance with plans and specifications on file in the office of the State Highway Commissioner and at the following places:

TOWN OF ESSEX: About 4,270 linear feet of 7 inch native stone macadam on of the United States Reclamation Service. tions at the Town Clerk's office and at the office of R. W. Stevens, Division Engineer, 12 Washington St., Hartford, Conn.

TOWN OF LYME: About 8,000 linear feet of 7 inch native stone macadam on the Hadlyme Road. Plans and specifications at the Town Clerk's office and at the office of A. W. Bushell, Division Engineer, Thayer Building, Norwich, Conn.

TOWN OF NORTH STONINGTON: About 6,075 linear feet of 7 inch native stone macadam on the Pendleton Hill Road. Plans and specifications at the Town Clerk's office and at the office of A. W. Bushell, Division Engineer, Thayer Building, Norwich, Conn.

TOWN OF VOLUNTOWN: About 4,050 linear feet of 7 inch native stone macadam on the Pendleton Hill Road. Plans and specifications at the Post Office and at the office of A. W. Bushell, Division Engineer, Thayer Building, Norwich, Conn.

TOWN OF BETHLEHEM: About 5,300 linear feet of 7 inch native stone macadam on the Bethlehem-Washington Road. Plans and specifications at the Town Clerk's office and at the office of G. E. Smith, Division Engineer, New Milford, Conn.

TOWN OF BRANFORD: About 17,150 linear feet of plain cement ooncrete pavement on the New Haven-New London Road. NOTE: Cement for the above work will be furnished by the State. Plans and specifications at the office of E. C. Welden, Division Engineer, Chamber of Commerce Bldg., New Haven, Conn.

TOWN OF KENT: About 26,256 linear feet of plain cement concrete pavement on the Housatonic River Road. NOTE: Cement for the above work will be furnished by the State. Plans and specifications at the office of G. E. Smith, Division Engineer, New Milford, Conn.

TOWN OF NORTH HAVEN: A two span concrete deck girder bridge over the Quinnipiac River. NOTE: Cement for the above work will be furnished by the State. Plans and specifications at the office of E. C. Welden, Division Engineer, New Haven, Conn.

All bids must be accompanied by a surety company bond or a certified check not less than one-third of the cost of the work. The State Highway Commissioner reserves the right to reject any and all bids.

Dated at Hartford, Connecticut, September 5, 1922.

C. J. BENNETT,
State Highway Commissioner,
12 Washington Street, Hartford, Conn.

**Thank You,
Mr. Ferguson**

"We just let contracts for approximately 25 miles of road construction yesterday and I attribute to a great extent the large number of bidders we had to the Publicity we received through the *News-Record*."

Very truly yours,
Angus Ferguson, Ch. Engr.,
Traylor County Road Department
Grafton, W. Va.

Bids: Oct. 10.

Concrete Structures: Filter Equipment and Brick Filter House

Greensboro, N. C.

Proposals will be received by the City Council of Greensboro, North Carolina, until 12 o'clock M. Tuesday, October 10th, 1922, for building a Filtration plant and appurtenances.

The work includes the construction and equipment of a six million gallon filter plant, the construction of a coagulation basin with dividing wall, capacity 1,148,000 gallons, and the construction of a mixing chamber. The principal quantities involved are:

8,000 cubic yards of earth excavation.
1,900 cubic yards of concrete.
225,00 pounds of reinforcing steel.
The equipment of six one-million gallon filter units.
80,000 brick laid in filter house walls.
Steel wash water tank of 70,000 gallons capacity.
1,000 GPM motor-operated pump.
Piping, valves, and miscellaneous items.

Plans will be on file and may be seen at the office of the City Manager, Greensboro, N. C., or at the office of The Ludlow Engineers, Winston-Salem, N. C., after September 15th. After that date copies of the Specifications, Bid Blank, and Contract may be obtained from the Engineers or City Manager. For the convenience of prospective bidders, the Engineers will furnish copies of the plans upon application accompanied by a check for ten ($10.00) dollars to cover the cost, or separate prints at one ($1.00) dollar each.

Each bid must be accompanied by a certified check in the sum of $5,000, or 5% of the amount of partial bids.

Proposals will be opened publicly with the usual rights reserved.

P. C. PAINTER,
City Manager.

J. L. LUDLOW,
Consulting Engineer.

Bids: Sept. 26.

Sewage Disposal Plant

Fort Worth, Tex.

Sealed proposals addressed to the Hon. Mayor and Board of Commissioners, Fort Worth, Texas., will be received at the office of C. S. Snow, City Secretary, City Hall, up to 9:00 o'clock a.m., Tuesday, September 26th, 1922, at which time said proposals will be publicly opened, read and considered by the Board of Commissioners for furnishing all necessary materials, equipment and labor for constructing a certain Sewage Disposal Plant for the City of Fort Worth, Texas .

Bidders must submit with proposal a certified check in the sum of Fifteen Thousand ($15,000.00) Dollars, payable, without recourse, to the order of E. B. Cheatham, City Auditor, as a guaranty that bidder will enter into contract and execute bond and guaranty in the forms provided, within ten days after notice of award of contract to him. Proposals without certified check will not be considered. The successful bidder must furnish bond to the amount of 33⅓ per cent of the sum bid, on form attached to "form of contract" attached to specifications, from a reliable surety company approved by the Mayor and Board of Commissioners. All "lump sum" and "unit" prices must be stated in both script and figures.

The City reserves the right to reject any or all bids, and to waive formalities.

In case of ambiguity, or lack of clearness in stating prices in the bids, the City reserves the right to consider the most advantageous construction thereof, or to reject the bid. Unreasonable (or "unbalanced") unit prices will authorize the City to reject any bid. Bidders are expected to inspect the site of the work and to inform themselves regarding all local conditions.

Instructions to bidders, proposal and contract forms, specifications and plans are on file at the office of Dudley L. Lewis, City Engineer; John B. Hawley, 403 Cotton Exchange Building, Fort Worth, and E. E. Sands, Mason Building, Houston, Texas.

Copies of plans and specifications may be secured from any of the above offices after September 12th—upon deposit of $100.00, to be returned to contractor upon submission of a bona fide bid on the work, with plans and specifications, or upon returning plans and specifications, intact, prior to date of receiving bids; otherwise the deposit will be forfeited.

E. R. COCKRELL, Mayor.
J. C. LORD, Com. Water & Sewers.
D. L. LEWIS, City Engineer.
C. S. SNOW, City Secretary.
Fort Worth, Texas,
August 29th, 1922.

Bids: Oct. 10.

Steam Turbine and Accessories

New Orleans, La.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans up to 12 o'clock, noon, Tuesday, October 10th, 1922, for furnishing one 6,000 kw. STEAM turbine and accessories.

Specifications and blank forms of proposals may be obtained at Room 303, No. 526 Carondelet Street, New Orleans.

The right is reserved to reject any or all bids.

A. G. MOFFAT,
Secretary.

GEO. G. EARL,
General Superintendent.
Aug. 10, 1922.

Bids: Sept. 23.

Lumber Handling Crane

Aberdeen, Wash.

Sealed proposals will be received by the Port of Grays Harbor at the office of the Commission, 206 E. Wishkah St., Aberdeen, Wash., until 10 o'clock A.M., Sept. 23, 1922, for one 5 ton lumber handling mill type crane equipped with lumber grapple 75 foot span.

Further information on application.

PORT OF GRAYS HARBOR.
FRANK H. LAMB, President.
J. A. VANCE, Secretary.

OFFICIAL PROPOSALS

Bids: Oct. 2.

Pavement, Curbing and Catch Basins

Noroton, Conn.

Sealed proposals for furnishing all labor and materials for the construction of proposed Drives, Curbing and Catch Basins and necessary drains to be constructed on the grounds of Fitch's Home for Soldiers and Soldiers' Hospital of Connecticut at Noroton Heights, Conn., will be received at the office of Col. Henry J. Seeley at the Soldiers' Home in Noroton until October 2, 1922, at 12:00 a.m. (D.S.T.).

The bids will be opened at the Governor's Office in the State Capitol at Hartford, on October 3rd, 1922, at 11:00 a.m. (D.S.T.).

The bids shall be in accordance with the plans and specifications for the work on file in the office of Col. Henry J. Seeley at the Soldiers' Home, where they may be obtained by bidders upon payment of $5.00, the same to be refunded when plans are returned in good condition.

The principal items of work consist of:

4,614 sq.yd. Penetration Pavement.
4,660 lin.ft. Concrete Curbing.
18 Catch Basins.

Each proposal shall contain the full name of every firm or corporation interested in the same and the address of the person or firm, or President or Secretary of the corporation bidding, and shall be accompanied by a certified check upon a national bank or trust company drawn to the order of The Soldiers' Hospital Board of Connecticut, in the sum of $650, which shall become the property of the State Hospital Board as liquidated damages in case the successful bidder fails to enter into a contract within five (5) days after the award of this contract as herein provided.

The checks of unsuccessful bidders will be returned upon demand and of the successful bidder upon completion of the work in a satisfactory manner, no bond being required.

All bids to be placed in a sealed envelope marked "Bids for Road and Curbing."

The Soldiers' Hospital Board reserves the right to reject any or all bids.

By order of
THE SOLDIERS' HOSPITAL BOARD
OF CONNECTICUT,
JOHN H. THACHER,
Chairman of Executive Committee.

Bids: Sept. 26.

Electric Light and Power Plant

Corinth, Miss.

Sealed proposals will be received at the office of the City Clerk of Corinth, Mississippi, up until 7:00 o'clock p.m. of Tuesday, the 26th day of September, 1922, for furnishing materials, labor and constructing according to the plans and specifications, a complete Municipal Electric Light and Power Plant.

The work will be divided into 10 sections. East section shall be a separate and distinct portion of the work and the Council reserves the right to award the contract by sections, any combination of sections or the work as a whole.

A brief description of each section is as follows:

Section No. 1. Power House Building complete and machinery foundations.

Section No. 2. 5' x 125' reinforced concrete chimney and foundation.

Section No. 3. Two (2) new 300 horsepower horizontal water tube boiler with steel breeching erected complete including brickwork.

Section No. 4. Two (2) new steam engines of the non-releasing corlis or the uniflow type. Size shall be ample to operate a 375 K.V.A. direct connected 3 phase, alternating current generator at 80% power factor. Furnished and erected complete on Purchaser's foundation. Alternate bids may be submitted on complete Turbine driven or oil driven units of same size as above stated.

Section No. 5. Two (2) new 375 K.V.A. 3 phase 60 cycle, 2300 volt, direct connected type alternator, furnished and erected complete on Purchaser's foundation.

Section No. 6. One (1) steam Turbine Driven Exciter and one (1) Electric Motor Driven Exciter Units furnished and erected complete on Purchaser's foundation.

Section No. 7. One (1) six panel Switchboard including wiring connections between switchboard and Exciters and Generators furnished and erected complete.

Section No. 8. Street Light and Pole line material furnished f.o.b. Corinth, Miss.

Section No. 9. Erection of Street Lighting and Distributing System complete.

Section No. 10. Steam piping, Feedwater Heater, Feedwater Pumps, Traps, etc., furnished and erected complete..

A certified check or Bidders Bonds of five (5%) per cent of the amount of each bid made payable to the Treasurer of the City of Corinth, Mississippi, must accompany each bid. Plans and Specifications are on file with the City Clerk at Corinth, Mississippi, and at the office of the Consulting Engineers, Fuller & Beard, Room 616 Title Guaranty Building, St. Louis, Missouri.

Parties desiring extra copies of Plans and Specifications for their personal use may obtain same from the Engineers. A deposit of $10.00 shall be made for a complete set of Plans and Specifications, $6.00 of which will be returned upon the receipt of the plans and specifications in good condition.

Bids must be sealed and addressed to M. T. Sharp, City Clerk, Corinth, Mississippi, and on the outside of the envelope must be plainly written "Proposals for Municipal Electric Light and Power Plant."

The Mayor and City Council especially reserve the right to reject any or all bids and waive informalities.

T. E. HENRY,
Mayor.
M. T. SHARP,
City Clerk.

A Representative Reports—

"It was my privilege to meet the Road Commissioners of Kalamazoo County (Mich.) in session and they wished me to convey to your staff their appreciation of the excellent results obtained through publishing proposals in *Engineering News-Record*."

Bids: Sept. 19.

Road Construction

Woodbury, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of the County of Gloucester for the construction of the Swedesboro-Woodstown road in the Borough of Swedesboro and Townships of Woolwich and South Harrison, in the County of Gloucester, New Jersey, with a reinforced concrete pavement, estimated amount of concrete pavement required is 38,402 sq.yd., and opened and read in public at Court House, Woodbury, New Jersey, on Tuesday, the nineteenth day of September, 1922, at 10.00 o'clock, Eastern Standard Time.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by William C. Cattell, County Engineer, have been filed in the office of the said engineer at Woodbury, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blueprints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside thereof, addressed to The Board of Chosen Freeholders of the County of Gloucester and must be accompanied by a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500 nor more than $20,000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of The Board of Chosen Freeholders of the County of Gloucester.

CHESTER N. STEELMAN,
Clerk.
WILLIAM C. CATTELL,
County Engineer.

Bids: Sept. 25.

School Building

Cinnaminson, N. J.

At a meeting of the Board of Education of the Township of Cinnaminson, in the County of Burlington, to be held in the Westfield Public School Building, situate at the intersection of the Moorestown-Riverton Road and Pomona Road, Cinnaminson, Burlington County, New Jersey, on Monday, September 25, 1922, at 8 o'clock in the evening (daylight saving time), separate sealed bids or proposals will be received, opened, and considered for the following:

1. For the erection of, and for all labor, materials, tools and appliances necessary for a two-story and basement brick addition to the said Westfield Public School building, at Cinnaminson, Burlington County, New Jersey.

2. For the construction and installation of, and for all labor, materials, tools, fixtures and appliances necessary for, the heating and ventilating system in said addition to said school building.

3. For the construction and installation of, and for all labor, materials, tools, fixtures and appliances necessary for, the electrical system in said addition to said school building.

4. For the construction and installation of, and for all labor, materials, tools, fixtures and appliances necessary for, the plumbing and drainage system in and for said addition to said school building.

Each proposal shall be based upon plans and specifications for the work prepared by J. Fletcher Street, architect, 129 South Fifth Street, Philadelphia, Pa.; and must be accompanied by a certified check, or by a bid bond issued by a Surety Company authorized to transact business in the State of New Jersey, in favor of the said Board of Education in an amount equal to not less than ten per cent, of the amount of the proposal. Further information as to the terms and conditions of bidding may be obtained upon application to said architect, who will also furnish copies of the said plans and specifications upon deposit of Twenty Dollars for the building plans and specifications and Ten Dollars for the plans and specifications covering each of the other classes of work. Upon return of said plans and specifications promptly after proposals are received said deposits will be refunded.

The Board of Education reserves the right to reject any or all bids or proposals submitted; to waive any informality in the making of the same; and to decide as to the desirability or responsibility of any and all bidders.

By order of the Board of Education of the Township of Cinnaminson.

BENJAMIN LIPPINCOTT,
District Clerk,
Cinnaminson, N. J.

Dated, September 5, 1922.

Bids: Oct. 19.

Wanaque Aqueduct—Great Notch Tunnel—Preliminary Notice

Newark, N. J.

The North Jersey District Water Supply Commission of the State of New Jersey, 20 Clinton Street, Newark, New Jersey, will receive proposals on October 19, 1922, for construction of Great Notch Tunnel and Approaches.

The work will include the excavation and concrete lining of a 7-foot tunnel 9,100 feet in length and the construction of about 5,000 feet of 7-foot concrete aqueduct in open cut and various appurtenant structures.

Formal notice to contractors will appear on or about September 29, on which date pamphlets containing information for bidders, contract, specifications and drawings, will be available.

By order of the North Jersey District Water Supply Commission of the State of New Jersey.

LAURENT J. TONNELE,
Chairman.
MORRIS R. SHERRERD,
Consulting Engineer.
ATTEST:
EDMOND TYLER,
Secretary.
ARTHUR H. PRATT,
Chief Engineer.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Sept. 25	Tulsa, Okla.	Aug. 24
Sept. 26	Mabton, Wash.	Sept. 21
Sept. 26	Hanover, Ill.	Sept. 21
Sept. 28	Poughkeepsie, N. Y. Adv. Sept. 14 and 21.	Sept. 14
Sept. 29	Cleveland, O.	Sept. 7
Oct. 1	Ponchatoula, La.	Aug. 3
Oct. 2	Glenwood Springs, Colo.	Sept. 21
Oct. 2	Saranac Lake, N. Y. Adv. Sept. 21.	Sept. 21
Oct. 3	Haines City, Fla. Adv. Sept. 7 to 21.	Sept. 7
Oct. 5	Marshall, Ill.	Sept. 14
Oct. 6	Memphis, Tenn. Adv. Sept. 21.	Sept. 21
Oct. 10	Greensboro, N. C. Adv. Sept. 14 and 21.	Sept. 14
Oct. 11	Binghamton, N. Y. Adv. Sept. 21.	Sept. 21
Oct. 19	Newark, N. J.	Sept. 7

SEWERS

Sept. 25	Hackensack, N. J.	Aug. 31
Sept. 25	Ellsworth, Wis.	Sept. 14
Sept. 26	Ft. Worth, Tex.	Sept. 7
Sept. 27	Chicago, Ill.	Sept. 21
Sept. 28	Lake Forest, Ill.	Aug. 31
Sept. 29	Chesterton, Ind.	Sept. 14
Oct. 2	Cape Girardeau, Mo. Adv. Sept. 14 and 21.	Sept. 21
Oct. 2	Saranac Lake, N. Y. Adv. Sept. 21.	Sept. 21
Oct. 2	Alexandria, La.	Sept. 21
Oct. 3	Toronto, Ont.	Sept. 7
Oct. 10	Syracuse, N. Y. Adv. Sept. 7 to 21.	Sept. 7
Oct. 10	Waseca, Minn.	Sept. 21
Oct. 16	State College, Pa. Adv. Sept. 21.	Sept. 21

WASTE DISPOSAL

Sept. 22	Trenton, N. J.	Sept. 7
Oct. 6	Charleston, W. Va. Adv. Sept. 21.	Sept. 21

BRIDGES

Sept. 26	Alabama	Aug. 31
Sept. 26	Toledo, O.	Sept. 7
Sept. 29	Los Angeles, Calif.	Sept. 14
Sept. 29	Stockton, Calif.	Sept. 21
Sept. 30	Washingtons Crossing (Taylorsville, Pa., P. O.), N. J. Adv. Sept. 21.	Sept. 21
Oct. 1	Siam	July 13
Oct. 6	Seattle, Wash.	Sept. 7
Oct. 9	White Plains, N. Y. Adv. Sept. 14 and 21.	Sept. 21
Oct. 16	Sacramento, Cal.	Sept. 14
Oct. 19	Chesterfield, S. C.	Sept. 21
Oct. 31	Sydney, Australia	Jan. 12
Jan. 23	Spokane, Wash.	Sept. 21
Sept. 1, 1923.	Sydney, New South Wales, Australia	Aug. 3

EXCAVATION, DRAINAGE IRRIGATION

Sept. 26	Slayton, Minn.	Sept. 21
Sept. 27	Delaware	Sept. 14
Sept. 28	Eagle Point, Ore.	Sept. 21
Oct. 1	Kingstree, S. C.	Sept. 21
Oct. 3	Ft. Lauderdale, Fla. Adv. Sept. 14 and 21.	Sept. 21
Oct. 3	Merced, Calif.	Sept. 21
Oct. 3	Paradise, Calif.	Sept. 21
Oct. 7	Illinois Adv. Sept. 21.	Sept. 21
Oct. 27	Minneapolis, Minn.	Sept. 21

STREETS AND ROADS

Bids Close		See Eng. News-Record
Sept. 25	California	Sept. 7
Sept. 25	Ellsworth, Wis.	Sept. 14
Sept. 25	Lindsay, Calif.	Sept. 7
Sept. 25	Brooklyn, N. Y.	Sept. 21
Sept. 25	Bryan, Tex.	Sept. 21
Sept. 25	New York, N. Y.	Sept. 21
Sept. 26	Colorado	Sept. 21
Sept. 26	Chicago, Ill.	Sept. 21
Sept. 26	Delaware	Sept. 21
Sept. 26	New York, N. Y.	Sept. 21
Sept. 26	Alabama	Aug. 31
Sept. 26	Connecticut	Sept. 14
Sept. 26	Colorado	Sept. 14
Sept. 27	Wellington, Kan.	Sept. 7
Sept. 27	New Jersey Adv. Sept. 14 and 21.	Sept. 14
Sept. 27	Baltimore, Md.	Sept. 14
Sept. 27	Michigan	Sept. 14
Sept. 27	Long Island City, N. Y.	Sept. 21
Sept. 28	Missouri	Sept. 21
Sept. 28	Phila., Pa.	Sept. 21
Sept. 28	Michigan	Sept. 21
Sept. 28	New Mexico	Sept. 7
Sept. 29	Ebensburg, Pa.	Sept. 21
Sept. 29	Tulsa, Okla.	Aug. 24
Sept. 29	Iola, Kan.	Sept. 7
Sept. 29	Ohio	Sept. 21
Sept. 29	Chicago, Ill.	Sept. 21
Sept. 30	Cleveland, O.	Sept. 21
Oct. 1	Michigan	Sept. 21
Oct. 2	Alexandria, La.	Sept. 21
Oct. 2	Vevay, Ind.	Sept. 21
Oct. 2	Noroton Heights, Conn. Adv. Sept. 14 and 21.	Sept. 14
Oct. 2	Ontario	Sept. 21
Oct. 2	Syracuse, N. Y.	Sept. 21
Oct. 3	Quebec	Sept. 21
Oct. 3	Anderson, S. C.	Aug. 31
Oct. 3	Washington	Aug. 31
Oct. 4	Michigan	Sept. 21
Oct. 4	Bismarck, N. D.	Sept. 21
Oct. 4	Greenville, S. C.	Sept. 21
Oct. 6	Wellington, Kan.	Sept. 14
Oct. 6	Alabama	Sept. 14
Oct. 9	California	Sept. 21
Oct. 10	Ft. Myers, Fla.	Sept. 21
Oct. 13	Iola, Kan.	Sept. 14

INDUSTRIAL WORK

Sept. 24	Kansas City, Mo.	Sept. 21
Sept. 25	Springfield, Mo.	Sept. 14
Sept. 25	Richmond, Va.	Sept. 21
Sept. 26	Trenton, N. J.	Sept. 21
Sept. 26	Corinth, Miss. Adv. Sept. 14 and 21.	Sept. 14
Oct. 1	Williamsport, Pa.	Sept. 14
Oct. 3	Union Grove, iWs.	Sept. 21
Oct. 5	Marshall, Ill.	Sept. 14

BUILDINGS

Sept. 22	Lima, O.	Sept. 21
Sept. 25	Clark Summit, Pa.	Sept. 14
Sept. 25	West Orange, N. J.	Sept. 21
Sept. 25	Cinnaminson, N. J. Adv. Sept. 14 and 21.	Sept. 21
Sept. 25	Santa Rosa, Calif.	Sept. 21
Sept. 26	Glens Falls, N. Y.	Sept. 14
Sept. 27	Wash., D. C.	Sept. 7
Sept. 28	Ithaca, N. Y. Adv. Sept. 7 to 21.	Sept. 7
Sept. 28	Detroit, Mich.	Sept. 21
Sept. 29	Des Moines, Ia.	Sept. 21
Sept. 29	Jamestown, N. D.	Sept. 21
Sept. 30	Duluth, Minn.	July 13
Sept. 30	Vandergrift, Pa.	Sept. 21
Oct. 1	Duluth, Minn.	Aug. 3
Oct. 1	Bloomfield, Ia.	Sept. 21
Oct. 2	Cedar Rapids, Ia.	Sept. 14
Oct. 3	Sacramento, Calif.	Sept. 7
Oct. 6	Brookville, O.	Sept. 14
Oct. 10	Selma, Calif.	Sept. 21
Oct. 10	Baltimore, Md.	Sept. 21
Oct. 16	Altoona, Pa. Adv. Sept. 21.	Sept. 21
Oct. 17	Racine, Wis.	Sept. 21

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Sept. 25	Power Boats—Staten Island, N. Y.	Sept. 21
Sept. 26	Repairing Walls—Savannah, Ga. Adv. Aug. 31 to Sept. 21.	Aug. 31
Sept. 27	Quarters — Ft. Bayard, N. M.	Aug. 31
Sept. 27	Portland Cement—Memphis, Tenn. Adv. Sept. 14 and 21.	Sept. 14
Sept. 28	Dredging—Buffalo, N. Y. Adv. Aug. 31 to Sept. 21.	Aug. 31
Sept. 28	Extension, etc.—Alexandria, La.	Sept. 7
Sept. 29	Post Office—Eureka, Utah	Sept. 7
Sept. 30	Stables—Edgewood Arsenal, Md. Adv. Sept. 21.	Sept. 21
Oct. 2	Steel Buoys—Staten Island, N. Y.	Sept. 21
Oct. 3	Spur Dikes—New Orleans, La. Adv. Sept. 21.	Sept. 21
Oct. 4	Telephone System—Tuskegee, Ala.	Sept. 14
Oct. 5	Dredging — New York, N. Y. Adv. Sept. 7 to 21.	Sept. 7
Oct. 6	Dredging — Wilmington, Del. Adv. Sept. 7 to 21.	Sept. 7
Oct. 6	Post Office — Charleston, W. Va. Adv. Sept. 14 and 21.	Sept. 14
Oct. 7	Cement—Wash., D. C.	Sept. 21
Oct. 10	Towboat—Mobile, Ala. Adv. Sept. 7 to 21.	Sept. 14
Oct. 11	Hospital — Tupper Lake, N. Y.	Sept. 21
Oct. 11	Remodeling — Mare Island, Calif.	Sept. 21
Oct. 11	Quarters, etc. — San Diego, Calif.	Sept. 21
Oct. 16	Earthwork—Yuma, Ariz.	Sept. 14
Oct. 18	Quarters—Edgewood, Md. Adv. Sept. 21.	Sept. 21
Oct. 23	Dump Scows — Nashville, Tenn. Adv. Sept. 21.	Sept. 21
Oct. 31	Dredging—Honolulu, H. T. Adv. Aug. 31 to Sept. 21.	Aug. 31

MISCELLANEOUS

Sept. 27	Snow Plow—Delaware	Sept. 14
Sept. 29	Cement—Turlock, Calif.	Sept. 21
Sept. 29	Coal Handling Plant—New York, N. Y.	Sept. 21
Oct. 2	Pier—Vancouver, B. C.	Sept. 7
Oct. 2	Gas Plant Equipment, etc.—Alexandria, La.	Sept. 21
Oct. 10	Steam Turbine, etc.—New Orleans, La. Adv. Aug. 17 to Sept. 21.	Aug. 17
Nov. 4	Transformers, etc. — Melbourne, Australia	Aug. 17
Dec. 18	Coal Handling Plant — Melbourne, Victoria, Australia Adv. Sept. 21.	Sept. 21

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Dundee—Plans election to vote on $125,000 bonds for water system. Engineer not announced. Noted Aug. 10.

N. Y., Voorheesville—Village Trustees, Hose House, takes bids in February, furnishing about 450 ton 8 in. Class "B" c.i. pipe, also constructing concrete reservoir, hauling and laying about 3½ mi. 8 in. Class "B" c.i. pipe. Former bids rejected. W. W. Chadsey, 434 State St., Schenectady, civil and sanitary engr. Noted Aug. 24.

Fla., Marianna—Plan election to vote on $25,000 bonds for extensions and betterments to waterworks system. H. A. Boides, clk.

O., East Liverpool — See "Streets and Roads."

O., Warren—Plans 6 in. mains in 200 ft. South Delaware St., 920 ft. Frances Ave., 200 ft. East Atlantic extension, 700 ft. Edgewood Ave., 300 ft. West Oak St., 1,020 ft. McKinley Ave., 1,100 ft. Quinby Ave., 1,050 ft. Delaware Ave., 1,100 ft. South Homewood Ave., 600 ft. East Front Ave., 1,300 ft. Albert St., 472 ft. Kinsman Ave., 1,000 ft. Peerless Ave., 1,000 ft. Choctaw Ave., 515 ft. Pawnee Ave., 770 ft. Viola Ave., 550 ft. Idelwild Ave., 500 ft. Arlington Ave., 1,020 ft. West Ave., 910 ft. West Front St., 1,420 ft. River Ave., 1,250 ft. Watson Ave., 1,100 ft. Atkins Ave.; 8 in. mains in 1,100 ft. South Main St. and 1,050 ft. South Park Ave. G. Hecklinger, city clk. Engineer not announced.

Minn., Owatonna—Plans steel tank, 31 ft. diam., 250,000 gal. capacity, also tower 65 ft. high. $15,000. Toltz, King & Day, 1410 Pioneer Bldg., St. Paul, engrs.

Tex., Tulia—Oct. 12, to vote on $50,000 bond issue for water extensions.

Wash., Camas—Having plans prepared waterworks improvement, incl. 7 mi. wood pipe. $40,000. Stevens & Koon, Spalding Bldg., Portland, Ore., engrs.

Waterworks (Continued)

Wash., Kelso—See "Buildings."

Wash., Spokane—North Spokane Irrigation Dist. having plans prepared 100,000 gal. stand pipe and steel tank, 60 ft. tower, and 5-6 mi. of 4-12 in. c.i. pipe. $75,000. O. Weile, Peyton Bldg., engr.

Wash., Spokane—Having plans prepared and takes bids early in 1923, pumping outfit, one unit of 1,000 hp., 50,000 gal. per day, housing, 1 well 50 ft. diam. and 55 ft. deep, $65,000; new foundation for pump in old plant, 300 hp. engine, $15,000; 10,000 ft. 6 in. c.i. pipe, to replace wooden pipe, $17,500; rein.-con. reservoir, 20,000,000 gal. capacity, $14,000. A. Lindsay, city engr.

Calif., Napa—State having plans prepared water work system for state hospital, here. $175,000. State Dept. of Architecture, Forum Bldg., Sacramento, engrs.

Calif., Williams—Plan election to vote on $50,000 bonds constructing waterworks system. C. E. Sloan, Santa Fe Bldg., San Francisco, consult. engr.

Ont., Collingwood—Plans new intake pipe for waterworks. $25,000. T. B. Ivey, city engr. Prices wanted on equipment.

BIDS DESIRED

N. Y., Binghamton—Oct. 11, by State Hospital Comn., Albany, construction and repairs to reservoir at Binghamton State Hospital, here. L. F. Pilcher, Albany, state archt.; adv. this issue.

N. Y., Saranac Lake—Oct. 2, by S. A. Miller, clk. Sewer and Water Bd., extending existing water distribution system. J. L. Collins, 30 Church St., New York, engr.; adv. this issue.

Tenn., Memphis—Oct. 6, by Bd. Comrs. Memphis Artesian Water Dept., rein.-con. reservoir and rein.-con. substructures of pumping station, iron removal plant and aerator, also furnishing and installing c.i. pipe, valves, drains and appurtenant structures, Contr. 6. Fuller & McClintock, 421 Produce Exch. Bldg., Kansas City, Mo., engrs.; adv. this issue.

Ill., Hanover — Sept. 26, by Bd. of Trustees, Woodman Hall, 17,163 lin.ft. 4-8 in. c.i. pipe in place, 10,821 lb. specials, 31 gate valves, 20 fire hydrants, 480 lin.ft. 8 and 10 in. pipe (river crossing), 600 lb. specials (river crossing), 1 centrifugal pump, 400 g.p.m., one 25 hp. single phase motor, 1 elevated steel tank, 40,000 gal. capacity, on 70 ft. steel tower. C. Fisher, pres. J. C. Thorne, 317 Howes Blk., Clinton, Ia., consult. engr.

Colo., Glenwood Springs—Oct. 2, by City Counsel, 4,100 ft. tunnel and 1,500 ft. concrete and metal flume and appurtenances thereto for city water supply. $75,000. M. L. Miller, 203 Boston Bldg., Denver, engr.

Wash., Mabton—Sept. 26, by City Clerk, additions and improvements to, also extension to present water system, wood pipe. $15,000. C. F. Wilson, Yakima, engr.

Que., Montreal—Executive Com. receiving bids watermains in Sherbrooke St. $92,400. H. G. Tetreault, dir. pub. wks.

BIDS RECEIVED

Pa., Phila.—F. H. Caven, dir. pub. wks., opened bids Sept. 12, furnishing and installing 3 chlorinators, from Wallace & Tiernan, Weidner Bldg., $15,000. Noted Sept. 7.

Wash., Walla Walla—For 6,000 ft. 6 in. steel converse pipe for improving waterworks, from Crane Co., 14th and Irving Sts., Portland, $86 per 100 ft. for galvanized, and $95 per 100 ft. for dipped pipe.

Calif., Grenada — Grenada Irrigation Dist., rebuilding pumping plants from L. Youdall, Commercial Savings Bldg., Stockton, $5,255, P. Butte, 534 Folsom St., San Francisco, $6,527; structures for 24 mi. canals, incl. checks, 74 corrugated metal turnouts, etc., from D. M. Reid, Grenada, $7,369, M. Steuart, Grenada, $8,985; ditches, 14 mi. new canal, involving 30,000 cu.yd. excav., also deepening 7 mi. present canals, from G. Milne, Ft. Jones, new ditches $6,327, enlargements $12,344; reconstructing dam and concrete lining of pumping plant sump and div. canal, from M. Steuart, Grenada, $14,961, L. Youdall, Commercial Savings Bldg., Stockton, $17,440. Noted April 13.

Calif., Lakeport—Mains and sewer pipe, from American Cast Iron Pipe Co., Balboa Bldg., San Francisco, 6, 8 and 10 in. pipe $56.65 per ton f.o.b. cars Hopland, 4 in. pipe $60.55 f.o.b. cars Hopland, 4 in. fittings $0.06 per lb., larger fittings $0.055; United Cast Iron Pipe & Fdry. Co., Monadnock Bldg., San Francisco, 6, 8 and 10 in. pipe $61.10 per ton f.o.b. cards Hopland, 4 in. $57.10 f.o.b. Hopland, 4 in. fittings $0.0615 per lb., larger fittings $0.0565 per lb., wyes $0.0665 per lb., plugs $2.50 each; Central Fdry Co., Rialto Bldg., San Francisco, 4 in. (Universal joint pipe) $0.71 per ft., 6 in. $1, 8 in. $1.47, 10 in. $2.16, total for pipe $52,405, total for fittings $2,659; Gladding McBean Co., Crocker Bldg., San Francisco, 8,500 ft. 8 in. sewers $0.50, 100 wyes $1, twenty-five 8 in. tees $1, one hundred 6 in. bends $1.40. Noted July 6.

CONTRACTS AWARDED

Fla., Orlando—Renovating and enlarging water plant, cranes to Arlington Eng. Co., Euclid, O. (street address not available), $2,500; condensers to D. H. Wheeler, New York City, (street address not available) $11,560; wiring to Johnson Electric Co., Orlando; boilers to Springfield Boiler Co., 1901 East Cap Ave., Springfield, Ill., $27,114; superheaters to Power Specialty Co., 111 Bway., New York City, $4,100; stack to Rust Eng. Co., Atlanta, Ga., (street address not available) $3,360; steel tank to Chicago Bridge and Iron Wks., 105th and Throop Sts., Chicago, $3,360; cleaning water mains to National Co., New York City, $8,384; pumps to Morris Machine Wks., 41 Cortlandt St., New York City, $4,785; filtration equipment to International Filter Co., 38 South Dearborn St., Chicago, $17,446; valves to Ludlow Valve Co., Ft. Adams St., Troy, N. Y., $5,553; fire hydrants to Columbia Iron Wks., 811 Boyce St., Chattanooga, Tenn., $2,784; water meters to Gamon Meter Co., 282 South St., Newark, N. J., $17,682; venturi meter to Simplex Valve Co., 5722 Race St., Phila., Pa., $1,048; water pipes to United States Cast Iron Pipe Co., 71 Bway., New York City, cost to be determined by amount used. Noted Jan. 26.

Mich., Detroit—Furnishing 500 ton 6 in. and 500 ton 8 in. c.i. water pipe, to U. S. Cast Iron Pipe & Fdry. Co., 122 South Michigan Ave., Chicago, Ill., $46 per ton, total $46,000.

Ill., Altamont — Waterworks improvements, to James & Shirm Co., Mattoon, $10,000. Noted July 27.

Minn., Shakopee—Watermain extensions, 3,820 lin.ft. 6 in. c.i. pipe; sewer extensions, 4,666 lin.ft. 8 in. vitr. pipe, to O'Neil & Preston, 608 Exch. Bank Bldg., St. Paul, $18,000. Noted Aug. 17.

Minn., Stewart—See "Sewers."

Minn., Thief River Falls—Waterworks improvements, 1,000,000 gal. capacity filtration plant, incl. plant building and motor house, to C. M. Carlson, Thief River Falls, $19,100; filter and pump equipment, to J. G. Robertson, 2542 University Ave., St. Paul, $15,170. Noted Aug. 31.

Calif., Sacramento—Rapid sand filtration plant, to Mathews Constr. Co., Forum Bldg., $771,957. Noted Sept. 7.

Sewers

PROPOSED WORK

N. Y., Dundee—Plans election to vote on $70,000 bonds for new sewerage system. Engineer not announced.

N. Y., Rochester—Plans storm, water and outlet sewer in Meriden St. and other streets, 23rd Ward. $60,000. C. A. Poole, city engr.

N. Y., Rochester—See "Streets and Roads."

Pa., Carbondale—Plans storm water flow sewer in Harlem Ave. $25,000.

O., East Liverpool — See "Streets and Roads."

Mich., Ferndale—Having plans prepared 11,400 ft. sewer extension in Nine Mile Rd. and other streets, incl. 5,000 ft. 15 in., 4,000 ft. 18 in., and 2,400 ft. 24 in. vitrified or cast cement pipe. $40,000. G. Jerome, 1331 Majestic Bldg., Detroit, engr.

Mich., Ferndale—Plans vitr. crock, segment block and brick sewers in Bermuda Ave., 650 ft. 22 in., 979 ft. 20 in. and 616 ft. 18 in. pipe; Stafford Ave. from Rockwell to Oakridge Aves., 452 ft. 18 in., 1,082 ft. 20 in. and 1,062 ft. 22 in. pipe; Albany Ave. from Stafford to Rockwell Aves., 829 ft. 24 in., 700 ft. 22 in., 574 ft. 20 in. pipe; Payton Ave., 1,023 ft. 18 in. pipe; Planavon Ave., 137 ft. 15 in. and 699 ft. 18 in. pipe; Lewiston Arm, 920 ft 24 in. pipe; Allen Ave., 1,168 ft. 18 in. and 295 ft. 15 in. pipe. $135,000. G. Jerome, 1331 Majestic Bldg., Detroit, engr.

Tex., Tulia—Oct. 12, to vote on $50,000 bond issue for sewers.

Calf., Oakland—Had plans prepared 17,960 lin.ft. 8 in. vitr. pipe sewers, etc., in Melrose Acres. W. W. Harmon, city engr.

Calif., Sanger—Plan to vote on bonds for 23,760 lin.ft. 6 in. and 2,138 lin.ft. 8 in. vitr. sewers, 3,930 ft. 30 in., 1,414 ft. 28 in., 1,980 ft. 14 in., 1,760 ft 12 in and 650 ft. 8 in. precast concrete pipe, etc. R. C. Phillips, Sanger, engr.

Ont., Sandwich—Plans extending sewerage system. $25,000. E. R. North, city engr. Prices wanted on materials.

BIDS DESIRED

N. Y., Saranac Lake—Oct. 2, by S. A. Miller, clk. Sewer and Water Bd., 6 and 8 in. sewers. J. L. Collins, 30 Church St., New York, engr.; adv. this issue.

Pa., State College — Oct. 16, by Town Council, 2,700 lin.ft. 36 in. storm water sewer, also 13,500 lin.ft. 4, 6, 8 and 10 in. sanitary sewers. H. B. Shattuck, boro. engr.; adv. this issue.

La., Alexandria—Oct. 2, by Comr. of Council, complete storm sewer, in 7th St., 3,483 cu.yd. concrete, 389,700 lb. reinforcing, 9,000 cu.yd. excav. V. M. Ake, secy.

Ill., Chicago—Sept. 27, by Bd. Local Impvts., 207 City Hall, sewers in various streets. $2,000,000. C. D. Hill, ch. engr.

Minn., Waseca—Oct. 10, 30,000 ft. outlet sewers and sewage disposal plant. $100,000. W. E. Buell & Co., 205-207 Davidson Bldg., Sioux City, Ia., engrs. Noted Feb. 16.

Mo., Cape Girardeau—Oct. 2, by City Council, Council Chamber, combined sanitary and storm sewerage system in Sewer Dist. 5. C. E. Smith & Co., 2073 Railway Exch. Bldg., St. Louis, consult. engrs.; adv. this issue.

Que., Montreal — Executive Com taking bids sewers, $61,280. H. A. Tetreault, dir. pub. wks.

BIDS RECEIVED

N. Y., New York—H. Bruckner, pres. Bronx Boro, opened bids Sept. 12, sewers in (1) West Kingsbridge Rd., (2) Philip Ave., (3) Lafayette Ave., (4) Liebig Ave., (5) White Plains Ave., etc., from M. Del Balso, 660 East 221st St., (1) $2,952; Spadero & Turrano, (1) $3,113; McLaughlin & Buckley, 337 East 134th St., (1) $3,601, (2) $17,304, (4) $5,000, (5) $28,828; J. V. Timmoney Constr. Co., 320 East 201st St., (2) $14,937; Knight & Dimicco, 448 East Tremont Ave., (2) $15,827, (3) $14,878; F. Gasperini, (3) $15,295; Gregorri & Gabrielle, (4) $4,844; Fordham Contg. Co., (4) $5,008, (5) $28,841; C. McDonald, (5) $31,713. Noted Sept. 7.

O., Cleveland—Sewers in Carnegie Ave. from East 100th to East 107th Sts., from C. Joseph, 877 Orange Ave., $10,118, D. Zullo, 10501 Hudson Ave., $10,671; Pearl Rd. relief sewer, from Manson Co., Engineers Bldg., $57,783, Randall & Cooper, Lorain, $67,840; Aspinwall Ave. and Saranac Rd., from Manson Co., Engineers Bldg., $27,957, River Constr. Co., Schofield Bldg., $32,317; Roseland Ave., from Hadded-Mall Co., Schofield Bldg., $16,720, A. Marra, Ulmer Bldg., $17,686. Work involves 880 ft. 6 ft. and 905 ft. 5 ft. 9 in. circular segment sewer, 2,300 ft. 15-24 in. vitr. tile pipe, 190 ft. of 9 ft. egg shape and 1,350 ft. 4 and 6 ft. circular brick sewer, 1,340 ft. 3-6 ft. egg shape sewer.

O., Marion—E. A. Schultz, dir. Pub. Serv., opened bids Aug. 31, sewage plant, Contr. A, from A. Bentley & Son, 201-31 Belmont Ave., Toledo, $435,100; P. Drake & Son, Marion, $508,813; sewerage system, Contr. B, from Kohlbarger & Hoyles, Marion, $76,316, Harris, Andrews & Henderson, Youngstown, (street address not available), $80,619. Noted Aug. 17.

Ore., Portland—Opened bids constructing Lents trunk sewer, (monolithic), (1) Sects. A and B, (a) with progress payments, (b) without progress payments, (2) Sects. A and C, (a) with progress payments, (b) without progress payments, from J. F. Shea, Henry Bldg., (1a) $693,110, (1b) $723,620, (2a) $709,333, (2b) $739,308; Jacobsen-Jensen Co., 407 Stanton St., (1a) $698,450, (1b) $726,190, (2a) $724,698, (2b) $749,988; Miracle Concrete Corp., (1a) $719,333, (1b) $759,872. Noted Feb. 23.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to D. Bonnacci, 672 Degraw St., relief sewers in Pitkin Ave. $20,047, New York Ave. between East New York Ave. and Empire Blvd. $14,246, East 39th St. $9,029, 18th Ave. $6,894, New York Ave. between Midwood and Hawthorne Sts. $2,613, Ridge Blvd. $2,536; to Nazzaro & Quierriero, 6712 11th Ave., East 13th St.

Sewers (Continued)

$5,863; to S. Ambrosio, 1016 60th St., 55th St. $4,565, sewer basins on southwest corner Foster Ave. and East 26th St. $401, northeast corner Ave. K and East 8th St. $326; to Murphy Bros., 262 Bay 43rd St., relief sewer in Creamer St. $3,793. Noted Sept. 7.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, repairing sewer in Foster Ave., to Necaro Co., 94 Court St., $104,060; Greene Ave., to D. Bonnacci, 672 McGraw St., $24,506. Noted Aug. 31.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Hosack St., etc., to J. Gallo, 203 Division St., Brooklyn, $53,793; Atfield Ave., to D. A. Gross, 895 Fulton St., Woodhaven, $4,212. Noted Aug. 24.

N. Y., Syracuse—Bd. Contr. & Supply, sewer in East Fayette St., to C. Bonn, 207 Delhi St., $51,648. Engrs. est. $125,000.

Ky., Madisonville—Bd. Pub. Wks., 9.2 mi. 8-12 in. sanitary sewers, to Moreno Burkham Constr. Co., Syndicate Trust Bldg., St. Louis, Mo., $65,400. Noted Aug. 31.

O., Sebring—J. G. Eardley, village clk., sewage disposal plant, to D. E. Beattie Co., Akron (street address not available), $52,500. Noted Aug. 31.

Ill., Havana—Sewers in various streets, to W. O. Anno, Havana, $13,633, and James & Anderson, Wood River, $12,947. Noted Aug. 24.

Minn., Shakopee—See "Waterworks."

Minn., Stewart—Sanitary sewerage system, 17,916 lin.ft. 812 in. vitr. pipe, 48 lin. ft. 10 in. c.i. pipe, 2 flush tanks, 45 manholes, etc.; watermain extensions, 6,280 lin. ft. Class B 6 in. c.i. pipe, etc., to O. N. Gjellefald Constr. Co., Forest City, Ia. Noted Aug. 17.

Mich., Detroit—To W. Blanck Co., 823 Ford Bldg., Melbourne Ave. Arm Bates St. Sewer, $33,968, Mound Ave. Arm of Seven Mile Rd. Sewer, $31,300; Liberty Constr. Co., 1026 Detroit Savings Bank Bldg., Raymond Ave. Sewer extension, $5,770; to Western Constr. Co., 1028 Ford Bldg., Lateral Sewer 3820, $8,238, Lateral 3721, $9,816. Noted Sept. 7.

Mich., Detroit—To T. A. Gillespie Co., 50 Church St., New York, 11,396 ft. Connors Creek Sewer, Sect. 2, and Public Park Site Sewer, rein.-con., double barrel section, 12 ft. x 17 ft. 6 in., $1,246,028. Noted Sept. 14.

Mo., Plattsburg—Sewers and disposal plant, to Burt & Tripp, Hutchinson, Kan., $56,805.

Nev., Gardnerville—Comrs. Douglas Co., Minden, to Gladding, McBean & Co., Crocker Bldg., San Francisco, Calif., furnishing vitr. salt glazed sewer pipe, Schedule 1, 5,280 lin.ft. 6 in. at $0.245, 3,960 ft. 8 in. $0.35, 3,350 ft. 10 in. $0.49, 5,260 ft. 12 in. $0.63, etc. total $7,998; Christensen & Co., 220 Maple St., Reno, excavating and backfilling for sewers and water pipe, etc., Schedule 7, 6,000 cu.yd. excav. and backfill $0.95, septic tank, $175, etc., total $5,875, for Schedule (8b) excavating waste and drain ditches, 1,800 cu.yd. $0.70, (8c) mixing and placing concrete, 135 cu.yd. $13, etc., total $3,714. Noted Aug. 17.

SEWAGE TREATMENT WORKS—MARION, O.

Following are lowest three bids opened Aug. 31, by city for constructing sewage treatment works, Contr. "A," (A) A. Bentley & Sons Co., Marion Ave., Toledo; (B) P. Drake & Sons, Marion; (C) River Constr. Co., Scofield Bldg., Cleveland. The unit bids were as follows:

	A			B	C
	Material	Labor	Material and Labor	Material and Labor	Material and Labor
150 lin. ft. drilling well	$4.00	$4.00	$4.00	$4.00	$4.50
Engineer's office (lump sum)	925.00	925.00	925.00	1,000.00	600.00
41,000 cu.yds earth excavation, class A	0.75	0.75	0.90	0.90	1.00
8,000 cu.yds. earth excavation, class B	1.00	1.00	1.50	3.50	3.00
100 cu.yds rock excavation	1.00	1.00	1.00	8.00	8.00
2,100 cu.yds. concrete, class A	10.00	10.00	13.30	20.00	14.75
700 cu.yds. concrete, class B	10.00	10.00	11.00	23.00	14.75
3,100 cu.yds. concrete, class C	12.00	12.00	18.00	21.00	15.75
210 cu.yds. concrete, class D	12.00	12.00	20.00	26.00	16.00
525 cu.yds. concrete, class E	10.00	20.00	25.00	32.00	20.00
50 bbl. additional Portland cement	3.20	3.20	3.20	3.50	4.00
220 sq.yds. special surfacing of concrete	1.00	1.00	1.44	1.50	8.25
460 lin. ft. expansion joints	1.00	1.00	1.00	0.40	1.00
700,000 lb. steel reinforcement	0.02	0.03	0.04	0.05	0.03½
110 ton bell and spigot cast iron pipe	80.00	80.00	80.00	85.00	90.00
17 tons flanged cast iron pipe	100.00	100.00	133.00	205.00	112.00
20 ton bell and spigot standard fittings	100.00	100.00	184.00	390.00	140.00
7 tons flanged standard fittings	200.00	200.00	234.00	450.00	180.00
11 tons special fittings	300.00	300.00	309.00	450.00	200.00
100 tons universal cast iron pipe	80.00	80.00	88.00	140.00	112.00
10 tons universal cast iron pipe fittings	200.00	200.00	218.00	500.00	180.00
2,000 lin.ft. 3-in. galvanized iron pipe	1.00	1.00	1.08	1.40	0.85
100 lin.ft. 2½-in. galvanized iron pipe	0.80	0.80	0.85	0.35	0.65
1,000 lin.ft. 2-in. galvanized iron pipe	0.50	0.50	0.60	0.30	0.40
100 lin.ft. 1½-in. galvanized iron pipe	0.40	0.40	0.48	0.25	0.30
250 lin.ft. 1-in. (or smaller) galv. iron pipe	0.30	0.30	0.33	0.20	0.20
10 1-in. gate valves	2.00	2.00	2.05	2.50	2.10
5 1½-in. gate valves	2.00	2.00	2.75	3.10	3.00
50 2-in. gate valves	4.00	4.00	4.05	4.10	4.00
5 3-in. gate valves	8.00	8.00	8.00	7.50	7.25
51 4-in. gate valves	10.00	10.00	10.65	13.00	10.00
2 6-in. gate valves	15.00	15.00	18.60	21.00	17.00
72 8-in. gate valves	30.00	30.00	32.10	35.00	32.00
2 10-in. gate valves	44.00	44.00	44.16	50.00	48.00
1 12-in. gate valve	60.00	60.00	61.20	66.00	64.00
9 24-in. gate valves	250.00	250.00	257.57	260.00	270.00
4 6-in. shear gates	20.00	20.00	20.31	29.00	25.00
1 8-in. shear gate	20.00	20.00	23.78	34.00	30.00
2 6-in. sluice gates	30.00	30.00	33.30	54.00	52.00
8 8-in. sluice gates	40.00	40.00	40.60	75.00	75.00
8 12-in. sluice gates	50.00	50.00	56.20	88.00	83.00
5 14-in. sluice gates	60.00	60.00	67.50	111.00	103.00
4 24-in rectangular sluice gates	100.00	100.00	185.00	275.00	250.00
1 24-in. circular sluice gate	100.00	100.00	162.00	310.00	275.00
10 adjustable valve boxes and covers	8.00	8.00	8.20	14.00	7.25
110 lin.ft. 1-rail iron pipe railing	2.00	2.00	2.40	1.20	0.75
125 lin.ft. 2-rail iron pipe railing	3.00	3.00	3.12	1.80	1.25
50 lin.ft. 4-in. vitrified pipe	0.30	0.30	0.30	0.20	0.14
6,000 lin.ft. 6-in. vitrified pipe	0.35	0.35	0.35	0.27	0.20
250 lin.ft. 8-in. vitrified pipe	0.54	0.54	0.54	0.40	0.30
Vitrified pipe specials, % discount	....	....	40%	60%	60%
2,150 lin.ft. 4-in. agricultural drain tile	0.08	0.08	0.08	0.06	0.11
100 lin.ft. 6-in. agricultural drain tile	0.11	0.11	0.11	0.10	0.15
33,000 lb. miscellaneous cast iron work	0.13	0.13	0.13	0.08	0.06
22,500 lb. miscellaneous wrought iron and steel work	0.14	0.14	0.14	0.10	0.05
12 M. ft. B.M. miscellaneous wood work	120.00	120.00	120.00	180.00	75.00
Buildings (lump sum)	....	....	29,000.00	22,000.00	28,315.00
Steam heating equipment (lump sum)	2,000.00	2,000.00	3,335.00	4,200.00	3,370.00
Electric wiring for lights (lump sum)	2,400.00	2,400.00	2,455.00	1,700.00	2,930.00
Plumbing (lump sum)	1,100.00	1,100.00	1,411.00	1,000.00	1,500.00
Sludge bed covering (lump sum)	....	....	20,050.00	22,000.00	22,640.00
600 cu.yd sand for sludge beds	2.00	3.00	4.00	2.00	2.75
40 cu.yd. gravel for sludge beds	3.00	4.00	5.00	2.00	2.75
1,400 sq.yd. special tamping	0.10	0.10	0.12	0.12	0.25
22,500 cu.yd. filtering material	3.00	3.00	3.30	2.25	3.50
6,760 sq.yd. trickling filter floor system	1.00	1.00	1.10	4.50	10.00
336 filter nozzles	1.00	1.00	1.90	2.00	25.00
Filter dosing equipment (lump sum)	5,000.00	5,000.00	5,626.00	6,800.00	4,350.00
Sludge ejector and piping (lump sum)	1,000.00	1,000.00	1,800.00	2,000.00	10,000.00
Pumping equipment and appurt. (lump sum)	10,000.00	10,000.00	12,042.00	19,785.00	18,450.00
Industrial equipment (lump sum)	2,000.00	2,000.00	2,528.00	5,000.00	2,631.00
Venturi meter and piping (lump sum)	2,000.00	2,000.00	2,250.00	3,000.00	2,850.00
40 sq.ft. vault lights (fixed)	3.00	3.00	3.05	1.25	5.00
450 sq.ft. vault lights (hinged)	7.00	7.00	7.85	1.50	6.00
Control gates (lump sum)	500.00	500.00	500.00	300.00	150.00
Painting (lump sum)	500.00	500.00	847.00	1,000.00	500.00
445 lin.ft. by-pass and overflow conduits	8.00	8.00	8.65	3.50	7.10
4,400 sq.yd. waterbound macadam roadway	1.00	1.00	1.25	1.50	3.00
1,700 lin.ft. gutters	1.00	1.00	1.00	1.00	0.45
930 sq.yd. walks	0.75	0.75	0.75	1.00	2.00
5,000 cu.yd. loam	1.00	1.00	1.45	0.75	0.75
3,150 sq.yd. sodding	0.40	0.40	0.45	0.50	1.75
11.5 acres seeding	58.00	58.00	58.00	50.00	25.00
1,030 lin.ft. fencing	0.10	0.10	0.18	0.18	0.50
5 hydrants	30.00	30.00	36.50	75.00	15.00
Extended totals			$435,101	$508,814	$544,415

Waste Disposal

BIDS DESIRED

W. Va., Charleston — Oct. 6, by L. H. Barringer, city mgr., garbage incinerator; adv. this issue.

CONTRACTS AWARDED

Ont., Chatham—C. H. R. Fuller, city engr., garbage incinerator and machinery, to Canadian Incinerator Co., Yonge St., Toronto, $10,792; general contract, to G. W. Culler & Co., Chatham (street address not available), $12,600; chimney to W. Summerhays, 1 Exch. St., Rochester, N. Y., $2,792. Noted July 13.

Bridges

PROPOSED WORK

Pa., Media—Delaware Co. will sell $400,000 bonds for construction of 16 bridges of various sizes. R. J. Aydlotte, co. engr.

Minn., Crookston—Polk Co. plans Bridge 3880, steel truss, probably two 170 ft. and one 150 ft. spans, over Red Lake River, Gentilly Twp. $30,000. J. T. Ellison, State Hy. Dept., 1246 University Ave., St. Paul, bridge engr.

Wash., Prosser—Benton Co. plans bridge, seven 80 ft. and two 53 ft. spans, concrete piers, 500 cu.yd. earth approach and fill. Bids will be taken in spring. $35,000-$40,000. E. H. Stradling, co. engr.

BIDS DESIRED

N. Y., White Plains—Oct. 9, at office F. L. Merritt, clk. Bd. Supervs. Westchester Co., Court House, rein.-con. arch bridge over Croton River at site of present Van Cortlandt Bridge, on Albany Post Rd. between towns of Cortlandt and Ossining; adv. this issue.

N. J., Washingtons Crossing (Taylorsville, Pa., P. O.)—Sept. 30, by Joint Comn. for Elimination of Toll Bridges over Delaware River between New Jersey and Pennsylvania, State House, Trenton, repairs to bridge over Delaware River, here. L. Focht., engr.; adv. this issue.

Pa., Phila.—See "Streets and Roads."

S. C., Chesterfield — Oct. 19, by Bd. Comrs. Chesterfield and Lancaster Counties, rein.-con. bridge over Lynches River at Cooks Mills between Chesterfield and Lancaster Counties, seven 43 ft. spans on rein.-con. piers.

Ohio—See "Streets and Roads."

Wash., Trent (Irvin P. O.)—Jan. 23, by H. S. Baker, engr. Spokane Co., (Spokane), 320 ft. concrete bridge, 3 spans, here. $60,000-$65,000.

Calif., Stockton—Sept. 29, by City Council, 202 ft. rein.-con. girder "T" beam type bridge, 60 ft., over Mormon Channel, on Center St., sub-structure to be pre-cast rein.-con. piling with monolithic cap. W. B. Hogan, city engr. Noted Aug. 31.

BIDS RECEIVED

Pa., Phila.—F. H. Caven, dir. pub. wks., opened bids removing steel girder bridge and piers and building 380 ft. new steel

Bridges (Continued)

girder bridge encased in concrete, 80 ft. wide, 40th St. and Pennsylvania R.R., from Monaghan & Loossee, 3016 Chestnut St., $258,370; Munday Paving Co., 22820 Alden St., $278,000. Noted Aug. 31.

S. D., Woonsocket—Sanborn Co. opened bids Sept. 16, bridge on Federal Aid Project 50, Sect. C, over James River, 340 ft. long, 18 ft. roadway, with center steel truss of 100 ft., from Great Northern Bridge Co., 225 Kasota Bldg., Minneapolis, Minn., $25,558; Iowa Bridge Co., 1263 East 19th St., Des Moines, Ia., $27,855; Pioneer Bridge Co., Mitchell, $27,880.

Tex., San Angelo—Tom Green Co. 500 ft. steel and concrete bridge over North Concho River on Highway 7, 200 ft. concrete cantilever span, 1,563 cu.yd. concrete, 358,928 lb. reinforcing, (a) county furnishing materials, (b) contractor furnishing materials, from Van Orden-Winans Constr. Co., Ft. Worth, (street addres not available), (a) $58,973, (b) $62,277; Brown-Abbott Bridge Co., Loraine, (a) $60,671, (b) $66,757; Austin Bros. Bridge Co., Coombs St., Dallas, (a) $62,200, (b) $66,807. Engrs. est. $75,000.

California—State Hy. Dept., Sacramento, bridge and railroad abutment over Susan River, near Fredonia, Lassen Co., (1) 430 cu.yd. Class A portland cement concrete, (2) 65 cu.yd. Class B portland cement concrete, (3) 395 cu.yd. Class C portland cement concrete, from Rocca & Caletti, San Rafael, (1) $35, (2) $35, (3) $20, total $25,225; C. H. Gildersleeve, San Francisco, (street address not available) (1) $45, (2) $44, (3) $38, total $37,220. Noted Aug. 24.

CONTRACT AWARDED

Del., Laurel—State Hy. Dept., Dover, superstructure for 1 span Scherzer rolling lift bridge, here, Contr. 41-A, to A. S. Fox & Co., Callahan Bank Bldg., Dayton, O., $24,384. Noted Aug. 31.

Ga., Atlanta—Viaduct on Spring St., to Nicholas Constr. Co., Atlanta, (street address not available) $513,877; steel work to Virginia Bridge & Iron Co., Roanoke, Va., $102,925. Noted July 20.

Ga., Savannah—State Hy. Depts., Georgia and South Carolina bridge over Savannah River, trestles and pier work to O. Otto, Savings Bank & Trust Bldg., $313,667; clearing and earth fills to A. P. Twiggs & Son, Herald Bldg., Augusta, $165,523. Noted Aug. 17.

Miss., Vicksburg—Warren Co., Baldwins Ferry Bridge over Big Black River, to Newsom Bros. & Millis, Goss, 346.2 cu.yd. concrete $23, 9,730 lb. reinforcing steel $0.055, 10,310 ft. b.m. untreated lumber $60, 183,940 ft. b.m. creosoted lumber $20, 1,200 lin.ft. untreated piling $0.75, 6,950 lin.ft. creosoted piling $1.05, 307 lin.ft. gas pipe railing $0.75, 717.8 sq.yd. asphalt paving $3.50, etc., total $32,835; 182,660 ft. b.m. creosoted lumber, to Hattiesburg Creosoting Co., Hattiesburg, $10,950. Noted Aug. 17.

Tennessee—State Hy. Dept., Nashville, superstructure for Clarksville Bridge over Cumberland River, Federal Aid Project 16, to Nashville Bridge Co., foot of Shelby Ave., Nashville, $88,119. Noted Aug. 24.

O., Moraine (Dayton P. O.)—Comrs. Montgomery Co. (Dayton) two 125 ft. steel truss span bridge here, to Brookville Bridge Co., Brookville, $68,700. Noted March 30.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, following bridges (1) 2 concrete substructures for steel spans and 4 concrete approach spans, Route 1, Sect. 29-B, Saline Co., (2) 1 superstructure for steel, Route 1, Sect. 29-C, Saline Co. (3) 1 concrete Route 1, Sect. 30-B, Saline Co. (4) 4 concrete Route 1, Sect. 31-B, Saline Co. (5) 2 concrete bridges and concrete approach spans Route 1, Sect. 33-B, Saline Co. (6) steel superstructure for steel Route 1, Sect. 33-C, Saline Co. (7) 2 concrete Route 1, Sect. 34-B, Williamson-Johnson Co. (8) 2 concrete Route 1, Sect. 37-B, Johnson Co. (9) 1 steel superstructure Route 1, Sect. 46, Iroquois Co. (10) 9 concrete Route 3, Sect. 8-B, Rock Island Co. (11) 4 concrete Route 3, Sect. 39-B, McDonough Co. (12) 2 concrete Route 3, Sect. 71-B, Randolph Co. (13) 1 steel superstructure Route 4, Sect. A-1, Cook Co. (14) repairing 1 steel Route 7, Sect. B-1, La Salle Co. (15) substructure for steel Route 8, Sect. 32-B, Woodford Co. (16) superstructure for steel Route 8, Sect. 32-C, Woodford Co. (17) 3 concrete Route 12, Sect. 15-B, Marion Co. (18) 1 concrete Route 20, Sect. 12-B, Lake Co. (19) concrete approach spans Project 26, Sect. 20-B, Logan Co. (20) 1 steel superstructure Project 26, Sect. 20-C, Logan Co. (21) 2 concrete Project 30, Sect. 17-B, Will Co. (22) concrete approach spans and substructure for steel Route 33, Sect. 43-B, Fulton Co. (23) superstructure for steel Route 33, Sect. 43-C, to D. Jenkins, 501 Gilbert Ave., Terre Haute, Ind., (1) $22,681 (5) $26,585; Rochester Bridge Co., Rochester, Ind., (2) $16,071 (13) $11,772 (16) $10,035; M. & P. Contg. Co., Rockport, Ind., (3) $3,380; W. H. Shons Co., 109 Spring St., Freeport, (4) $14,359 (14) $990; International Steel and Iron Co., 1243 Edgar St., Evansville, Ind., (6) $6,382; Roth Bros. & Akers, Ottumwa, Ia., (7) $5,890 (8) $10,725 (18) $17,808; Continental Bridge Co., Monadnock Blk., Chicago, (9) $4,193; Hawlett Constr. Co., Moline, (10) $13,181; H. C. Holmes, Macomb, (11) $11,922; Mautz & Oren, Effingham, (12) $25,687; Hedges Constr. Co., 111 West Washington St., Chicago, (15) $13,871; H. J. C. Beckemeyer, Carlyle, (17) $18,499; G. C. Fairclo, Milford, (19) $14,272; Illinois Steel Bridge Co., Jacksonville, (20) $8,150 (23) $4,658; F. Lorenz, Oak Glen, (21) $9,101; D. Alford, Cuba, (22) $21,392. Noted Aug. 31.

Tex., New Braunfels—Concrete arch bridge across Comal River, five 70 ft. concrete arch spans and two 30 ft. girder spans, to Miller-Fifield Constr. Co., Waterloo, Ia., $38,280. Noted Aug. 17.

Calif., Bagby—Supervs. Mariposa Co., Mariposa, 180 ft. steel span with concrete piers and abutments, concrete approach and floor, to Security Bridge Co., Ogden, Utah, (street address not available) $23,500. Noted Sept. 14 under Mariposa.

Calif., Glenburn—Shasta Co., Redding, constructing rein.-con. bridge over Fall River, near here, to F. H. Nielson, Orland, $33,656.

Dams

CONTRACTS AWARDED

N. Y., Beacon—City Council, 525 Main St., repairs to Dam 537, South Mountain, Mt. Beacon Reservoir, to M. R. Spino, Beacon, $34,996. Noted Aug. 24.

Railways

BIDS RECEIVED

New York—Transit Comn., 49 Lafayette St., New York, opened bids Sept. 15, installing tracks for 239th St. Yard of White Plains Rapid Transit R.R. Co., etc., from M. Del Balso, 660 East 221st St., New York, $211,229; Frederick Snare Corp., 8 West 40th St., New York, $213,522; B. T. and J. J. Mack, 200 Bway., New York, $242,000. Noted Sept. 7.

CONTRACT AWARDED

Pennsylvania—Slaight Lumber Co., Morris, 12 mi. railroad line from Morris into woods, to D. Kitchen, Wellsboro.

Excavation, Drainage, Irrigation

PROPOSED WORK

Idaho, Hauser (R. D. Post Falls)—O. Weile, engr., Peyton Bldg., Spokane, preparing plans and takes bids in spring, extending irrigation system, here, 15,500 ft. 14-30 in. c.i. pipe, for Spokane Farms Co., $75,000.

Mont., Hamilton—Ravalli Irrigation Dist. having plans prepared and takes bids in spring, replacing 4½ mi. flumes 8 x 16 ft. on medium high trestle, about 125,000 ft., also relining canals. $750,000. Jacobs & Powell, Seattle, Wash., engrs.

Wash., Locke—Comrs. Locke Drainage Dist., Pend Oreille Co., taking bids levee, concrete culvert, pump, engine, housing and tile, steam shovel and scraper work, 80,000 cu.yd. common and select dry earth excav. $45,000-$50,000. Engineer not selected.

Wash., Okanogan—State Dept. of Conservation plans developing 8,000 acres of land, here. $600,000.

Wash., Spokane—Spokane Valley Irrigation Dist. will vote on $500,000 bonds Sept. 27, and takes bids in February, irrigation system, incl. 5 mi. 8-60 in. rein.-con. pipe and 5 mi. 24-66 in. wood pipe, 5 x 8 ft. to 5 x 12 ft. wooden flumes, 60,000 cu.yd. earth excav. $500,000. R. K. Tiffany, Old Natl. Bank Bldg., engr.

Calif., Fresno—Centerville D. D., c/o engineers, had plans prepared irrigation system, 138,839 cu.yd. excav., etc. C. P. Jensen, Cory Bldg., and R. C. Phillips, Sanger, engrs.

BIDS DESIRED

S. C., Kingstree—Oct. 1, by Comrs. Williamsburg, Florence and Clarendon Counties, at office of Kelley & Hinds, Kingstree, 1,250,000 cu. yd. earth excav. P. G. Gorudin, Kingstree, engr.

Fla., Ft. Lauderdale—Oct. 3, by Bd. Comrs. Broward Co., constructing inlet from New River Sound to Atlantic Ocean, near here. H. G. Wheeler, chn. F. A. Bryan, clk.; adv. this issue. Noted Aug. 31.

Illinois—Oct. 7, by Drainage Comrs. Union Dist. 1, Atkinson and Alba Twps., Henry Co., for cleaning out and deepening Bentley Ditch, Cunnea Branch, Irvin Lateral and Lievens Branch, etc.; adv. this issue.

Minn., Minneapolis—Oct. 27, by Bd. Park Comrs., City Hall, dredging Lake Calhoun and filling lowlands and boulevards, 85,500 cu.yd. sand shore dykes, 264,000 cu.yd. sand fill, 312,200 cu.yd. mud fill. $65,000. J. A. Ridgway, secy. A. C. Godward, engr.

Minn., Slayton—Sept. 26, by Murray Co., repairing Co. Ditch 19, 167,310 lin.ft. 6-36 in. tile (4,147 ton), 35,513 cu.yd. excav., 1 concrete bulkhead, 1 concrete bridge, $87,254; Judicial Ditch 26, 83,428 cu.yd. excav., 82,444 lin.ft. 6-36 in. tile (1,891 ton), 1 bulkhead, bridge, $63,166. J. W. Woolstencroft, Slayton, engr.

Kan., Edwardsville—J. D. Waters, Bonner Springs, taking bids for removal of 100,000 yd. dirt from bottom of lake, here, for Forest Club, Bonner Springs.

SEWERS

Ore., Eagle Point—Sept. 28, at office of Bd. Directors of Eagle Point Irrigation Dist., constructing main supply canal, with all equipment, structures, etc., 180,000 cu. yd. excav., etc. W. E. Hammel, secy. Noted July 13.

Calif., Merced—Oct. 3, by Dirs. Mecred Irrigation Dist., furnishing 2 vertical type Booster plants to handle 30 sec. ft. water against head of 24 ft. R. C. Starr, Merced, ch. engr.

Calif., Paradise—Oct. 3, by G. C. Billie, secy. Paradise Irrigation Dist., furnishing and delivering 7,000 lin.ft. 34 in. and 6,000 lin.ft. wood stave pipe, also large quantity of 3-7 in. pipe for extension to present main distributing lines.

BIDS RECEIVED

N. Y., New York—J. H. Delaney, comr. Docks, Pier "A" foot of Battery Pl., North River, opened bids Sept. 18 dredging Chelsea Piers, Manhattan Boro, from Columbia Dredging Co., 30 Church St., $22,546; New Jersey Shipbuilding & Dredging Co., 50 Broad St., $26,438; R. Rogers, $26,438; Morris & Cummings Dredging Co., 17 State St., $29,354. Noted Sept. 14.

CONTRACTS AWARDED

R. I., Providence—Bd. Contract and Supply, excavating and filling at Municipal Wharf, Fields Point, (hydraulic excav.), 70,000-80,000 cu.yd. earth excav., to Briggs Eng. & Constr. Co., 710 Union Trust Bldg., $0.24 per cu.yd. Noted Aug. 31.

Ill., Taylorville—Comrs. North Fork Outlet D. D., Court House, dredging 16 mi. Sangamon River from point south of Niantic to point below Robey, 1,625,000 ft. earth and 3,300 ft. rock and shale excav., etc., to McWilliams Dredging Co., 332 South Michigan Ave., Chicago, $140,000. Noted July 27.

Colo., Colorado Springs—Beaver Park Land & Water Co., 301 Mining Exch. Bldg., Brush Hollow Reservoir, near Penrose, 308,000 yd. earth embankment with rip rap face, to A. Allen & Mishou Constr. Co., Pueblo, (street address not available), $108,845. Noted Aug. 17.

Streets and Roads

PROPOSED WORK

Mass., Marlboro—Plans reconstructing Lincoln St. from Broad to Mechanic Sts., and Newton St. from Main to Garfield Sts., asphalt. $35,500. Dept. Pub. Wks., engrs.

Conn., Wallingford—Plans paving South Cherry, Franklin and South Orchard Sts. $45,900. Private plans.

N. Y., Rochester—Plans paving Schlitzer St. and Dalton alley, concrete, $3,050; Folsom St. $19,200, Clinton Ave. N. between Ridge and Navarre Rds. $30,500, Aab St. $17,300. Turpin St., $31,100, Arbutus St. $18,600, all foregoing warrenite bitulithic; Marlow St. $10,200, Bradburn St. $4,780, Emanon St. $7,700, Weyrech St. $7,000, Lorraine Pl. $4,600, resurfacing Bronson Ave. $18,000, all foregoing asphalt; cement walks, sewers and paving Joseph Ave. between Herman St. and Clifford Ave., 40 ft., $85,000; grading and sewer in Highland Parkway $8,600. C. A. Poole, city engr.

N. J., New Brunswick—Middlesex Co. soon takes bids paving 1 mi. section of Matawan-Old Bridge Rd., concrete. A. B. Fox, Perth Amboy, engr. Noted Aug. 24 under "New Jersey."

Streets and Roads (Continued)

Pa., Bradford—Plans paving Ave. B, Brennan, Clark, North and Elm Sts, brick, asphalt or concrete. $25,000. C. Charlton, city clk. Engineer not announced.

Pa., Scranton—Plans paving 40 streets. Cost to exceed $100,000. W. P. Huester, city clk. Engineer not announced.

W. Va., Spencer—Geary Dist., Roane Co., voted $120,000 bonds grading 12 mi. road. G. H. Hill, Spencer, engr.

N. C., Greensboro—Guilford Co. plans grading and waterbound macadam paving 2½ mi. road from city limits of Greensboro to Buffalo Creek Bridge, and resurfacing (probably asphalt treatment), 3 mi. old macadam road, $32,000; grading and warrenite paving on concrete base 2 mi. road from County home along Bessemer Rd. to Summit Ave., $50,000. W. C. Boren, chn. Co. Hy. Comn.

Ga., Thomasville — Had plans prepared paving 5 blocks Broad St. from Tosco Hotel to Calhoun St., 50 ft., asphaltic concrete, also curb and sidewalks.

Fla., Monticello—Plans election to vote on $75,000 bonds paving 3 mi. various streets. J. L. Smith, Monticello, engr.

Fla., Wauchula—Hardee Co. having plans prepared paving 90 mi. roads, 2½ in. asphalt on 6 in. rock. H. S. Jaudon Eng. Co., Elberton, Ga., engrs.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids which were to be opened Sept. 15, grading and paving 3.551 mi. Sect. "P" Columbus-Sandusky Rd., Huron Co., waterbound macadam, $39,154. Noted Sept. 7.

Ohio — Dept. Highways and Pub. Wks., Columbus, rejected bids opened Sept. 1, grading, bridging and paving 3.355 mi. Sect. "O" Wooster-Mansfield Rd., Wayne Co., and 1.089 mi. Sect. "B" Cleveland-Buffalo Rd., Lake Co., both brick. Noted Sept. 7.

O., Columbus—W. H. Duffy, dir. Pub. Serv., plans grading, curbing and paving 1,174 ft. Chestnut St. from High to 4th Sts., 52 ft., asphalt $26,090, stone $33,435; 1,096 ft. 5th Ave. from Perry St. to alley west of Parker St., 60 ft., brick $120,440, asphalt $108,193; 264 ft. alley north of Eastwood Ave. from Taylor to Parkwood Aves., 20 ft., concrete $1,566, brick $2,080. R. H. Simpson, City Hall, engr.

O., East Liverpool — Plans curbing, sewers, water mains and repaving West 5th St., tarvia, asphalt, concrete, rein.-con., asphaltic concrete or bitulithic. $25,000. G. A. Shone, city clk.

Michigan—State Hy. Dept. Lansing, soon takes bids grading 5½ mi. State Trunk Line Rd. 18-13, Midland Co. F. F. Rogers, state highway comr.

Mich., Detroit—Had plans prepared grading and paving with ½ in. sheet asphalt on 8 in. concrete, Broadstreet Ave. from Joy to Collingwood Aves. $44,440, Lawton Ave. from Carter to Gladstone Aves. $3,890, also paving alleys with one course concrete, east east and west alley between Lansing, McKinstry, Dix and Uthes Aves. $2,340, alley between Parker, Maxwell, Waterloo and Charlevoix Aves. $5,100, alley between Jos. Campau, Mitchell, Hale and Mack Aves. $1,470. J. W. Reid, city engr.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, rejected bids paving 0.61 mi. Route 6, Sect. 28, Whiteside Co., 1.66 mi. Route 6, Sect. 29, Whiteside Co., 3.64 mi. Project 38, Sect. 46, Schuyler Co. No bids were received on 5.28 mi. Route 27, Sect. 36, Tazewell Co. Noted Aug. 31.

Wis., Madison—Making plans paving between car tracks on Johnson and University Sts., rein.-con. $25,000. E. E. Parker, City Hall, engr.

Wis., New Richmond—Plans paving, curbing and guttering 1.5 mi. Main St., 25 ft., vitr. brick, asphalt or concrete. $50,000. W. T. Doar, clk. Engineer not selected.

Wis., Sheboygan—Had plans prepared paving, curbing and guttering North Water and 13th Sts., 25-30 ft., one course concrete curb and gutter. $25,000. C. N. Boley, City Hall, engr.

Missouri—State Hy. Dept. at div. office Buffalo, rejected bids opened Aug. 14, 12.311 mi. road, 24 ft., State Aid Project 20.183, Dallas Co. Noted Aug. 3.

Wash., Seattle — Rejected bids opened Sept. 1, paving Terry Ave. et al., engrs. est. $120,402; Atlantic St. et al., engrs. est. $34,890. Noted Sept. 7.

Calif., Modesto—Had plans prepared surfacing following streets with 1½ in. warrenite, 108,804 sq.ft. 105th St. from L to K Sts., 11th and 12th Sts. from K to J Sts., and 12th St. from J to H Sts.; 36,751 sq.ft. surfacing and 280 sq.ft. guttering on H St. from 9th to 11th Sts.; 68,441 sq.ft. surfacing and 280 sq.ft. guttering on I St. from 9th to 12th Sts.; 56,400 sq.ft. surfacing and 480 sq.ft. gutetring on K St. from 9th to 13th Sts. G. H. Freitas, city engr.

Calif., Oakland—Had plans prepared improving 14th St. between Poplar and Peralta Sts., 61,294 sq.ft. grading, 229 lin.ft. concrete curb with steel guard, 2,217 lin.ft. concrete curb without steel guard, 2,632 sq. ft. concrete gutter, 59,292 sq.ft. asphaltic concrete pavement, etc. W. W. Harmon, city engr.

Ont., Hamilton—Plans paving 40,000 sq. yd. King St. from Sherman to Delta Aves., asphalt on concrete. $131,000. E. R. Gray, city engr.

Ont., Hamilton—Plans 12,000 sq.yd. asphalt pavements on concrete, with concrete curbs and gutters, on Dundurn St. from King to York Sts. $39,000, Fraser Ave. from Eu nboro to Campbell Aves. $3,000, Graham Ave. from Roxboro Ave. to pipe line, $5,000. E. R. Gray, city engr.

Ont., Hamilton—Plans 10,000 sq.yd. asphalt pavements on Emerald St. from King to Stinson Sts., Ottawa St. from Beach Rd. to Burlington Ave., Balmoral Ave. and Ottawa St. from Main to King Sts., Mary and Catharine Sts. from Cannon St. to Barton Rd., Queen St. from King to York Sts. $44,000. E. R. Gray, city engr.

Ont., Leamington—Having plans prepared concrete pavement on Erie St. S. $35,000. J. J. Newman, Davis Blk., Windsor, engr.

B. C., Nelson—Takes bids in spring improving streets in business section, concrete, $100,000; grading and paving 9 mi. of Inland-International Highway, waterbound macadam, $100,000. C. F. McHardy, mayor.

BIDS DESIRED

N. Y., Brooklyn—Sept. 25, by E. Riegelmann, boro pres., Boro Hall, grading East 37th St., repaving Navy, Nassau and Wallabout St., granite, 23rd St., asphalt block, curbing and flagging 82nd St.

N. Y., Long Island City—Sept. 27, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., repaving outside of railroad franchise area of Jackson Ave. from Junction Ave. to 51st St., 2nd Ward, sheet asphalt on 6 in. concrete and within railroad franchise area improved granite block and sheet asphalt on 6 in. concrete; grading sidewalk space and laying sidewalks where necessary on southerly side of Liberty Ave. from Lefferts Ave. to 120th St., 4th Ward; grading, curbing and laying sidewalks where necessary in 95th St. from Liberty to 107th Aves., curbing and laying sidewalks where necessary on southerly side of Liberty Ave. from 94th to 95th Sts.

N. Y., New York—Sept. 25, by J. Miller, pres. Manhattan Boro, Municipal Bldg., widening and repaving widened portion roadway of 25th St. from Bway. to 7th Ave., roadway of 26th St. from Bway. to 7th Ave., roadway of 30th St. from 6th to 7th Aves., all foregoing sheet asphalt on concrete, roadway of 57th St. from 7th Ave. to Bway., sheet asphalt and wood block on concrete, 20th St. from 6th to 7th Aves., granite block on concrete.

N. Y., New York—Sept. 26, by H. Bruckner, pres. Bronx Boro, paving West 190th St., etc., sheet asphalt; relief sewer in Webster Ave. between Burnside Ave. and East 194th St.

N. Y., Syracuse—Oct. 2, by Bd. Contract and Supply, paving 4,960 sq.yd. Jasper St., 25 ft., $29,460; 5,790 sq.yd. Highland St. from Highland Ave. to Park St., 27 ft., $34,860; 5,400 sq.yd. Teall Ave. from James to Peck Sts., 34 ft., $30,120; 6,130 sq.yd. Shuart Ave. from Sedgwick to Teall Aves., 25 ft., $38,770; 11,550 sq.yd. Grand Ave. from Delaware St. to city line, 25 ft., $60,930; 9,580 sq.yd. Cooleridge Ave. from Wilbur to Whittier Sts., 25 ft., $56,080; 3,830 sq. yd. Merriman Ave. from Messena to Geddes Aves., 25 ft., $23,210; 6,280 sq.yd. Kellogg St. from Slocum to Delaware Sts., 25 ft., $43,210; 4,090 sq.yd. Castle-St. from State to Renwick Sts., 30 ft., $24,400; 10,840 sq. yd. Crouse Ave. from Fayette St. to University Pl., 32 ft., $60,640; 7,880 sq.yd. Walnut Ave. from Harrison St. to University Pl., 34 ft., $55,190. Bids will be received on asphalt, brick, bituminous concrete and Portland cement concrete, stone and concrete curbs. N. L. Pitts, City Hall, engr.

Pa., Ebensburg—Sept. 29, by Supervs. Jackson Twp., c/o H. Jones, controller Cambria Co., Court House, Ebensburg, 5,800 lin. ft. vitr. brick paving and 5,800 lin.ft. concrete curbing on Jackson Rd., near Summerhill. A. B. Curry, 909 Johnstown Trust Co., Johnstown, engr.

Pa., Phila.—Sept. 28, grading, asphalt and vitr. brick paving on various streets, repairing bridges, and furnishing motor driven street flushers.

Del., Wilmington—Sept. 26, by C. E. Grubb, engr., County Bldg., grading and constructing 2 mi. road from Fairview School to Pleasant Hill, 16 ft., asphalt penetration on water bound macadam.

W. Va., Pineville—Comrs. Wyoming Co. receiving bids grading and gravel surfacing 2½ mi. Clear Fork Rd., 20,000 cu.yd. excav., 6,200 cu.yd. borrow, 28 cu.yd. concrete. $25,000. H. J. Spelman, Robson-Pritchard Bldg., Huntington, engr.

S. C., Greenville—Oct. 4, by H. P. Dill, superv. Greenville Co., grading and surfacing 4.03 mi. sections Dunhams Bridge Rd., 41,000 cu.yd. common and 1,704 cu.yd. rock excav., 12,628 cu.yd. topsoil surfacing, 938 lin.ft. rein.-con. pipe, 33,196 lb. reinforcing, etc.; 1.99 mi. sections Kays Bridge Rd., 16,819 cu.yd. common and 667 cu.yd. rock excav., 6,249 cu.yd. topsoil surfacing, 787 lin.ft. rein.-con. pipe, 3,490 lb. reinforcing, etc.

Fla., Ft. Myers—Oct. 10, by Bd. Comrs. Lee Co., clearing, grading and hardsurfacing 6 mi. road in Road and Bridge Dist. 4, on Capitva Island. $25,000. Engineer not announced. Noted July 27.

La., Alexandria—Oct. 2, by Comr. of Council, paving 7th St., vertical fibre brick, incl. 15,300 sq.yd. brick on 5 in. concrete, 43,500 lb. reinforcing in A and B drains, 492 cu.yd. concrete in A and B drains, 94,400 lb. c.i. in grates, etc. V. M. Ake, secy.

Ohio—Sept. 29, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 1.985 mi. Sect. "K-2" Cincinnati-Chillicothe Rd., Clermont Co., $54,118 also 1.22 mi. Sect. "S-1" Newark-New Lexington Rd., Perry Co., $35,318, both bituminous macadam, tar or asphalt; rein.-con. girder bridge on Sect. "L-2" Columbus-Portsmouth Rd., Pike Co., $3,889. Noted Sept. 7.

O., Cleveland—Sept. 30, by Bd. Comrs. Cuyahoga Co., paving Hilliard Rd. vitr. brick on concrete, $120,176; Chagrin River Rd., $73,260; Noble Rd., vitr. brick, $274,075. F. Lander, Court House, engr.

Ind., Vevay—Oct. 2, by Comrs. Switzerland Co., grading and paving with stone, 13,810 ft. highway, in Cotton Twp., to be known as Harry Scudder et al. Rd. W. A. Reeves, aud.

Michigan—Sept. 27, by State Hy. Dept., Lansing, grading and surfacing 12.366 mi. Federal Aid Project 80, Sect. E, Machinac Co., 33,827 cu.yd. excav., 130,470 sq.yd. gravel; 1.261 mi. Federal Aid Project 91, Berrien Co., 8,453 cu.yd. excav., 13,323 sq. yd. asphalt, concrete or bituminous concrete. F. F. Rogers, state highway comr.

Michigan—Sept. 28, by State Hy. Dept., Lansing, grading and surfacing 1.386 mi. State Trunk Line Rd. 35-9, Gladstone Co., 2,088 cu.yd. excav., 14,121 sq.yd. asphalt, concrete or bituminous concrete. F. F. Rogers, state highway comr.

Michigan—Sept. 29, by State Hy. Dept., Lansing, grading 8.612 mi. Federal Aid Project 87, Wayne Co., 69,177 cu.yd. excav. F. F. Rogers, state highway comr.

Michigan—Oct. 1, by State Hy. Dept., Lansing, grading and gravel surfacing 7.98 mi. Assessment Dist. 384, Eaton and Ionia Counties. $45,000. F. F. Roger, state highway comr.

Michigan—Oct. 4, by State Hy. Dept., Lansing, grading and surfacing 10.514 mi. Assessment Dist. Rd. 444, Lapeer and Genesee Counties, 63,689 cu.yd. excav., 74,016 sq.yd. gravel. F. F. Rogers, state highway comr.

Ill., Chicago—Sept. 26 by Bd. Local Impvts., 207 City Hall, paving various streets. $500,000. C. D. Hill, ch. engr.

Ill., Chicago — Sept. 29 by Bd. Local Impvts., 207 City Hall, paving various streets. $500,000. C. D. Hill, ch. engr.

N. D., Bismarck—Oct. 4, by Burleigh Co., 2 mi. Federal Aid Project 174, incl. 35,081 cu.yd. excav., 3,900 cu.yd. gravel surface.

Missouri—Sept. 28, by State Hy. Dept., Jefferson City, improving 110 mi. various roads in 21 counties. $2,000,000. B. H. Piepmeier, state highway engr.

Colorado—Sept. 26, by State Hy. Dept., Denver, concrete paving 1.003 mi. road extending eastward on the U. P. Highway from Aurora City limits, Federal Aid 225, Arapahoe Co., 18 ft., alternate bids on bituminous pavement, 40 cu.yd. concrete, 1,900 cu.yd. common, 300 cu.yd. borrow fill and 5,100 sta.yd. overhaul excav., 10,595 sq.yd. one course plain cement concrete pavement, 750 cu.yd. gravel shoulders, etc., $36,000; 1.519 mi. road beginning at

Streets and Roads (Continued)

Broomfield and extending northerly toward Lafayette, Federal Aid 222-B, Adams Co., 18 ft., 153 cu.yd. concrete, 15,600 cu.yd. common, 1,500 cu.yd. rock and 5,700 cu.yd. borrow fill excav., 15,600 sta.yd. overhaul. 16,044 sq.yd. one course plain cement concrete pavement, 9,490 lb. reinforcing, etc., $72,000. L. D. Blauvelt, State Office Bldg., Denver, engr.

California—Oct. 9, by State Hy. Comn., Sacramento, gravel surfacing 10.7 mi. highway between Ione and Jackson, Amador Co.; asphaltic concrete surfacing 0.9 mi. highway through Atwater and Livingston, Merced Co. A. B. Fletcher, state highway engr.

Quebec — Oct. 3, by J. L. Boulanger, deputy minister of highways, Quebec, building 7,585 ft. Aylmer-Chaplan Highway, in Aylmer, oiled macadam. M. Nectkar, Dept. Rds., Quebec, engr.

Que., Montreal—Executive Com. taking bids paving various streets, $228,244, sidewalks, $41,339. H. A. Tetreault, dir. pub. wks.

Ontario—Oct. 2, by W. A. McLean, deputy minister of highways, Toronto, grading on Provincial Highway, Danforth Ave. from Toronto city limits to Kingston Rd., Contr. 778. $25,000. G. Hogarth, Parliament Bldgs., Toronto, ch. engr.

BIDS RECEIVED

Conn., Stratford—R. H. Hunter, town mgr., opened bids Sept. 8, paving ½ mi. West Broad St. between Barnum and Linden Aves., Telford type asphalt, from Natl. Constr. Co., 721 Main St., Hartford, $19,965; Leverty & Hurley, 1374 Wood Ave., Bridgeport, $28,800. Noted Aug. 31.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids Sept. 13, repaving (1) Union St., (2) 16th Ave., (3) 15th St., (4) 95th St., from Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (1) $32,702, (2) $15,677, (3) $6,292, (4) $9,912; Cranford Co., 52 9th St., (1) $33,547, (2) $14,375, (3) $6,473, (4) $8,951; Boro Asphalt Co., 1301 Metropolitan Ave., (1) $36,178, (2) $15,137, (3) $6,770, (4) $9,473. Noted Sept. 7.

N. Y., New York — H. Bruckner, pres. Bronx Boro, opened bids Sept. 12, paving (1) West 230th St., (2) Hornaday Pl., grading, curbing and laying sidewalks, etc., on (3) Whitlock Ave., from Southern Blvd. to bridge over Port Morris branch of New York Central Central R.R., grading, etc., (4) Seymour Ave., (5) Whitlock Ave. from East 149th St. to Leggett Ave., from Asphalt Constr. Co., 2197 Madison Ave., (1) $11,051, (2) $6,021, (3) $9,530; Brusstar Constr. Co., Harlem River and 150th St., (1) $12,531, (2) $6,521; C. T. Beckwith, Inc., 2875 Bway., (1) $12,833, (2) $6,003, (3) $13,960; Casper Helbock, 633 Wales Ave., (4) $19,866; P. J. Kearns Contg. Co., 2306 Creston Ave., (4) $20,846, (5) $21,529; Spadero Contg. Co., 827 East 217th St., (4) $25,670; M. Del Balso, 660 East 221st St., (5) $19,344; Fordham Contg. Co., (5) $21,620. Noted Sept. 7.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, opened bids Sept. 15, repaving roadway of Southfield Blvd., etc., from Brooklyn & Manhattan Contg. Corp., 26 Court St., Brooklyn, $178,580; C. Vanderbilt, 24 Elizabeth St., West New Brighton, $178,990; J. E. Donovan, 2205 Richmond Terrace, Port Richmond, $180,397. Noted Sept. 7.

N. Y., Syracuse — Bd. Contr. & Supply, opened bids Sept. 13, paving (1) East Adams St. (2) Renwick Ave., both asphalt from J. H. Gallup, Union Bldg., (1) $25,236 (2) $53,470; F. J. Baker, Bastable Bldg., (1) $25,245 (2) $50,440; Dale Eng. Co., Mann Bldg., Utica, (1) $25,729 (2) $51,421.

N. J., Somerville—Somerset Co., Court House, constructing 67,749 sq.yd. State Highway Route 16, Sect. 4, from Pluckamin to Somerville, concrete, from Peconco Eng. Contg. Co., 1170 Bway., New York City, $329,740; Acchione & Canuso Paving Co., 804 South 12th St., Phila., $342,079; Pub. Serv. Production Co., 80 Park Pl., Newark, $344,212. Noted Aug. 17.

Pa., Ebensburg—Combria Co. Controller, opened bids Sept. 8, paving 16,136 ft. Wilmore Plank Rd., vitr. brick on concrete, from G. T. Morgan, Johnstown, $189,259; Bell-Bockel Co. Inc., 543 Vine St., Johnstown, $206,450.

Pa., Patton—G. Prindible, pres. Boro. Council, reconstructing 3,200 lin.ft. Beach Ave., 20 ft., vitr. brick on concrete with raised stone curb, from L. R. Mathieu & Sons, Union Ave. and 19th St., Altoona, $40,833; Bell-Bockel Co., 543 Vine St., Johnstown, $41,834. Noted Aug. 31 under "Ebensburg."

ROAD WORK—MAINE

Bids were opened by State Highway Comn., Augusta, Aug. 25, for constructing State Highway "B," Bridgton Project No. 58, from (A) Arborio Road Constr. Co., Hartford; (B) J. Arborio, 82 Church St., New Haven; (C) A. D. Bridge's Sons, Inc., Hazardville, Conn. The unit bids were as follows:

	A	B	C
10,000 cu.yd. earth excavation	$1.10	$1.25	$1.25
920 cu.yd. rock excavation	2.50	3.00	3.00
650 cu.yd. borrow	1.10	1.25	1.25
284 cu.yd. stone fill	2.00	3.00	2.00
1,000 cu.yd. gravel base	2.75	2.00	2.75
1,000 cu.yd. stone base, gravel finish	3.25	3.25	2.50
250 cu.yd. gravel sub-base	2.50	2.50	3.00
20.8 cu.yd. class "A" concrete	30.00	25.00	30.00
59.3 cu.yd. class "B" concrete	25.00	20.00	20.00
92 lin.ft. 12-in. c.m. pipe	1.00	1.00	1.00
174 lin.ft. 16-in. c.i. pipe	1.00	1.50	1.50
66 lin.ft. 18-in. c.i. pipe	1.25	2.00	1.75
120 lin.ft. 24-in. c.i. pipe	1.50	2.50	2.50
514 sq.yd. cobble gutter	1.25	1.00	1.00
200 cu.yd. gravel road	2.75	3.00	3.00
27,900 sq.yd. broken stone base course	.54	.50	.65
1,938 cu.yd. bituminous macadam surface course	5.50	7.00	7.70
62,775 gal. bituminous mat. hot (tank cars)	.08	.06	.11
*62,775 gal. bituminous mat. hot (bbls.)	.09	.04	.07
1,080 lin.ft. wood guard rail	.55	.75	.50
Extended totals less item marked*	$56,377	$58,497	$66,836

ROAD WORK—KENTUCKY

Bids were opened by State Highway Comn., Frankfort, Aug. 15, for constructing 9.3 mi. Salyersville-Paintsville Rd., Federal Aid Project No. 76, State Project No. 34, Sect A, Johnson Co., from (A) Dempster Constr. Co., Knoxville, (awarded contract); (B) R. G. Hill Co., Knoxville, Tenn.; (C) Hunt-Forbes Constr. Co., Ashland. The unit bids were as follows:

	A	B	C
77,313 cu.yd. earth excavation	$0.50	$0.60	$0.67
39,510 cu.yd. solid rock excavation	1.05	1.20	1.33
22,181 cu.yd. borrow excavation	.45	.60	.67
1,534 cu.yd. excavation, channel change	.50	.60	.67
1,052 cu.yd. excavation, solid rock	1.10	1.25	1.33
344.95 cu.yd. class A concrete	25.00	33.00	35.00
1,081.13 cu.yd. cement rubble masonry	11.00	10.00	15.00
431.38 cu.yd. class A concrete, bridges	26.00	30.00	35.00
12.97 cu.yd. class B concrete	24.00	28.00	32.00
15.01 cu.yd. class D concrete	40.00	48.00	65.00
1,043 cu.yd. cement rubble masonry, bridges	10.00	9.00	15.00
119,037 lb. reinforcement	.07	.07	.10
400 cu.yd. foundation excavation, dry earth	1.10	.80	1.50
50 cu.yd. foundation excavation, wet earth	1.50	3.00	2.50
12,367 lin.ft. standard cable guard rail	.50	.60	.86
303 cu.yd. hand placed stone fill	1.50	2.25	4.50
25 cu.yd. rip rap	1.50	2.25	4.00
21 removing trees, stumps	2.00	4.00	5.00
5.2 acres clearing and grubbing	40.00	70.00	70.00
1,328 lin.ft. 18 in. standard vitrified pipe	2.15	2.25	3.95
264 lin.ft. 24 in. standard vitrified pipe	2.50	3.50	5.60
828 lin.ft. 18 in. D. S. vitrified pipe	2.50	3.00	4.20
646 lin.ft. 24 in. D. S. vitrified pipe	3.40	3.75	6.20
146.92 cu.yd. 1:3:6 encasing concrete	18.00	27.00	30.00
Extended totals, vitrified pipe	$161,418	$184,926	$225,629
Extended totals, cast iron pipe	$165,160	$185,915	$229,747
Extended totals, reinforced concrete pipe	*$161,139	....	....

* Awarded contract.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids Sept. 15, grading roads in following counties: Stark Co., Sect. "D-2" and "E" Alliance-Minerva Rd., 3.96 mi., from F. J. Mann & Sons, Ashland, $27,852; Keystone Constr. Co., Columbus, (street address not available), $29,026; A. F. Wendling Co., Massillon, $32,067. Tuscarawas Co., Sect. "A" Canton-Canal Dover Rd., 3 mi., from C. G. Fuller, Canal Dover, $18,237; Kavanaugh-De Niro Co., Youngstown, (street address not available), $18,418; J. I. Geiger, Valley Park, R. R. 9, Dayton, $18,418. Tuscarawas Co., Sect. "B" Canton-Canal Dover Rd., 2.299 mi., from C. G. Fuller, Canal Dover, $17,831; Keystone Constr. Co., Columbus, (street addres not available), $18,497; Culbertson & Casper, Canton, (street address not available), $18,650. Tuscarawas Co., Sect. "E" Canton-Canal Dover Rd., 2,093 mi., from F. J. Mann & Sons, Ashland, $19,783; D. Roach, Defiance, $22,418; Kavanaugh-DeNiro Co., Youngstown, (street address not available), $22,909. Williams Co., Sect. "C" Stryker-Evansport Rd., 1.187 mi., from E. E. Manley, Mt. Pelier, $14,879; J. A. Elder, Bryan, $15,057; C. M. Gray, Waterville, $15,690. Williams Co., Sect. "D" Strkyer-Evansport Rd., 2.58 mi., from Carey, Archbold, $4,065; D. G. Watson, Malinta, $4,948; Kelly Constr. Co., Bryan, $5,196. Jackson Co., Sect. "K" Jackson-Pomeroy Rd., bridge over Sugar Creek, from P. C. Adams, Jackson, $4,038. Noted Sept. 7.

O., Cleveland — Cuyahoga Co., Court House, paving Detroit Rd. 4, 3,465 lin.ft. stone curb, 8,800 lin.ft. 4 in. vitr. pipe gutter, 6,400 cu.yd. earth excav., 13,850 sq.yd. granite block, 2,400 cu.yd. concrete base, from Enterprise Paving & Constr. Co., 8444 Bway., $110,227; Roehl Bros., West 25th St. and Clark Ave., $113,767; River Constr. Co., Schofield Bldg., $117,994. Engrs. est. $132,178.

O., Cleveland—Opened bids Sept. 1 paving driveways in Highland Park Cemetery, concrete, from Complete Constr. Co., 3129 Scranton Rd., $46,228; Garland Bros., Pavers Exch., Society for Savings Bldg., $47,000. Noted Aug. 24.

O., Cleveland—Paving (1) Superior Ave. from Public Sq. to West 6th St., (2) Linn Dr., (3) Amesbury Ave. (1-3 inclusive), involve 1,170 cu.yd. earth excav., 2,500 sq.ft. vitr. brick, 24,000 sq.ft. relaid granite block, 4,600 sq.yd. asphalt and 970 sq.ft. concrete, (4) Baltic Rd., 3,600 cu.yd. earth excav., 82,400 sq.ft. vitr. brick on concrete, 3,600 sq.yd. asphalt, from Cleveland Trinidad Paving Co., The Arcade, (1) $24,997; Highway Constr. Co., Elyria, (1) $25,676; Rieley Bros., The Arcade, (2) $4,548, (3) $1,176, (4) $48,631; Garland Bros., Pavers Exch., Society for Savings Bldg., (2) $5,018; Freshwater Constr. Co., Natl. Bldg., (4) $45,591.

Missouri—State Hy. Dept. at div. office Albany, opened bids July 18, 3.973 mi. road from King City to Stanberry, 24 ft., Federal Aid Project 54, Gentry Co., 5,000 cu.yd. earth excav., etc. (a) inverted penetration macadam (b) penetration macadam (c) 1 course concrete (d) asphaltic concrete, from E. L. Meek & Co., Kansas City, (street address not available) (a) $87,829 (b) $82,691 (c) $114,001 (d) $90,009; J. O. Patterson & Co., 311 Ridge Bldg., Kansas City, (a) $92,313 (b) $92,869; Koss Constr. Co., 2818 5th Ave., Des Moines, Ia., (c) $111,181; Dalton Constr. Co., Junction City, Kan., (c) $113,074. Noted July 6.

Wash., Seattle—Paving 20th Ave. et al. (1) 4,900 cu.yd. subgrade (2) 1,560 ft. integral concrete curb (3) 1,450 ft. 5 in. asphaltic concrete curb (4) 10,875 ft. 5 in. concrete curb (5) 3,000 sq.yd. 5 in. concrete paving (6) 16,450 sq.yd. 6 in. concrete pav-

Streets and Roads (Continued)

ing, from D. H. Traphagen, Walker Bldg., (1) $0.70 (2) $0.30 (3) $0.75 (4) $0.35 (5) $1.60 (6) $1.73, total $54,560; Coluccio & Erickson, 1642 Lane St., (1) $0.68 (2) $0.38 (3) $0.70 (4) $0.40 (5) $1.45 (6) $1.60, total $55,166; J. L. Smith, Pioneer Bldg., (1) $0.70 (2) $0.45 (3) $0.65 (4) 0.40 (5) $1.55 (6) $1.65, total $55,391. Paving 11th Ave. N., from Coluccio & Erickson, 1642 Lane St., 7,300 sq.yd. 6 in. concrete $1.85, 665 ft. asphaltic concrete curbing $0.75, 4,075 lin.ft. concrete curbing $0.45, 1,800 cu.yd. subgrade $0.70, total $27,434.

Calif., Fresno—Improving (1) Butler Ave., (2) Aris Ave. between Belmont and Hedges Sts., (a) 322,910 ft. grading, (b) 300.200 ft. asphaltic pavement, (c) 21,786 ft. concrete gutter, (d) 11,958 ft. concrete curb, (e) 5,814 ft. concrete walks, (f) 131,631 ft. grading, (g) 119,823 ft. asphaltic pavement, (h) 11,336 ft. concrete gutter, (i) 519 ft. concrete curb, from Thompson Bros., G and Divisadero Sts., (1a) $0.055 (1b) $0.235 (1c) $0.33 (1d) $0.65 (1e) $0.23 (2f) $0.049 (2g) $0.219 (2h) $0.33 (2i) $0.65; W. Hanranah, Griffith-McKenzie Bldg., (1a) $0.049 (1b) $0.229 (1c) $0.50 (1d) $0.59 (1e) $0.23; California Road & Street Impvt. Co., Bank of Italy Bldg., (1a) $0.058 (1b) $0.231 (1c) $0.29 (1d) $0.58 (1e) $0.23 (2f) $0.052 (2g) $0.219 (2h) $0.29 (2i) $0.58; Federal Constr. Co., Call Bldg., San Francisco, (2f) $0.056 (2g) $0.223 (2h) $0.30 (2i) $0.59. Noted Aug. 31.

Calif., Martinez—Improving Green, Ward and Talbart Sts., etc., from J. T. Sayles, Martinez, $22,180; Federal Constr. Co., Call Bldg., San Francisco, $23,800. Noted Aug. 24.

Calif., Stockton — Improving Pershing, Argonaut Sts., etc., (1) 11,266 cu.yd. excav., (2) 9,484 cu.yd. fill, (3) 23,907 ft. concrete curb and gutter, (4) 134,255 ft. cement concrete walks, (5) 448.081 ft. 2 in. asphaltic concrete on 3 in. macadam, from Clark & Henery Co., 38 South Sutter St., (1) $0.70, (2) $0.40, (3) $1, (4) $0.19, (5) $0.1625; Blumenkranz & Vernon, Farmers & Merchants Bank Bldg., (1) $0.75, (2) $0.40, (3) $1, (4) $0.20, (5) $0.185. Noted Aug. 31.

CONTRACTS AWARDED

Maine—State Hy. Dept., Augusta, to Arborio Road Constr. Co., 408 Main St., Hartford, Conn., bituminous macadamizing 2.64 mi. State Highway B, Project 58, in Brighton, $56,377, 3.16 mi. State Highway N, Project 61, in Perry, gravel, $65,268, 3.36 mi. State Highway W, Project 56, in New Sharon, gravel, $43,785; to A. D. Bridges Sons, Inc., Hazardville, Conn., bituminous macadamizing 1.004 mi. State Highway D, Project 54, in Rockport and Camden, $18,107, 5.8 mi. State Highway F, Project 59, in Turner, gravel, $68,823; to J. Arborio, 82 Church St., New Haven, Conn., 3.67 mi. State Highway W, Project 55, in Rome and New Sharon, gravel, $52,557; to Frissell Eng. Co., Gardner, Mass., 3.78 mi. State Highway K, Project 52, in Presque Isle, cement concrete, $143,381. Noted Sept. 14.

Connecticut—State Hy. Dept., Hartford, to F. L. Ford, 173 Orange St., New Haven, paving 9,450 lin.ft. Willimantic-Norwich State Rd., 18 ft., in Franklin and Lebanon, 1,530 cu.yd. earth excav. $1.50, 1,400 cu.yd. borrow $1.50, 1,460 lin.ft. rubble drain $2, 4,090 cu.yd. plain concrete paving $10, etc., total $50,745 (extra for 6,200 bbl. cement at $2.50, $15.500).

Connecticut—State Hy. Dept., Hartford, paving 5,835 ft. North Westchester Rd., 18 ft., in Colchester, to Russo Bros. & Laurenz, 647 Main St., Hartford, 10,500 sq.yd. 7 in. traprock macadam $1.20, etc., total $19,628; 1,720 lin.ft. Water St., in Derby, 760 cu.yd. concrete, 1,125 lin.ft. concrete curbing, 3,850 sq.yd. earth grading, to D. W. Frione & Co., 105 Ward St., New Haven, $6,926, state furnished cement $3,000; 1,600 lin.ft. South Main St., in Seymour, 1,900 sq.yd. vitr. brick, 380 cu.yd. concrete, relaying 450 lin.ft. curbing, 3,850 sq.yd. earth grading, 265 cu.yd. concrete base, to T. J. Fleming, Waterbury, $9,759, state furnished cement $2,250; 1,600 lin.ft. Main St., in Naugatuck, to C. W. Blakeslee & Sons, Inc., 58 Waverly St., New Haven, 7,000 sq.yd. 3 in. asphalt $1.80, 1,080 lin.ft. curbing $0.60, resetting 1,646 lin.ft. curbing $0.33, 615 sq.yd. concrete sidewalk $0.14, 1,200 cu.yd. 6 in. concrete base $7, 7,000 sq.yd. earth grading $0.45, etc., total $26,852, state furnished cement $3,500. Noted Sept. 14.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, paving Ave. U, to J. J. Guinan Contg. Co., 2314 Gravesend Ave., $9,090; Amboy St. and Sterling Pl., etc., to Sicilian Asphalt Paving Co., 41 Park Row, New York, $15,510 and $7,661 respectively; Ave. H, Ridge Blvd., Bay 28th and 53rd Sts., also curbing and paving 61st St., to Borough Asphalt Co., 1301 Metropolitan Ave., $17,302, $44,158, $5,999, $6,951 and $7,303 respectively; Snyder Ave., etc., to Cranford Co., 52 9th St., $9,859; paving Wilson Ave., etc., to Cleveland Trinidad Paving Co., Flushing, $25,841; grading and curbing Troy Ave., also grading sidewalk space, curbing and laying sidewalks where necessary on Glenwood Rd., etc., to Grimm Constr. Co., 170 McKinley Ave., $7,541 and $1,854 respectively; grading and curbing 16th Ave., etc., to F. Persicano, 350 Fulton St., $1,844. Noted Sept. 7.

N. Y., Lockport—Resurfacing West Ave., patented willite, to Willite Rd. Constr. Co., 342 Madison Ave., New York, $34,895. Noted Sept. 7.

N. Y., Mamaroneck—Bd. Supervs. Westchester Co., Court House, White Plains, improving Mamaroneck Ave. from Washington Sq. north to County Highway 1581, here, to J. Dimando, Inc., Mamaroneck, $90,554. Noted Aug. 31.

N. Y., Yonkers—Bd. Supervs. Westchester Co., Court House, White Plains, improving 0.57 mi. Palmer Ave. from Central Ave. west to Miles Square Rd., to Roberts & Lemonjelli, Ridgefield, Conn., (street address not available), $26,717. Noted Aug. 31.

N. J., Bridgeton—Cumberland Co., reconstructing Sect. 1 Landis Ave., also improving Cohansey Rd., to Tri-State Constr. Co., Bridgeton, $275,717. Noted Aug. 24.

N. J., Moorestown—Burlington Co. (Mt. Holly) paving Chester Ave., concrete, here, to Union Paving Co., 30th and Locust Sts., Phila., $80,156.

N. J., Red Bank—Monmouth Co., Court House, Freehold, constructing State Highway Route 4, Sect. 5A, Maple Ave., here, to W. P. McDonald Co., 342 Madison Ave., New York City, 90.61% of engineers estimate ($120,928). Noted Aug. 17.

Pa., Pittsburgh—Grading, paving and curbing (1) Osgood St., (2) Marsonia, Meadville and Malvern Sts., (3) Center Ave., (4) Hamilton Ave., to T. Cronin Co., South 18th St., (1) $29,059, (2) $58,072, (3) $45,223; M. O'Herron Co., Carson St., (4) $53,832.

Pa., Wilkes-Barre—Paving county road from Mocanaqua to Newport Twp. line, 2½ in. bitoslag surface on 7 in. asphalt stone, to Eastern Paving Co., Colonial Trust Bldg., Phila., $189,083.

Maryland — State Roads Comn., Baltimore, paving following roads with concrete, 3 mi. Contr. A-21, Allegheny Co., to S. T. Brotemarkel, Cumberland, $114,369, 4 mi. Contr. F-57, Frederick Co., to M. J. Grove Lime Co., Lime Kiln, $130,488, 1 mi. Contr. AA-25, Anne Arundel Co., to F. M. Duvall, St. Margarets, $24,382, 1.5 mi. Contr. HO-23, Howard Co., to Apicella & Leonard Co., 224 Albemarle St., Baltimore, $50,674, 1 mi. Contr. H-29, Hartford Co., to Sutton Constr. Co., 1207 Wine St., Phila., $38,216; gravel surfacing 2 mi. Contr. HO-27, Howard Co., to E. R. P. Smith, Hyattsville, $18,421, 2 mi. Contr. HO-30, Howard Co., to H. O. Firor, 1707 Pratt St., Baltimore, $19,090, 2.5 mi. Contr. C-13, Calvert Co., and 3.9 mi. Contr. CH-21, Charles Co., to E. H. Schmidt, Baltimore (street address not available), $20,617 and $38,790 respectively, 4 mi. Contr. SM-20, St. Marys Co., to St. Marys Constr. Co., Mechanicsville, $32,922; 2 mi. Contr. P-37, Prince George Co., to E. R. P. Smith, Hyattsville, $16,355, 4 mi. Contr. C-14, Calvert Co., to T. Mullan, 3945 Greenmount Ave., Baltimore, $29,277. Noted Aug. 17 and 31.

Maryland—State Rds. Comn., Baltimore, paving following roads with plain concrete, 1.85 mi. Project 57, Frederick Co., to M. J. Grove Co., Frederick, $51,876, 2 mi. Project 82, Frederick Co., to Bester, Gosnell & Russell, Hagerstown, $63,201, 1.9 mi. Project 83, Harford Co., to Development & Constr. Co., Amer. Bldg., Baltimore, $55.544, 1 mi. Project 89, Dorchester Co., and 2 mi. Project 90, Wicomico Co., to P. D. Philips & Bros., near Quantico St., Salisbury, $23,067 and $46,773 respectively, 2 mi. Project 70, Garrett Co., to F. A. Dennison Co., Cumberland, $60,837; gravel surfacing 2.5 mi. Project 87, Charles Co., to B. M. Wilmer, $26,946. Noted July 20, 27, and Aug. 3.

W. Va., Charleston—Paving with hillside brick on 5 in. concrete 0.5 mi. Maine Dr., to G. T. Fogle & Co., Charleston, (street address not available) $21,213; paving with 7 in. concrete 0.5 mi. East End Alleys, to Abbott Bros., Charleston, (street address not available), $10,000; paving with hillside brick and asphaltic concrete on 6 in. concrete 0.8 mi. Sunset Dr. and Garvin Ave., also paving with hillside brick on 5 in. concrete 0.7 mi. West Ave., Garden and Red Oak Sts., to Board & Haley Co., Charleston, (street address not available) $32,163 and $28,819 respectively.

N. C., Greensboro—Irving Park Co. paving portions of Sunset Dr., Country Club Pl., Fairview and St. Andrews Rds., 2 in. asphalt on concrete, to Murray Constr. Co., Greensboro, $50,000.

S. C., Sumter—Sumter Co. hardsurfacing with asphaltic concrete 6.1 mi. Manning Rd. and 4.2 mi. Camden Rd., to R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, N. C., $152,840 and $102,770 respectively; paving with concrete 4.3 mi. Bishopville Rd. and paving with asphaltic concrete 4.5 mi. Mayesville Rd., to C. D. Rigsbee, Durham, N. C., $119,804 and $117,339 respectively; paving with asphaltic concrete 4.3 mi. Pinewood Rd., to Powell Paving & Contg. Co., Palmetto Bank Bldg., Columbia, $107,999. Noted Aug. 31.

Fla., Safety Harbor—A. E. Shaver, clk., paving various streets, incl. 8,000 cu.yd. excav., 5,180 sq.yd. vitr. brick (taking up, cleaning and relaying with asphalt filler), 3,450 sq.yd. vitr. brick furnished by town (hauling and laying with asphalt filler), 7,176 sq.yd. vitr. brick, 7,176 sq.yd. asphalt block, 6,002 sq.yd. sheet asphalt, 6,002 sq. yd. 5 in. compacted rock base, 5,358 lin.ft. 6 x 18 in. concrete curb, 11,750 lin.ft. 4 x 15 in. concrete curb, etc., to J. L. Cone & Co., Walton and Caesar Sts., Tampa, $30,000. Noted Aug. 24.

Tennessee — State Hy. Dept., Nashville, reconstructing base course on Federal Aid Projects 22 and 24, Marion Co., to A. J. Wardrep, Holston Bank Bldg., Knoxville, $38,056; constructing road of hand placed stone base course and bridges on Federal Aid Project 65-B, Warren Co., to Warren Co. Constr. Co., Stahlman Bldg., Nashville, roadway $127,098, bridges $3,561. Noted Aug. 24.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 0.956 mi. Sect. "K" Caldwell-Marietta Rd., plain concrete, to G. W. McElfresh, Caldwell, $36,423; grading and drainage structures on 2 mi. Sect. "L" Mt. Gilead-Mansfield Rd., Morrow Co., to O. Johnson, West Mansfield, $25,494; bridge on Sect. "S" Salineville-Yellow Creek Rd., Columbiana Co., to Cox & Heflop, Kensington, $5,474. Noted Sept. 7 and 14.

O., Akron—W. C. Peters, dir. Pub. Serv., grading, laying sidewalks and paving North Main St. from York St. to Cuyahoga Falls Ave., to T. E. McShaffrey Constr. Co., 171 South Forge St., $80,465; Aqueduct St. from Edgerton Rd. to Tallmadge Ave., also resurfacing South Case Ave. from East Market St. to Little Cuyahoga River, to Columbus Asphalt Paving Co., Buckeye Bldg., $34,941 and $5,767 respectively; grading and laying sidewalks on Wall St. rfom Edward to Mildred Aves., grading, laying sidewalks and graveling Lakemont Ave. and Hillcrest St., Glenwood Ave. from Gotham to Rosalind Courts, and Englewood Ave. et al., also improving Norka Ave. from Thornton to Scheck Sts., to Di Foti Constr. Co., 72 Furnace St., $7,984, $13,545, $8,238, $13,095 and $2,586 respectively; grading, laying sidewalks and graveling Linden St. from Cuyahoga Falls to Birchwood Aves., to Timmis Clark Co., 437 2nd Natl. Bldg., $3,838; improving Home Ave. from East Tallmadge Ave. to north corporation line, to Hollinger & Davidson, $2,030; paving, laying sidewalks and sewers in Lakemont Ave. also paving Middlebury St. from McNaughton St. to Buchtel Ave., to E. H. Rawle, 839 Bloomfield Ave., $14,177 and $13,517, respectively. Noted Sept. 14.

O., Akron—Summit Co., to A. F. Wible, 859 Chalker St., grading and paving 1.19 mi. Richfield-Hudson Rd. 19, Sect. A, 16 ft., 7,500 cu.yd. earth excav. at $0.50 per cu.yd., 11,250 sq.yd. 3 in. bituminous macadam $1, 11,250 sq.yd. 5 in. waterbound macadam base $0.84, total $26,001, engrs. est. $26,131; to V. Olson Contg. Co., Heberich Bldg., 1.23 mi. Brittain-Massillon Rd. 49 B. 2, 12,500 cu.yd. earth excav. $0.54, 12,500 sq.yd. 8x10 in. concrete $2.93, $44,925, engrs. est. $45,763. Noted Sept. 14.

O., Cleveland—Cuyahoga Co. paving Bean Rd., concrete, to Freshwater Constr. Co., Natl. Bldg., $48,167. Engrs. est. $50,101. Noted Sept. 14.

O., Cleveland Heights (Warrensville P. O.)—Paving Cedar Rd., to Cleveland Trinidad Paving Co., The Arcade, Cleveland, $68,845; Inglewood and Roanoke

Streets and Roads (Continued)

Rds., to Rieley Bros., The Arcade, Cleveland, $30,368; Greyton and Nela View Rds., to Spence Bros., c/o Pavers Exch., Society for Savings Bldg., Cleveland, $22,910. Noted Sept. 14.

O., Greenfield—Grading and paving Jefferson St. and Edge Ave., to W. H. Ringwald & Sons Co., Chillicothe, $41,073 and $9,711, respectively. Noted Aug. 17.

Michigan—State Hy. Dept., Lansing, grading and surfacing 6.98 mi. State Trunk Line Rd. 22-11, Sect. B, Leelanau Co., 56,809 cu.yd. excav., 65,518 sq.yd. gravel, to Leelanau Co. Rd. Comn., Cedar, $45,191. Noted Aug. 17

Mich., Detroit—To Detroit Ashalt Paving Co., 20 McGraw Bldg., grading, shaping and paving with sheet asphalt on 8 in. concrete, Malvern Ave. $8,388, Central Ave. $40,451, 14th Ave. $7,002, Quincy Ave. $4,306, Stoepel Ave. $17,202; to G. R. Cooke, 1260 Penobscot Bldg., Arlington Ave. $12,734, Dakota Ave. $17,305, Minnesota Ave. $17,333, Montana Ave. $26,607; to Cleveland Trinidad Paving Co., 402 Hammond Bldg., 11th St. $16,264. Noted Sept. 14.

Mich., Detroit—To Detroit Asphalt Paving Co., 20 McGraw Bldg., paving 3,500 sq.yd. Six Mile Rd. from Woodward to Oakland Aves., $19,870, also 2,700 sq.yd. from Oakland Ave. to Grand Trunk Ry., $13,198, both 18 ft. wide, less single track, 3½ in. sheet asphalt on 8 in. concrete.

Mich., Detroit—To R. J. Powelson Co., 6415 Iroquois Ave., paving Alley 1555, $3,911, Alley 1650, $2,905; to T. E. Currie, 20 McGraw Bldg., Alley 1556, $4,319, Alley 1557, $2,539; to A. F. Lester, 1631 Dime Bank Bldg., Alley 1558, $3,606; H. Mincel, 4573 Cooper St., Alley 1559, $1,378; to G. Nunn, 6409 3rd Ave., Alley 1561, $3,222, Alley 1566, $4,350; to J. Porath, 745 Griswold St., Alley 1562, $2,658; to Otis Cement Constr. Co., 806 Hammond Bldg., Alley 1563, $2,700, Alley 1564, $3,268, Alley 1565, $4,932.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, to R. A. Baum, Paris, concrete paving 5.37 mi. Route 1, Sect. 25, Clark Co., $116,138; Chicago Heights Coal Co., Chicago Heights, 1.29 mi. Route 1, Sect. 164, Cook Co., $21,881; Mautz & Oren, Effingham, 4.84 mi. Route 3, Sect. 71, Randolph Co., $95,869, 4.62 mi. Route 3, Sect. 72, Randolph Co., $102,039; R. L. Williams, Wyatt, Mo., 5.94 mi. Route 9, Sect. 9, McLean Co., $98,184, 3.75 mi. Route 9, Sect. 10, McLean Co., $62,016, 4.17 mi. Project 32, Sect. 11, Washington-Jefferson Co., $70,907, 3.4 mi. Project 32, Sect. 12, Jefferson Co., $59,109, 5.16 mi. Project 32, Sect. 13, Jefferson Co., $96,784; Baker, Agerter & Thompson, Indianapolis, Ind. (street address not available), 6.1 mi. Route 10, Sect. 19, Sangamon Co., $122,872, 6.63 mi. Project 44, Sect. 2, Christian Co., $135,554; Darrow & Jacobson, 311 Carey Ave., Waukegan, 4.61 mi. Route 20, Sect. 12, Lake Co., $99,124; Jaicks Bros., 275 Thatcher Ave., River Forest, 0.77 mi. Route 22, Sect. 17, Kane Co., $15,695; Eiff & Simons, 605 North 14th St., Quincy, 5.09 mi. Route 31, Sect. 5, Adams-Brown Co., $88,530; 5.67 mi. Route 31, Sect. 6, Brown Co., $100,560; Nelson Bros., Jerseyville, 5.36 mi. Route 38, Sect. 1, Jersey Co., $113,904; H. K. Rhoades, Lincoln, 4.87 mi. Project 26, Sect. 21, Logan Co., $88,310, 5.68 mi. Project 26, Sect. 22, Logan Co., $100,096; I. D. Lain, Bloomington, 5 mi. Project 28, Sect. 26, Livingston Co., $106,113; McMahon Constr. Co., Rochester, Ind., 4.23 mi. Project 29, Sect. 36, Iroquois Co., $91,223, 6.6 mi. Project 29, Sect. 37, Iroquois Co., $120,856, 2.9 mi. Project 29 Sect. 38-D, Iroquois Co. $51,921; Reith-Riley Constr. Co., Goshen, Ind., 3.65 mi. Project 30, Sect. 15, Kankakee Co., $67,127, 5.63 mi. Project 30, Sect. 16, Kankakee Co., $113,907, 4.04 mi. Project 30, Sect. 17, Will Co., $82,266; Sutton & Moore, Canton, 5.16 mi. Project 33, Sect. 42, Fulton Co., $120,383; Indiana Road Paving Co., Bement, 5.37 mi. Project 36, Sect. 66, Woodford-Marshall-La Salle Co., $93,999, 4.87 mi. Project 36, Sect. 67, Marshall-La Salle Co., $95,100; Russell Condon Constr. Co., 311 Karbach Bldg., Omaha, Neb., 5.21 mi. Project 38, Sect. 45, Schuyler Co., $122,105; C. C. Vanderbloom & Sons, Pecatonica, 5 mi. Project 39, Sect. 2, Carroll Co., $110,943, Stocker Gravel & Constr. Co., Highland, 0.35 mi. Route 6, Sect. E, Bond Co., $8,761, 1.68 mi. Route 7, Sect. N-29-A, Madison Co., $13,433; Illinois State Contg. Co., 2100 Wabash Ave., Chicago, 0.94 mi. Route 15, Sect. K-29-A, La Salle Co., $19,151; L. Rich Constr. Co., Denny and Manchester Sts., St. Louis, Mo., grading Route 1, Sect. 29-A, White-Gallatin-Saline Co., 90,505 cu.yd. excav., $26,599, Route 1, Sect. 30-A, Saline Co., 30,125 cu.yd. excav., $15,024, Route 1, Sect. 31-A, Saline Co., 47,500 cu.yd. excav., $14,878, Route 1, Sect. 33-A, Saline Co., 45,895 cu.yd. excav., $14,835, Route 1, Sect. 34-A, Williamson-Johnson Co., 60,410 cu.yd. excav., $28,954; Buis & Olsen, St. Joseph, Mo., Route 1, Sect. 35-A, Johnson Co., 31,400 cu.yd. excav., $22,776, Route 1, Sect. 36-A, Johnson Co., 55,970 cu.yd. excav., $29,038, Route 1, Sect. 37-A., Johnson Co., 52,010 cu.yd. excav., $25,485, Project 33, Sect. 43-A, Fulton Co., 60,930 cu.yd. excav., $24,142; J. A. McGaughey Co., 1319 Columbia Ave., Chicago, Route 3, Sect. 37-A, McDonough Co., 56,049 cu.yd. excav., $15,822, Route 8, Sect. 32-A, Woodford Co., 67,020 cu.yd. excav., $21,933, Project 26, Sect. 20-A, Logan Co., 25,797 cu.yd. excav., $5,282; New Era Constr. Co., 6548 Bosworth Ave., Chicago, Route 8, Sect. 37-A, Tazewell Co., 42,225 cu.yd. excav., $17,891, Route 9, Sect. 9-A, McLean Co., 42,120 cu.yd. excav., $19,640, Route 9, Sect. 10-A., McLean Co., 26,370 cu.yd. excav., $12,668; W. O. Whitsell, Mt. Vernon, Route 12, Sect. 15-A, Marion Co., 37,340 cu.yd. excav., $14,210; Cameron, Joyce & Co., Keokuk, Ia., Route 28, Sect. 4-A, Knox-Henry Co., 36,865 cu.yd. excav., $16,950, Route 28, Sect. 5-A, Henry Co., 31,550 cu.yd. excav., $13,342; A. O. McCoy, Mt. Sterling, Project 38, Sect. 44-A, Schuyler Co., 46,830 cu.yd. excav., $27,540. Noted Aug. 31.

Ill., Blue Island—Bd. Local Impvts., paving various streets, to J. A. Sackley Co., 133 West Washington Blvd., Chicago, $144,049. Noted July 20.

Wis., Milwaukee—Milwaukee Co. surfacing 2.86 mi. Brown Deer-Menomonee Falls Rd., plain concrete, to Froeming Bros., 1326 Humboldt Ave., $89,046. Noted Sept. 7.

Minnesota—State Hy. Dept., St. Paul, concrete paving 10,100 sq.yd. Minnesota Trunk Highway No. 1, near Northfield, Rice Co., to Johnson, Drake & Piper, 809 1st Natl. Soo Line Bldg., Minneapolis, $24,468.

Minn., Minneapolis — Will resurface Nicollet Ave. between Washington Ave. and 10th St., probably creosoted wood blocks, $87,000. Work will be done in spring, by day labor.

Kan., Eureka—Paving 20 blocks, asphaltic concrete, to M. R. Ammerman, 248 North Market St., Wichita, $2.20 per sq.yd.

South Dakota—State Hy. Dept., Pierre, grading 6.6 mi. Federal Aid Project 50, Sanborn Co., to Pioneer Bridge Co., Mitchell, 109,517 cu.yd. excav. $0.24 per cu.yd., total 37,492; 7.467 mi. Federal Air Project 102, Lincoln Co., to Canton Block & Tile Co., Canton, 59,812 cu.yd. excav. $0.26, 207.35 cu.yd. Class A concrete $20, total $22,925; 4.61 mi. Federal Aid Project 23, Sect. C, Jackson Co., to D. D. Bidwell, Egan, 7,032 cu.yd. gravel surfacing $0.60, 4.461 mi. road shaping $100, etc., total $15,289; 13.07 mi. Federal Aid Project 61, Brule Co., to R. P. England, Murdo, 115,095 cu.yd. excav. $0.26, 269.15 cu.yd. Class A concrete $24, total $40,142; 10.59 mi. Federal Aid Project 108, Charles Mix Co., to H. Pickus Constr. Co., 309 Mass Bldg., Sioux City, Ia., 77,669 cu.yd. excav. $0.285, 227.5 cu.yd. Class A concrete $26, total $31,034; 13.77 mi. Federal Aid Project 115. Minnehaha Co., to W. R. Larson Constr. Co., 520 Secy. Natl. Bank Bldg., Sioux Falls, 106,490 cu.yd. excav. $0.265, 320.75 cu.yd. Class A concrete $18 total $38,241; 11.06 mi. Federal Aid Project 98, Lincoln Co., to Canton Block & Tile Co., Canton, 76,570 cu.yd. excav. $0.27, 143.17 cu.yd. Class A concrete, $20, total $27,538.

Ark., Little Rock—Pulaski Co. paving 8 mi. and 12 mi. various roads, bituminous macadam, to Standard Paving Co., of Arkansas, Little Rock, (street address not available), $261,281 and $281,972 respectively. Noted Aug. 10.

Tex., Ft. Worth—Tarrant Co. grading, gravel surfacing, etc., to Purvis & Lowery, Ft. Worth, Arkansas Lane, C-50, $10,440, Bludworth School Rd. C-53 $6,433, Pleasant Glade Rd. C-55 $10,000; to Tarrant Co., Ft. Worth, Denton Rd. C-52 and Cold Springs Rd. C-46 $38,200; to McCoy & Richards, Arlington, constructing road bed incl. gravel base on 8.13 mi. Grapevine-Cardinal Rd. through Bedford to Euless Rd., 16 ft., $25,704.

Wash., Seattle—Paving Olive Way et al., to Olympic Constr. Co., 400 West Harrison St., 1,000 sq.yd. vitr. brick at $3, 9,100 sq.yd. 6 in. sandstone paving $6.20, 1,000 sq.yd. asphalt $2.75 and 1,200 sq.yd. asphalt $3, 2,600 sq.yd. 7 in. concrete $2, 2,900 lin.ft. asphaltic concrete curbing $0.80, 3,550 lin.ft. concrete A curbing $0.60, 3,500 sq.yd. 2 course concrete sidewalks $1.40, 12,000 cu.yd. earth excav. $0.70, total $112,279, engrs. est. $111,965; paving Lakedell Ave. et al., to J. L. Smith, Pioneer Bldg., 7,360 sq.yd. 6 in. concrete $2.18, 2,000 lin.ft. asphaltic concrete curbing $0.75, 3,320 lin.ft. concrete curbing $0.50, 1,850 lin.ft. concrete sidewalk $1.45, 1,500 cu.yd. earth excav. and 12,000 cu.yd. sub grade $0.70, total $43,785, engrs. est. $42,555. Noted Sept. 7.

Wash., Yakima—Paving South 3rd St. from Walnut St. to city limits, bituminous concrete on concrete, to Yakima Paving Co., Yakima, $60,551. Engrs. est. $65,000.

Calif., Fresno—Fresno Co., grading and paving Route 4, Sect. A, to T. Hanrahan, 1361 P St., $168,999. Noted Sept. 14.

Calif., Fresno—Supervs. Fresno Co. paving Route 20, Sect. A, Co. Highway system, from Sanger to Adams Ave., to California Constr. Co., Mattei Bldg., $83,712. Noted Aug. 24.

Calif., Healdsburg—Improving various streets to Clark and Henery Constr. Co., 38 South Sutter St., Stockton, $152,519. Noted Sept. 14.

Calif., Marysville—To S. D. Miller, Manteca, grading and covering with either gravel or crushed rock to depth of 8 in. in center and 4 in. on side, 2.84 mi. road from Dobbins to Cottage Mill Ravine, $11,250; constructing 3 mi. macadam on Ostrom Rd. at Ostrom Station running west and south to Plumas School House, 4,500 cu.yd. grading, 2,015 cu.yd. crushed stone, etc., $11,000. Noted Aug. 10.

Calif., Turlock—To A. Teichert & Son, Oschner Bldg., Sacramento, improving portion of High St., 68.500 sq.ft. 1½ in. warrenite bitulithic on 3 in. asphaltic concrete $0.206, 100,300 sq.ft. grading $0.035, 2,000 ft. concrete gutter $0.24, 300 ft. 12 in. culverts $3.50; portion of North Bway., 38,000 sq.ft. 1½ in. warrenite bitulithic on 3 in. asphaltic concrete $0.206, 72,100 sq.ft. grading $0.035, 2,700 ft. concrete gutter $0.24, 1,800 ft. concrete curb $0.50, 270 ft. culverts $3.50. Noted June 8.

Calif., Yuba City—Supervs. Sutter Co., improving Franklin Rd., to Galbraith & Janes, Box 338, 18,000 sq.yd. grading at $0.18, 1,250 yd. rein.-con. pavement, $13.60. Noted Aug. 31.

Ont., Hamilton—Will build new asphalt pavements on Gore St., by day labor under supervision of E. R. Gray, city engr. $50,000.

Ont., Walkerville—Asphalt pavements to Merlo, Merlo & Ray, Sandwich St., Ford; concrete work to Cadwell Sand & Gravel Co., 228 Sandwich St., Windsor. Total est. $65,000.

Industrial Works

PROPOSED WORK

Mass., Spencer—Wickwire-Spencer Steel Corp. having preliminary plans prepared 3 story, 33 x 100 ft. factory, rein.-con. and brick, plain foundation. $40,000. Architect not announced.

R. I., Providence—Hope St. Garage Co., Inc., 825 Hope St., plans 1 story garage and service station, brick, steel and concrete, 4th St. $50,000. Architect not announced.

N. Y., Buffalo—W. W. Grupp, 425 Humboldt Parkway, plans 1 story, 50 x 52 x 64 x 68 ft., brick, steel and concrete garage, Sycamore St. To exceed $40,000.

N. Y., Buffalo—E. Waechter, 100 Ontario St., plans 2 story, 60 x 100 ft., brick garage, Ross Ave. and Ontario St. To exceed $40,000.

N. Y., Geneva—Lisk Mfg. Co., Canandaigua, plans enameling plant on 14 acre site, here. $1,000,000. Architect not announced.

N. Y., Long Island City—Perry Candy Co., 408 West Bway., New York, soon lets contract brick, steel and concrete factory, plain foundation, Wilbur Ave., here. $75,000. R. G. Cory, 30 Church St., New York, archt. and engr.

N. Y., Jamestown—Jamestown Worsted Mills Co., 335 Harrison St., having plans prepared by Lockwood, Green & Co., archts. and engrs., 1556 Hanna Bldg., Cleveland, O., for factory No. 16, 4 story, 70 x 180 ft., brick, steel and concrete. $250,000.

Pa., Columbia—Peerless Folding Box & Crate Co., having plans completed by F. S. Sheeman, archt., Swan Annex, Johnstown, 1 story, 50 x 200 ft. brick, steel and concrete factory. $40,000.

Pa., Lancaster—Monitor Bi-Loop Radiator Co., Woolworth Bldg., plans addition to factory. Architect not announced.

POWER HOUSE—COHOES, N. Y.

Following are lowest bids opened Aug. 16, by C. L. Cadle, supt. Pub. Wks., Capitol, Albany, for constructing a power house and work incidental thereto, (A) Brown, Lowe & Law Bros., 361 Foster Ave., Schenectady; (B) Eastover Constr. Co., Inc., Herkimer; (C) Troy Public Works Co., Utica. The unit bids were as follows:

	A	B	C
Pumping, bailing and draining (lump sum)	$7.000.00	$7,500.00	$7,500.00
4,500 cu.yd. excavation	2.50	1.25	3.00
48 M ft. b.m. sawed lumber	100.00	90.00	100.00
7,100 cu.yd. first-class concrete	17.70	21.00	19.00
1,725 cu.yd. second-class concrete	14.50	14.00	15.00
350 cu.ft. precast concrete	4.00	1.90	2.00
9,400 lb. iron castings	.08	.08	.08
470,000 lb. metal reinforcement	.06	.075	.055
800 lin.ft. wrought iron pipe railing	— 2.00	2.00	2.00
560,000 lb. structural steel	.06	.06	.055
3,000 sq.yd. painting walls and ceilings	.50	.45	.50
4,600 sq.ft. tile floor	.75	.68	.60
50,000 lb. machinery	.25	.25	.25
1 40-ton crane	9,550.00	11,500.00	10,000.00
1 15-ton crane	6,400.00	7,000.00	6,500.00
Installing hydraulic equipment (lump sum)	10,000.00	11,000.00	10,000.00
1,700 cu.ft. stonework	4.00	3.95	4.00
13,500 sq.ft. face brickwork	1.00	1.00	1.00
11,300 cu.ft. common brickwork	1.00	.99	1.00
452 sq.yd. cement plaster	1.75	1.68	1.75
3,700 sq.ft. solid metal windows	1.25	1.20	2.80
15 metal covered doors	80.00	75.00	80.00
1 vertical lift sliding door	800.00	880.00	800.00
72 squares composition roofing	18.00	17.00	18.00
175 lin.ft. 4-in. downspouts	2.00	1.90	2.00
1 12-in. ventilator	40.00	35.00	40.00
2,000 lin.ft. fibre duct	.25	.25	25.00
10,000 lbs. metal duct	.25	.14	15.00
Electrical work (lump sum)	3,500.00	2,500.00	2,500.00
Extended totals	$329,887	$334,966	$340,474

Industrial Works (Continued)

Pa., Monongahela—H. R. Downer and W. M. Rees, c/o Keystone Garage, having plans prepared 2 story and basement, 60 x 200 ft. brick, steel, stone and tile garage. $40,000. Private plans.

Pa., Pittsburgh—Gulf Refining Co., Frick Annex, plans 144 x 175 ft. refinery, Mathilda and Gross Sts. Private plans.

Pa., Williamsport—W. D. Crooks & Sons, Park St., plans 2 story and basement, 125 x 160 ft. brick and steel plant, Park St. $75,000.

S. C., Greenville—Judson Mills, Community Bldg., having plans prepared by J. E. Sirrine Co., archts., South Main St., 2 story. 175 x 300 ft., textile mill. $600,000.

Ala., Waterford—Houston Power Co., Newton, plans 3,000 hp. hydro-electric power plant, here. Southern Eng. Corp., Albany, Ga., engrs.

Tenn., Knoxville—Louisville & Nashville R.R., Louisville, Ky., plans large concrete and steel freight depot, here. $150,000. W. H Courtenay, 1010 3rd St., Louisville, Ky., ch. engr.

Mich., Detroit—Whitney-Hollinger Co., 408 Dime Bank Bldg., having plans prepared 4 story, 50 x 150 ft., rein.-con. and brick plant, plain foundation, Inner Belt R. R. $1,000,000. Architect's name withheld.

Wis., Antigo—Faust Lumber Co. plans 1 and 2 story, 75 x 190 ft., brick and rein.-con. saw mill, plain foundation, to replace one recently destroyed by fire. $75,000. Architect not selected.

Wis., Clintonville—Service Auto Co. plans 1 story, 50 x 120 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000. A. C. Haase, mgr. Architect not selected.

Wis., La Crosse—J. F. and L. A. Keizer, 935 West Ave., S., plans 1 story, 50 x 60 ft., garage and filling station, brick and rein.-con., plain foundation. $40,000. Architect not selected.

Wis., Pardeeville—Pardeeville Canning Co. plans 2 story and basement, 60 x 90 ft., brick, rein.-con. and steel factory, plain foundation. $40,000. Architect not selected.

Wash., Kelso—See "Buildings."

Wash., Seattle—F. D. Black, Inc., Colman Bldg., having plans prepared by J. R. Nevins, archt., Hoge Bldg., 3 story factory, concrete and mill constructed, R.R. Ave. and Connecticut St. $150,000.

Calif., Oakland—Chevrolet Motor Co., 3044 West Grand Blvd., Detroit, Mich., had plans prepared by A. Kohn, archt., 1000 Marquette Bldg., Detroit, Mich., 2 story, 146 x 684 ft., rein.-con., brick and steel. auto body plant, Hillside Ave. and 73rd St., here. $600,000.

Calif., San Francisco—Ferro Bros., 2823 23rd St., had plans prepared by C. Fantoni, archt., 550 Montgomery St., 2 story, 25 x 104 ft., brick and steel, addition to bakery, 23rd and York Sts.

Que., Montreal—Quebec Liquor Comrs., 34 St. Paul St. W., plans 2 story garage, Delormier St., $53,000.

Ont., Niagara Falls—Davidson & Williams, Chippawa, having plans prepared for garage and repair shop, here. $50,000. Prices wanted on equipment.

Ont., St. Thomas—Bylaw to spend $120,000 for rebuilding plant and installing new vertical retorts was defeated. New plans are to be prepared by R. Christie, supt. city gas works, and if work can be reduced to $100,000 it will probably be proceeded with.

BIDS DESIRED

N. J., Trenton—Sept. 26, by Bd. Freeholders Mercer Co., 2 story, 55 x 75 ft., brick and steel warehouse and garage, Brunswick Ave. $40,000. W. W. Slack & Son, 142 East State St., archt.

Pa., Meadville—Meadville Iron Co. Inc., Mill St., taking bids 1 story, 60 x 88 ft. addition to factory, Mill St. Shutts & Morrison, Marine Bank Bldg., Erie, archts.

Pa., Phila.—Budd Mfg. Co., 21st and Hunting Park Aves., taking bids 6 story, 100 x 329 ft. rein.-con. and brick factory, plain foundation, 21st and Hunting Park Aves. Ballinger & Co., 12th and Chestnut Sts., archts.

Va., Richmond—Sept. 25, by Ophuls & Hill, Inc., consult. engrs., 112-114 West 42nd St., New York, remodeling building and installing equipment for Merchants Cold Storage & Ice Mfg. Co., 208 South 6th St. $250,000.

Wis., Milwaukee—C. H. Tharinger, archt., 3328 State St., taking bids and opens same about Sept. 25, 6 story and basement, 72 ft. high, 43 x 138 ft., brick and timber warehouse, plain and wood pile foundation, for Neidhofer & Co., 253 East Water St. Noted April 13.

Wis., Union Grove—Oct. 3, by State Bd. Control, Madison, 1 story, 50 x 90 ft., brick and steel laundry, plain foundation, at Wisconsin Home for Feeble Minded, here. $40,000. A. Peabody, Capitol Bldg., Madison, archt.

Kan., Atchinson—Blair Milling Co., 300 South 4th St., taking bids 6 story and basement, 36 x 83 ft., flour mill, concrete pile foundation. H. Wyatt, 306 McMillian Bldg., Kansas City, Mo., archt,

Mo., North Kansas City—Sept. 24, by Burrell Eng. Co., archts. and engrs., 403 Arcade Bldg., Kansas City, 8 story, 64 x 204 ft., rein.-con., brick and steel mill, 300,000 bu. capacity, 14 tanks, 20 ft. diameter, 90 ft. high, here, for Kansas Flour Mills Co., Postal Telegraph Bldg., Kansas City. Noted Sept. 14.

BIDS RECEIVED

Calif., Petaluma—Poultry Producers of Central California, 323 East Washington St., 110 x 210 ft. packing plant, hollow tile, from Ward & Jones, 180 Jessie St., San Francisco, $42,988; Vogenson Constr. Co., Petaluma, $45,120; R. W. Moller, Call Bldg., San Francisco, $45,994.

Calif., Sacramento—State Dept. Pub. Wks., 2 story, 160 x 160 ft., printing plant, from Davison & Nicolsen, 180 Jessie St., San Francisco, $94,800; Herndon & Finnegan, 1814 17th St., $103,926; K. E. Parker Co., 519 California St., San Francisco, $105,400. Noted Aug. 31.

CONTRACTS AWARDED

R. I., Providence—United Electric Railways Co., Union Sta., 1 and 2 story, 88 x 250 ft. garage and service station, brick and concrete, Melrose and Russell Sts., to F. L. Pierce, 201 Union Trust Bldg. Noted Sept. 7.

Del., Wilmington—Hilles & Jones Co., 2 story, 25 ft. high, 88 x 240 ft. foundry, steel frame, brick walls, plain foundation, 9th and Church Sts., to Shoemaker-Satterthwaite Bridge Co., 4 South 15th St., Phila. Engrs. est. $50,000.

N. Y., Brooklyn—Rubel Coal & Ice Corp., Glenmore Ave., 1 story, 100 x 168 ft., brick, steel and concrete factory, plain foundation, Ave. J and East 10th St., by day labor. $200,000. Private plans.

N. Y., Fulton—Peters Chocolate Co., 40 x 80 ft. boiler house incl. boiler foundations, 8 x 8 x 140 ft. power tunnel and chimney foundation, to Barto-Phillips Co., 52 Vanderbilt Ave., New York. $50,000.

N. Y., Hudson—Holbrook Co., 100 x 260 ft. automobile body manufacturing building, 20 x 30 ft. boiler house, 20 x 30 ft. service building and 25 x 50 ft. connecting passage, etc., to Barto-Phillips Co., 52 Vanderbilt Ave., New York, $80,000.

N. Y., Rochester—Jensen-Mac Collum Co., 529 East Main St., removing present gas filling station and erecting 1 story, 100 x 155 ft. and 20 x 24 ft. auto sales and service station, brick and steel, concrete pile foundation, Main St. E., general contract, to J. B. Pikee, 1 Circle St. Archts. est. $75,000.

Pa., Phila.—Harrison Brush Co., 4th and Arch Sts., 3 story and basement, 30 x 110 ft. rein.-con., brick and steel factory, plain foundation, 4712-14 Market St., to Schaefer & Co., Otis Bldg. Archts. est. $80,000. Noted July 20.

Pa., Pittsburgh—Graham Nut & Bolt Co., 1317 West Carson St., 1 story factory, steel frame, Neville Island, to Harding & Crea, White Bldg., Buffalo, N. Y., $96,000.

N. J., Trenton—Standard Inlaid Mfg. Co., East State St., 2 story, 35 x 258 ft., rein.-con. and brick factory, to Karno-Smith Co., Broad St. Bank, $50,000.

Tenn., Nashville—Baptist Sunday School Bd., 8th Ave., 4 story, publishing and mailing building, brick, concrete and steel, Berryhill St., to E. G. Holliday Co., 22 Noel Blk., $153,000. Engrs. est. $175,000.

O., Cleveland—A. Claus Mfg. Co., 5701 Walworth Ave., 1 story, 80 x 450 ft. and 80 x 240 ft. brick and steel factory and warehouse, Brook Park Rd., to H. G. Slatmyer & Son Constr. Co., 203 Lakeside Ave., N. W. Archts. est. $250,000.

Mich., Flint—Fisher Body Ohio Co., East 140th St. and Coit Rd., Cleveland, O., 2 story, 202 x 401 ft. rein.-con. and brick factory, Wilcox St., to Realty Constr. Co., Flint, $500,000. Noted Sept. 7.

Wis., Appleton—Valley Motor Car Co., 726 College Ave., 2 story, 50 x 60 ft., garage and repair shop, brick and rein.-con., to Appleton Constr Co., Odd Fellows Bldg. Engrs. est. $40,000.

Wis., Athens—Rietbrock Land & Lumber Co., 700 Cedar St., Milwaukee, will build 2 story, 25 ft. high, 40 x 80 ft., brick and timber planing mill, by day labor. Private plans.

Wis., Hartford—Kissel Motor Car Co. structural steel for power house, 40 x 80 ft., 40 ft. high, brick and steel, plain foundation, to Milwaukee Bridge Co., 1400 34th St., Milwaukee; balance of work to be done by day labor. Engrs. est. $40,000. Cahill & Douglas, 217 West Water St., Milwaukee, engrs.

Wis., Oshkosh—Winnebago Co. c/o Clerk, 1 story, 58 x 120 ft., garage and repair shop, brick and rein.-con., plain foundation, to Blake Constr. Co., 816 College Ave., Appleton. Engrs. est. $40,000. Noted Aug. 17.

Wis., Sheboygan—Keil Oil Co., c/o W. G. Keil, 1516 North 9th St., will build 1 story, 40 x 90 ft., brick and rein.-con. filling station and garage, by day labor. $40,000. Private plans.

Buildings

PROPOSED WORK

Mass., Boston—Apartment and Store—Coleman & Gilbert, 331 Huntington Ave., having plans prepared, apartment and store building, probably concrete, Huntington Ave. and Gainsborough St. $400,000-$500,000. Architect not announced.

Conn., Bridgeport—High School—Bd. Educ. plans 3 story and basement, brick and concrete, Boston and Central Aves. $900,000. Architect not selected.

Conn., Greenwich—Lodge—Acacia Lodge 85, A. F. & A. M. Havemeyer Pl., having plans prepared by G. B. Post & Sons, archts., 101 Park Ave., New York City, and F. G. C. Smith, associated archt., Smith Bldg., 2 story, 86 x 110 ft. brick and concrete, Havemeyer Pl. $150,000. This corrects report of Sept. 7 issue.

N. Y., Arverne (Far Rockaway P. O.)—High School—Bd. Educ., 500 Park Ave., New York, plans brick, steel and stone, plain foundation, Beach 61st St. and Boulevard, here. $1,260,000. C. B. J. Snyder, Concord St., Brooklyn, archt. and engr.

N. Y., Brooklyn—Hospital—Methodist Episcopal Hospital, 6th St., soon lets contract 100 x 145 ft., brick, steel and stone addition, plain foundation, 6th St. and 7th Ave. $450,000. Crow, Lewis & Wick, 200 5th Ave., New York, archts. and engrs.

N. Y., Hicksville—High School—Bd. Educ. having sketches made by Coffin & Coffin, archts. and engrs., 522 5th Ave., New York, brick, steel and stone, plain foundation. $200,000.

N. Y., New York—Office—Thirty-Three West 60th St. Corp., c/o Rouse & Goldstone, archts. and engrs., 512 5th Ave., having plans prepared 11 story, 100 x 109 ft., brick, steel and stone, plain foundation, 27-37 West 60th St. $50,000.

N. Y., Owego—School—Bd. Educ. soon takes bids 3 story, 150 x 200 ft., brick, steel and stone, plain foundation. $275,000. Coffin & Coffin, 522 5th Ave., New York, archts. and engrs. Noted April 6.

N. Y., Rochester—Apartment—A. B. Headley (owner and archt.), 4 Church St., plans apartment, East Ave. $250,000.

N. J., Newark—School—Bd. Educ., Broad St., soon takes bids brick, steel and stone, plain foundation, Hawkins St. $235,000. Private plans.

N. J., Paterson — Hospital — Paterson Genl. Hospital having sketches made by Crow, Lewis & Wick, archts. and engrs., 200 5th Ave., New York City, 4 story, brick, steel and stone addition, plain foundation, Market St, $400,000.

Pa., Johnstown — Hospital — Conemaugh Valley Memorial Hospital, plans 3 story and basement, 100 x 120 ft. brick and steel, Franklin St. $150,000. Architect not selected.

Pa., Oakmont—Apartment and Store—Deaveshall Co., soon takes bids 3 story and basement, 80 x 118 ft. brick, steel and stone, plain foundation. $175,000. H. L. Reinhold, Jr., Otis Bldg., Phila., archt.

Pa., Phila. — Apartment — Neubauer & Supowitz, archts., 929 Chestnut St., soon takes bids 4 story, 90 x 108 ft. brick and steel, plain foundation, 48th and Walnut Sts. $200,000. Owner's name withheld.

Pa., Phila.—Office and Store—Mastbaum Bros. & Fletcher, 15th and Chestnut Sts., soon takes bids 12 story, 102 x 188 ft. brick, steel and stone, plain foundation, 21st and Market Sts.. $1,000,000. Hoffman-Henon Co., Finance Bldg., archts.

Pa., Phila.—Sales, etc.—J. J. Greenberg, c/o Nash Motor Co., 901 North Broad St., plans 5 story, 75 x 160 ft. rein.-con., brick and stone, plain foundation, Broad and Thompson Sts. $250,000. P. S. Tyre, 1509 Arch St., archt.

Pa., Phila.—Store and Office—E. L. Rothchild, archt., 1420 Chestnut St., soon takes bids 3 story and basement, 23 x 105 ft. brick and steel, plain foundation, 1122 Walnut Ave. $175,000. Owner's name withheld.

Del., Claymont—High School—Dept. of Educ. having plans prepared by Coffin & Coffin, archts. and engrs., 522 5th Ave., New York City, 2 story, 80 x 280 ft., brick, steel and stone, plain foundation. $275,000.

Md., Baltimore — Apartment — Joint Ownership Constr. Co., 323 North Charles St., having plans prepared by R. G. Pratt, archt., 323 North Charles St., 3½ story, 53 x 80 ft., brick and stucco, plain foundation, Charles St. $150,000.

Md., Westport (Baltimore P. O.)—School—School Bd., 1310 Madison Ave., Baltimore, having plans prepared by B. Frank, archt., 328 North Charles St., Baltimore, 4 story and sub-basement, rein.-con. and brick, plain foundation, Navada and 1st Sts., here. $300,000. J. Posey, 11 East Pleasant St., Baltimore, engr.

D. C., Wash.—Auditorium—Calvary Baptist Church, 8th and H Sts., N. W., plans 95 x 130 ft., stone. $4,000,000. A. B. Heaton, Maryland Bldg., archt.

D. C., Wash.—Convention Hall—Convention Hall Assn. having plans prepared by Milburn Heister Co., archts., 710 14th St. N. W., for convention hall. $375,000.

West Virginia—Home—Grand Lodge, Knights of Pythias, c/o H. R. Bell, 213½ North Huron St., Wheeling, plan 4 story. Location not decided. Architect not selected.

Ga., Atlanta—College—Georgia School of Technology having plans prepared by Robert & Co., archts. and engrs., Tuft Bldg., new chemistry building, $250,000; commerce and architecture building, $150,000; quardrangle dormitories, each of 4 buildings to provide restaurants and living quarters for 150 students, $500,000; auditorium, 3,000 seating capacity, $300,000; gymnasium, $225,000; also plans to expend $75,000 for additional real estate to add to campus, the rearrangement of the campus, establishment of new light areas and general remodeling of existing buildings.

Fla., Orlando—Hotel—M. Overstreet, J. L. Giles, et al., having plans prepared by E. Krug, archt., Orlando, 100 room hotel, stucco, adjoining country club. $300,000.

Fla., Sarasota—Hotel—Stock Co. promoted by Chamber of Commerce, W. B. Towles, 935 Argyle St., Chicago, et al, having plans prepared by W. C. Kraig, archt., Sarasota, and Chicago, (street address not available), 4 story, 150 x 170 ft., rein.-con. and steel. $1,000,000.

Fla., Tavares—Court House—Lake Co. plans court house. $175,000. G. E. Heller, co. engr.

O., Arcadia—School—Bd. Educ. having plans prepared by T. McLaughlin, archt., Savings Bldg., Lima, 2 story and basement, brick and concrete. $150,000. H. I. Bricker, clk.

O., Athens — Gymnasium — Bd. Trustees Ohio University, having plans prepared by F. L. Packard, archt., New Hayden Bldg., Columbus, 3 story and basement, brick, stone and concrete, on campus. $200,000.

O., Cincinnati—Clubhouse—Queen City Club, c/o James Gamble Rogers, archt. and engr., 367 Lexington Ave., New York City, having sketches made brick, steel and stone, plain foundation, 4th St. and Bway., here. $350,000. H. A. Worchester, chn. building com.

O., Cleveland—Commercial—Ninety-Nine Year Lease Co., c/o T. H. McKee, 409 Swetland Bldg., plans 3 or 4 story, brick, steel and concrete, southwest corner Chester Ave. and Dodge Court. $150,000. Architect's name withheld.

O., Cleveland — Store and Office — H. Guenther and D. R. Davies, 1733 Euclid Ave., having plans prepared by W. S. Ferguson Co., archts., 1900 Euclid Ave.. 12 story, 50 x 189 ft., brick, steel and concrete, 1510 Euclid Ave. $500,000. Only 2 stores will be built at present.

O., Cleveland—Theatre and Office — W. Fox Corp., c/o W. R. Sheehan, genl. mgr., 10th Ave. and 55th St., New York City, having plans prepared by T. W. Lamb, archt., 644 8th Ave., New York City, 16 story, brick, steel and concrete, Euclid Ave., here. $2,000,000.

O., Columbus Grove—High School—Bd. Educ. having plans prepared by T. McLaughlin, archt., Savings Bldg., Lima, 2 story and basement, brick and concrete. $150,000.

O., Elyria—Club—Loyal Order of Moose, plans modern fireproof clubhouse, 2nd St. $150,000. Architect not announced.

O., Lorain—High Schools—Bd. Educ. having plans prepared by F. C. Warner, archt., Hoppodrome Annex, Cleveland, 2 story, brick, steel and concrete addition, East 31st St. and Seneca Ave., $150,000; brick, steel and concrete addition, East 20th St. and Oakdale Ave. Noted Nov. 3.

O., Massillon—High School—Bd. Educ. having plans prepared by Albrecht, Wilhelm & Kelley, archts., 1836 Euclid Ave., 2 story, brick, steel and concrete. $250,000.

Mich., Detroit—Church—Lady of Rosary Church, Woodward and Medbury Aves., having plans prepared by J. Finn & Sons Co., archts., 7720 Plymouth Rd., 2 story, 90 x 120 ft. brick, steel and stone, plain foundation. Woodward and Medbury Aves. $150,000.

Ill., Chicago—Club—B. P. O. E. Building Comn., 50 East 42nd St., New York City, having plans prepared by E. Swartout, archt. and engr., 18 West 34th St., New York City, for brick, steel and stone memorial club, plain foundation, Lake View Ave., near Diversey Parkway, here. $3,000,000.

Wis., Appleton — High Schools — Bd. Educ., receiving sketches two 4 story, 75 x 190 ft. junior high schools, rein.-con., brick and steel, plain foundations. $500,000. E. L. Williams, clk. Architect not selected.

Ia., Des Moines—Office—Equitable Insurance Co. of Iowa, Bankers Trust Bldg., soon receives bids 18 story, 132 x 133 ft., rein.-con., brick, steel, stone and tile, 6th and Locust Sts. $2,000,000. Proudfoot, Bird & Rawson, 810 Hubbell Bldg., archts.

Minn., Minneapolis—Institution—Bethany Home, 3719 Bryant Ave. S., had plans prepared by A. R. Van Dyck, archt., 819 1st Natl.-Soo Line Bldg., 3 story and basement, 143 x 162 ft., rein.-con., brick and tile, 3719 Bryant Ave. S. Soon takes bids on 1st unit of superstructure. Major part of foundation contract let to Madsen Constr. Co., 848 Builders Exch., $6,000. Remainder to be let later. Total $175,000.

Minn., Winona—Schools—Bd. Educ. plans several rein.-con. buildings. $1,000,000. A. H. Kressin, clk. Croft & Boerner, 1006 Marquette Ave., Minneapolis, archts.

Mo., Kansas City—Elephant House—City Park Bd., City Hall, having plans prepared by Wright & Wright, archts., 4th Natl. Bank Bldg., 80 x 100 ft., rein.-con., brick and steel.

Mo., Kansas City—Memorial—Liberty Memorial Assn. having plans prepared by H. V. B. Magonigle, archt., 101 Park Ave., New York City, for memorial building. (Union Station Plaza). $2,000,000.

Tex., Ft. Worth — Home — Masonic Orphans' Home having plans prepared by H. M. Greene Co., archts., N. Texas Bldg., Dallas, 2 story and basement, 50 x 150 ft. $150,000.

Tex., Ft. Worth—Hospital—Bd. Trustees Methodist Hospital having plans prepared by Clarkson & Gaines, archts., 1st Natl. Bank Bldg., 5 story, containing 400 beds. $1,000,000.

Tex., Houston—Club—Knights of Columbus, Crawford St., having plans prepared by M. J. Sullivan, archt., Carter Bldg., 4 story, 75 x 150 ft., rein.-con. and steel, plain foundation. $200,000.

Okla., Tulsa—Mercantile—Jacobs Mercantile Co., 106 Detroit St., plans building, 106 South Detroit St. $300,000-$500,000. Architect not selected.

Wash., Kelso—Theatre, School, Church, etc.—Long Bell Lumber Co., 14th and Kenwood Sts., Kansas City, Mo., having plans prepared by F. E. McIlvain, archt., 1001 Orear Leslie Bldg., Kansas City, Mo., general store, moving picture theatre, school, church, hospital, Y. M. C. A. building, city hall and residences, also light and water plants, near here.

Calif., Bakersfield—Hospital—Kern Co. soon takes bids group of buildings for hospital, brick, stone and terra cotta. To exceed $150,000. C. H. Biggar, 1st Natl. Bank Bldg., archt. Noted Feb. 2.

Calif., Berkeley—Church—Trinity Methodist Church, c/o G. Rushforth, archt., 354 Pine St., San Francisco, having preliminary plons prepared church, Durant Ave. and Bancroft Way. $250,000.

Calif., Chico—Bank and Office—First National Bank, having plans prepared by C. Cole, archt., Waterland-Breslauer Bldg., 4 story, 3rd and Main Sts.

Calif., Colusa — Hospital — Colusa Co. plans election in November to vote on $150,000 bonds for hospital. Architect not selected.

Calif., Crockett—School—Crockett School Dist. plans election to vote on $250,000 bonds for school.

Calif., San Francisco—Apartments—C. Grillo (Standard Investment Co.), 948 Market St., having plans prepared by W. Beasley, archt., 948 Market St., 6 story and basement, rein.-con., Eddy St. near Hyde St.; three 6 story and basement, rein.-con., Northwest Eddy and Hyde Sts.; three 6 story and basement, rein.-con., O'Farrell St. between Hyde and Polk Sts.

Calif., San Francisco—Apartment—J. E. Levin, 1507 Folsom St., San Francisco, and S. Levin, New York, having plans prepared by C. A. Meussdorffer, archt., Humboldt Bank Bldg., 9 story and basement, rein.-con., Northwest Jackson and Laguna Sts. $200,000.

Buildings (Continued)

Que., Montreal—City Hall—City soon takes bids 5 story building incl. garage, to replace one destroyed by fire. $1,000,000. L. Parent, city archt. Viau & Venne, 76 St. Gabriel Ave., D. J. Spence, 246 Beaver Hall Hill, and Amos, Carmier & Marchand, Montreal, (street address not available), all consult. archts.

Ont., Sudbury—Theatre—Regent Theatre Ltd., had plans prepared by Hall & Duerr, archts., Lumsden Bldg., Toronto, 2 story and basement, 50 x 120 ft., concrete, brick and steel. $150,000.

B. C., Vancouver—Store—Woodward Department Stores Ltd., Hastings and Abbott Sts., takes bids about January, 6 story and basement, 86 x 132 ft., 75 ft. high, brick, steel and tile, Hastings St. near Abbott St. $200,000. W. T. Whiteway, 207 Hastings St. W., archt.

BIDS DESIRED

Conn., Bridgeport—E. B. Caldwell, Jr., archt., 886 Main St., taking bids 4 story, 55 x 120 ft. brick and concrete, plain foundation, Park Ave., for Y. W. C. A., 263 Golden Hill St. $150,000. Noted June 1.

N. Y., New York—Apartment—F. F. French Co., 299 Madison Ave., 14 story, 50 x 80 ft., brick, steel and stone, plain foundation, Park Ave. $750,000. Work will be done by separate contracts.

N. J., Cinnaminson—School—Sept. 25, by Bd. Educ., Westfield P. S. Bldg. at intersection of Moorestown-Riverton Rd. and Pomona Rd. for addition to Westfield P. S. J. F. Street, 129 South 5th St., Phila., archt.; adv. this issue.

N. J., West Orange—School—Sept. 25, by Bd. Educ., brick, steel and stone, plain foundation. $350,000. Guilbert & Bettelle, 548 Broad St., Newark, archts. and engrs.

Pa., Altoona—School—Oct. 16, by School Dist., 3 story and basement, 224 x 232 ft. fireproof. J. Millard, Altoona, archt.; adv. this issue. Noted Aug. 10.

Pa., Germantown (Phila. P. O.)—B. F. Betts, archt., Land Title Bldg., Phila., taking bids 2 story, 50 x 90 ft. brick, steel and stone, plain foundation, Germantown Ave. and Haines St., for Y. M. C. A., Germantown Ave. and Haines St. $150,000.

Pa., Phila. — Bank — Wayne Junction Trust Co., c/o A. Scanlon, taking bids 3 story, 40 x 110 ft. brick, steel and stone, plain foundation, Germantown Ave. and Robets St. $200,000. Simon, Brittain & English, 336 4th Ave., Pittsburgh, archts.

Pa., Vandergrift—Sept. 30, by Bd. Educ., 2 story and basement, brick and stone addition. $155,000. W. G. Eckles, New Castle, archt. Noted Aug. 10.

Md., Baltimore—Apartment—Oct. 10, by R. G. Pratt, archt., 323 North Charles St., 3 story, 59 x 69 ft. rein.-con. and brick, plain foundation, North Charles St., for Joint Ownership Constr. Co., 323 North Charles St. $175,000.

Md., Baltimore — Memorial — State of Maryland and City of Baltimore taking bids and open same about Oct. 15, 102 x 118 ft., rein.-con. and Indiana marble, plain foundation, Gay and Fallsway Sts. $900,000. E. B. Lee, Rockville, chn. State Memorial Com. and H. C. Jones, Chamber of Commerce Bldg., chn. City Memorial Com. L. H. Fowler, 347 Uorth Charles St., archt.

O., Lima—Store—Sept. 22, by Hoover & Bond Co., 18 Pub. Sq., 4 story, 42 x 105 ft., brick, concrete and terra cotta, Main St. $150,000. P. Hulsken, 216 West Market St., archt.

Mich., Detroit—School—Sept. 28, by Bd. Educ., 2 story and basement, 24 ft. high, 58 x 182 ft. and 67 x 181 ft. rein.-con., brick and steel, plain foundation, Duboise and Waterloo Sts., $250,000. Malcomson, Higginbotham & Palmer, 405 Moffat Bldg., archts.

Tenn., Memphis — Temple and Office — Jones & Furbringer, Porter Bldg., and Hanker & Cairns, Madison Ave. Bldg., associated archts., taking bids 11 story, steel, concrete, brick and tile, Monroe and South Front Sts., for Al Chymia Temple Mystic

Wis., Milwaukee—Business—M. Tullgren & Sons, archts., 425 East Water St., taking bids and opens same about Sept. 26, 3 story, 70 x 150 ft., brick and concrete addition, for C. Niss & Sons, 697 3rd St. $150,000. Noted Aug. 17.

Wis., Racine—Vocational School—Oct. 17, by Bd. of Industrial Educ., 3 story and basement, 54 ft. high, 185 x 220 ft., brick, tile and concrete, plain foundation. $200,000. J. M. Matson, 533 Baker Blk., archt.

Ia., Bloomfield—School—Oct. 1, by Bd. Educ., 2 story and basement, rein.-con., brick and tile. $150,000. R. C. Bristow, clk. W. Gordon, 319 Hubbell Bldg., Des Moines, archt.

PAVING—AKRON, OHIO

Bids were opened Sept. 6, by M. P. Tucker, dir. Pub. Serv., for grading and paving North Main St. from York St. to Cuyahoga Falls Ave., (A) T. E. McShaffrey Constr. Co., 171 South Forge St.; (B) Engineer's Estimate; (C) Columbus Asphalt Paving Co., Buckeye Bldg. The unit bids were as follows:

	A	B	C
7,500 cu.yd. grading	$0.70	$0.90	$1.00
5,500 lin.ft. under drains, 4-in. pipe	.05	.15	.17
500 lin.ft. grains, 12-in. pipe	1.25	1.20	1.50
1 sewer lateral with wye	35.00	40.00	50.00
44 sewer laterals without wye	35.00	40.00	48.00
14 manholes readjusted	5.00	10.00	2.00
16 inlets pl. I	25.00	40.00	40.00
5 cu.yd. concrete Cl. II	10.00	10.00	15.00
2,525 lin.ft. sandstone curb hand dressed	1.40	1.40	1.50
20 lin.ft. sandstone circular curb	2.00	2.25	2.50
600 lin.ft. granite circular curb	3.50	3.50	3.50
2,400 lin.ft. sandstone curb redressed	.25	.25	.50
2,400 lin.ft. curb reset	.35	.50	.75
100 lin.ft. stone headers	1.00	1.00	1.25
12,100 sq.yd. concrete base 6-in. thick	1.45	1.35	1.45
12,100 sq.yd. concrete base, 7-in. thick	1.70	1.60	1.65
12,100 sq.yd. concrete base, 8-in. thick	1.90	1.85	2.00
12,100 sq.yd. standard brick pavement cement fill	2.25	2.10	2.25
12,100 sq.yd. standard brick pavement, asphalt	2.35	2.50	2.50
1,400 sq yd. standard brick pavement, gutter cement fill	2.30	2.20	2.40
4,400 sq.yd. standard brick pavement, inside car tanks cement fill	2.25	2.40	2.35
4,400 sq.yd. standard brick pavement, inside car tanks, asphalt fill	2.25	2.50	2.50
620 sq.yd. granite block pavement, cement fill	5.25	5.00	5.85
620 sq.yd. granite block pavement, asphalt fill	5.25	5.20	6.00
10,700 sq.yd. sheet asphalt pavement "Pl. B" Trinidad	1.95	2.00	1.90
10,700 sq.yd. sheet asphalt pavement, Pl. "B", Texaco	1.80	1.80	1.75
10,700 sq.yd. sheet asphalt pavement, Pl. "B" Mexican		1.80	1.70
10,700 sq.yd. bitulithic pavement	1.90	2.00	2.00
50 sq.yd. brick pavement relaid	1.00	1.75	2.50
26,100 sq.ft. cement walks	.19	.20	.20
5,400 sq.ft. cement driveways	.27	.26	.30
100 sq.ft. cement walks relaid	.15	.15	.20
1,000 lb. reinforcing steel	.05	.06	.05
5 concrete monuments	10.00	15.00	15.00
9 street signs acc. 5,570	25.00	20.00	25.00
130 shade trees	7.00	10.00	7.00
11,200 lin.ft. rails prepared with mortar	.10	.10	.15
11,200 lin.ft. rails prepared with bituminous strip	.15	.15	.20
1,400 lin.ft. 4-in. W. I. pipe drains	.75	.65	.60
350 lin.ft. 3½-in. fibre conduit	.75	.70	1.00
Cement is omitted from cushion deduct (per sq.yd.)	.10	.10	.05
Cinder base is omitted, deduct (per sq.ft.)	.02	.03	.02
Extended totals standard brick pavement cement fill, 6-in. base	$83,535	$84,407	$91,005
Extended totals standard brick pavement, asphalt fill, 6-in. base	84,140	86,181	93,573
Extended totals sheet asphalt pavement, pl. "B" Trinidad, 6-in. base	*80,465	84,461	88,363
Extended totals sheet asphalt pavement, pl. "B" Texaco, 6-in. base	78,860	82,321	86,758
Extended totals sheet asphalt pavement, pl. "B" Mexican, 6-in. base		82,321	86,223
Extended totals bitulithic pavement, 6-in. base	$79,930	84,461	89,438

* Awarded contract.

Ia., Des Moines—Schools—Sept. 29 by Bd. Educ., for Wallace School, East 30th and Cleveland Sts., $80,000; Elmwood School, 31st and Brattleboro Sts., $80,000; Monroe School, 30th and Hickman Sts., $40,000; Adams School, East 29th and Douglas Sts., $40,000; all 2 story and basement, brick and concrete. Proudfoot, Bird & Rawson, 810 Hubbell Bldg., archts.

N. D., Jamestown—Sept. 29, by State Bd. Administration, Bismarck, 3 story and basement, rein.-con., brick, stone and tile, at state hospital for insane, here. $200,000. Keith & Kurke, Equity Bldg., Fargo, archts.

Calif., Santa Rosa—School—Sept. 25, by Trustees Santa Rosa Grammar School Dist., rein.-con. school. $150,000. W. H. Weeks, 369 Pine St., San Francisco, archt. Noted June 22.

Calif., Selma—Science—Oct. 10, by Trustees Selma High School Dist., 3 story, 145 x 151 ft., rein.-con. N. F. Marsh, Broadway Central Bldg., Los Angeles, archt.

BIDS RECEIVED

Del., Smyrna—High School—For 1 and 2 story, 80 x 150 ft., rein.-con. and brick, plain foundation, from A. L. Hudson, Smyrna. $157,800; J. T. Ryan, Smyrna, $257,937.

O., West Carrollton—School—Bd. Educ. opened bids Sept. 5, 2 story, rein.-con. and brick, from H. R. Blagg Co., 1229 East 3rd St., Dayton, $119,890; J. Lowes, Inc., 509 West 2nd St., Dayton, $123,000; N. S. Hogankamp, Minster, $127,200.

CONTRACTS AWARDED

N. Y., Avoca--High School—Bd. Educ., 330 x 380 ft., brick, steel and stone, plain foundation, to L. Dennison, 162 North Main St., Hornell. Archts. est. $350,000.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, P. S. 16, Wilson St. near Bedford Ave., here, to C. Meads Co., 217 West 14th St., New York, $174,100. Noted Sept. 7.

N. Y., Buffalo—School—Bd. Educ., 1401 Telephone Bldg., general contract School 69, 3 story, 175 x 250 ft., rein.-con., brick and tile, Clinton St., to Tifft Constr. Co., Iroquois Bldg., $336,651; heating and ventilating work, to R. J. Moran, 379 East Utica St., $61,645. Noted Aug. 31.

N. Y., Johnson City—Church and Parish House—All Saints Episcopal Church, brick, steel and stone, plain foundation, Main St., to Dillon & Wiley, 103 Park Ave., New York. Archts. est. $200,000. Noted April 6.

N. Y., New York—Apartment—Estate of G. F. Johnson, 30 East 42nd St., 5 story, brick, steel and stone, plain foundation, Fox St., by day labor. $175,000. C. Kreymborg, 2534 Marion Ave., archt. and engr.

N. Y., New York—Apartment—Jatison Constr. Co., c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., 9 story, 84 x 100 ft., brick, steel and stone, plain foundation, 146-152 West 55th St., by day labor. $600,000.

N. Y., New York — Exchange — Attica Film Corp., 484 5th Ave., 2 story, brick, steel and stone, plain foundation, 331 West 44th St., to Thompson-Starrett Co., 49 Wall St. Archts. est. $250,000.

N. Y., New York—Hotel—Empire Hotel, Columbus Ave. and 73rd St., 12 story, 115 x 130 ft., brick, steel and stone, plain foundation, to Empire Contg. Organization, Inc., 130 West 42nd St. Archts. est. $750,000.

N. Y., New York—Loft—C. Glazer, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., 9 story, 70 x 85 ft., brick, steel and stone, plain foundation, West 26th St., by day labor. $350,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., P. S. 64, brick, steel and stone, Walton Ave. and East 171st St., to T. Dwyer, Bway. and 216th St., $624,000. Archts. est. $500,000. Noted Sept. 7.

N. J., Trenton—Bank—Broad St. Natl. Bank, 8 story, 50 x 118 ft. brick and steel addition, Montgomery St., to Karno-Smith Co., Broad St. Bank, $400,000.

Pa., Erie—High School—Bd. Educ., 2 story and basement, 200 x 304 ft., brick and stone, 23rd and Cascade Sts., general contract to H. J. Conrath, Ariel Bldg.; plumbing to Barnes & Clarke, New Castle. Archts. total est. $450,000. Noted July 13.

Pa., Phila. — Academy — Academy of Sacred Heart, 3 story, 42 x 174 ft. with 39 x 51 ft., 59 x 92 ft. and 42 x 89 ft. wings, City line and Haverford Aves., to Doyle & Co., 1519 Sansom St. Archts. est. $500,000.

Pa., Phila. — Church — St. Aloyasius Roman Catholic Church, 1 story and basement, 63 x 116 ft. rein.-con., brick and stone, plain foundation, 26th and Tasker

Buildings (Continued)

Sts., to E. Fay & Co., 2 South Mole St., $150,000.

Pa., Phila.—Office—A. M. Greenfield, 15th and Chestnut Sts., 20 story, 79 x 138 ft., 15th and Chestnut Sts., to F. W. Mark Constr. Co., Commercial Trust Bldg., $1,250,000.

Pa., Phila.—Office—Middle City Realty Co., Walnut and Juniper Sts., 17 story and basement, 53 x 230 ft., Walnut and Juniper Sts., to F. W. Mark Constr. Co., Commercial Trust Bldg., $1,000,000.

Pa., Phila.—Office and Sales—T. B. Gibbs, c/o Carson & Carson, archts., 1620 15th St., 10 story, 19 x 104 ft., rein.-con. and brick, to Hughes-Foulkrod Co., Commonwealth Bldg., $575,000.

Pa., Phila.—Recreation—Bureau Recreation, City Hall, 1 and 2 story, 48 x 275 ft. rein.-con., brick and steel, recreation center, plain foundation, 52nd St. and Sedgley Ave., to Robbins Constr. Co., 1137 North Front St., $170,000.

Pa., Phila.—School—Bd. Educ., 2 story, 113 x 134 ft., brick and steel, plain foundation, Palmetto and Bleigh Sts., to Kober Constr. Co., 34 South 17th St., $246,777. Noted Sept. 14.

Pa., Phila. — Magaziner & Eberhard, archts., 603 Chestnut St., 5 story, 72 x 81 ft. brick and steel, plain foundation, Cherry and Lambert Sts., to W. R. Dougherty & Co., 1610 Sansom St., for Y. M. C. A., 18th and Arch Sts. Archts. est. $200,000. Noted Aug. 17.

Va., Winchester—School—Bd. Trustees, 1 story, 197 x 551 ft., brick, concrete and steel ,incl. auditorium to seat 2,000, to J. L. Crouse, Greensboro, N. C., $1,000,000.

Fla., Ft. Pierce—Theatre and Store—R. N. Koblegard, Woodward Bldg., Wash., D. C., and Ft. Pierce, theatre and store, 34 ft. high, rein.-con. and steel, Pine St., to C. E. Cahon, Ft. Pierce. Archts. est. Archts. est. $150,000

Fla., Miami — Cathedral — Scottish Rite Masons, 140 x 190 ft., rein.-con. and steel, Northwest 3rd St. and North River Dr., to J. B. Orr, Miami, cost plus percentage basis. Archts. est. $200,000.

O., Warrensville—School—Bd. Educ. of Orange Rural School Dist., 2 story, brick, steel and concrete Orange Twp., to Parrish Bros., Wick Ave., Youngstown. $153,416. Noted Sept. 1.

O., Willoughby — Domestic Science — Andrews Institute for Girls, 2 story, 60 x 200 ft., brick, steel and concrete, to Johnson & Erickson, Ashtabula. Archts. est. $200,000. Noted July 20

Wis., Milwaukee—Apartment Hotel—Hotel Investors, Inc., 330 Caswell Blk., 3 story and basement, 50 ft. high, 2 units each 50 x 110 ft., brick and concrete, plain foundations, to Brun Constr. Co., 387 Clinton St. Engrs. est. $250,000.

Minn., Minneapolis—Apartment Hotel—J. Friedman, 1900 Emerson Ave. S., 13 story and basement, 50 x 100 ft., 150 ft. high, with 3 wings, each 6 story, 75 high, total dimensions 125 x 326 ft., rein.-con., brick and tile, Mt. Curve and Douglas Aves., to Fleisher Constr. Co., 1000 Builders Exchange. Archts. est. $1,500,000.

Calif., Kerman—High School—Kerman Union High School Dist., general contract 2 story, rein.-con., to J. H. Palm, c/o A. Johnson, archt., Kingsburg Bank Bldg., Kingsburg, $144,800. Noted Sept. 14.

Que., Montreal—School—Catholic School Comrs., 191 Stadacona St., 3 story, 75 x 130 ft., 25 ft. high, rein.-con., brick and stone, St. Joseph Blvd., to A. and D. Boileau, 546 Fabre St. $150,000. Noted Sept. 14.

Federal Government Work

PROPOSED WORK

La., New Orleans—Dykes—U. S. Engineer, Custom House, rejected bids for dykes at Head of Pass, Mississippi River. Noted Aug. 3.

Miss., Gulfport—Hospital—Bureau Yards & Docks, Navy Dept., Wash., D. C., soon receives bids for U. S. Veterans Hospital, here. Noted Sept. 14.

O., Chillicothe—Hospital—Quartermaster General, Munitions Bldg., Wash., D. C., soon receives bids for group of 20 rein.-con. and brick buildings, complete, incl. sewer, water and lighting systems, roads and walks, for U. S. Veterans Hospital, at Camp Sherman, here. Noted Sept. 7.

Minn., St. Cloud — Hospital — Bureau Yards & Docks, Navy Dept., Wash., D. C., plans U. S. Veterans Hospital, here.

Nevada — Road — C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., 881 Mills Bldg., San Francisco, Calif., received no bids grading and building structures on 14.6 mi. Currant Creek Rd. in Nevada Natl. Forest. Will probably be readvertised. Noted Sept. 7 under California.

BIDS DESIRED

N. Y., Staten Island—Power Boats—Sept. 25, by Superintendent Lighthouses, 6 power boats, 24 ft., complete with engines.

N. Y. Staten Island—Steel Buoys, etc.—Oct. 2, by Superintendent Lighthouses, for 105 various size steel buoys, 21 with bells and 2 with whistles.

N. Y., Tupper Lake—Hospital—Spec. 4710—Oct. 11, by Bureau Yards & Docks, Navy Dept., Wash., D. C., 8 buildings for U. S. Veterans Hospital, here.

Md., Edgewood—Quarters—Oct. 18 at office Constructing Quartermaster, Aberdeen Proving Ground, for 20 sets officers quarters; adv. this issue.

Md., Edgewood Arsenal—Stables—Sept. 30 at Office Constructing Quartermaster, Aberdeen Proving Ground, 20 stable buildings here; adv. this issue.

D. C., Wash.—Cement—Oct. 7 at office A. L. Flint, genl. purch. agt., Panama Canal, Wash., D. C., for furnishing 10,000 bbl. portland cement, Circular No. 1497.

La., New Orleans—Spur-dikes—Oct. 3 at Office U. S. Engineer, 329 Custom House, spur-dikes at Southwest Pass, Mississippi River; adv. this issue.

Tenn., Nashville—Dump Scows—Oct. 23, Office U. S. Engineer, 3 steel dump scows; adv. this issue. Noted Sept. 14.

Calif., Mare Island—Remodeling—Spec. 4601—Oct. 11, by Bureau Yards & Docks, Navy Dept., Wash., D. C., remodeling Barracks Building 53, here. Noted Sept. 7.

Calif., San Diego—Quarters, etc.—Spec. 4665—Oct. 11, by Burau Yards & Docks, Navy Dept., Wash., D. C., for quarters and mess hall at Naval Training Section, here.

BIDS RECEIVED

Mass., Northampton—Hospital—Quartermaster General, 2306 Munitions Bldg., Wash., D C., for group of buildings for U. S. Veterans' Hospital, here, (1) work complete, from G. A. Fuller Co., Munsey Bldg., Wash., D. C., (1) $2,995,000, (2) $43,000, (3) $30,000, (4) $1,000, (5) $4,700, (6) $35,000, (7) $1.50, (8) $10.25, (9) $18, (10) $74, (11) $100, (12) $53, (13) $0.50, (14) $2.90, (15) $1, (16) $1.66, (17) 625 days; J. Stewart & Co., 30 Church St., New York City, (1) $3,161,000, (2) $42,500, (3) $26,000, (4) $1,500, (5) $6,300, (6) $35,000, (7) $1.50, (8) $21, (9) $32, (10) $70, (11)) $90, (12 $60, (13) $1.30, (14) $2.80, (15) $1.90, (16) $2.70, (17) 425 days; Pontiac Constr. Co., 206 Lincoln Bldg., Detroit, Mich., (1) $3,550,000, (2) $34,753, (3) $28,550, (4) $2,500, (5) $4,250, (6) $21,642, (7) $2.90, (8) $21.20, (9) $37.42, (10) $68, (11) $100, (12) $55, (13) $0.78, (14) $4.05, (15) $1.70, (16) $2.70, (17) 485 days. Noted Aug. 24.

CONTRACTS AWARDED

R. I., Providence—Dredging—Office U. S. Engineer, dredging in harbor at Bridgeport, Conn., to P. Sandford Ross Bros., 277 Washington St., Jersey City, N. J., $42,382. Noted Sept. 7.

R. I., Providence—Dredging—Office U. S. Engineer, dredging in Pawtucket (Seekonk) River, to J. S. Packard Dredging Co., 1004 Turks Head Bldg., $61,803. Noted Aug. 10.

N. Y., Buffalo—Buildings—Office U. S. Engineer, constructing 8 buildings, to Mosier & Sumners, Inc., 1266 Seneca St., Buffalo, $152,984.

N. Y., New York—Dredging—U. S. Engineer, 710 Army Bldg., 39 Whitehall Bldg., dredging in Hudson River, to Central Dredging Co., Bangor Bldg., Cleveland, O., $164,586. Noted Aug. 3.

N. Y., New York—Dredging—Office U. S. Engineer, 1st Dist., dredging Compton Creek and Shoal Harbor, New Jersey, to J. P. Randerson, 51 State St., Albany, $10,780.

Del., Wilmington—Excavation—U. S. Engineer, Wilmington, excavating Inland Waterway from Delaware River to Chesapeake Bay, Del. and Md., 5,600,000 cu.yd. excav., to W. H. Gahagan, Inc., 147 Remsen St., Brooklyn, N. Y., $1,455,856. Noted Aug. 24.

Md., Baltimore—Dredging—Office U. S. Engineer, dredging in Baltimore Harbor and Channel, to Arundel Corp., 2 Pratt St., $272,250. Noted July 27.

D. C., Anacostia—Hangar—Spec. 4691—Bureau Yards & Docks, Navy Dept., Wash., D. C., hangar at Naval Air Station, here, to Donnell-Zane Co., Inc., 233 Bway., New York City, $42,605 (150 days). Noted Aug. 31.

D. C., Wash.—Cable—Chief of Engineers Office, rubber insulated lead covered and armored cable, to Amer. Steel & Wire Co., Wilkins Bldg., $70,147.

D. C., Wash.—Tunnel, Conduit, etc.—Public Printer, Government Printing Office, for tunnel, pipe covering and electric wiring between Capitol power plant and Government Printing Office, to W. F. Cush, 3rd and R Sts., tunnel, $79,877; McKeesby & Madison, 623 F St., pipe covering $17,596; John A. Roeblings Sons Co., South Broad and Canal Sts., Trenton, N. J., electric wiring $20,850. Noted Aug. 24.

La., New Orleans—Bulkhead—U. S. Engineer, Custom House, bulkhead construction at Southwest Pass, to D. M. Picton & Co., Port Arthur, Tex., $250,633. Noted Aug. 3.

Miss., Vicksburg—Levee Work—Office U. S. Engineer, Lower Yazoo Levee Dist., to Roach, Stansell, Lawrence Bros. & Co., North Memphis Savings Bank Bldg., Memphis, Tenn., $14,000, and Elkas & Weathers, Erwin, $52,200; Upper Texas Levee Dist., to G. H. and W. T. Lawrence, Memphis, Tenn. (street address not available), $78,000.

Tenn., Memphis—Levee Work—Office U. S. Engineer levee work in 1st and 2nd Dists., to G. H. and W. T. Lawrence, Memphis (street address not available) $20,430, T. W. Roach, Memphis (street address not available) $63,700, Roach, Stansell, Lawrence Bros. & Co., North Memphis Savings Bank Bldg., $89,600.

La., New Orleans—Sand and Gravel—Office U. S. Engineer, 321 Customhouse, sand and gravel for Southwest Pass, Mississippi River, to R. P. Hyams Coal Co., Ltd., 339 Carondelet St., $37,000., Noted Aug. 10.

Minn., Duluth—Scow—Office U. S. Engineer, Duluth, steel derrick scow, to Marine Iron & Shipbuilding Co., foot of 11th Ave. W., $93,220. Noted July 20.

Calif., Mare Island—Circulating Loop—Spec. 4684—Bureau Yards & Docks, Navy Dept., Wash., D. C., circulating loop for central power plant at Navy Yard, here, to Tibbitts Pacific Co., 16 California St., San Francisco, $104,960 (200 days). Noted Sept. 7.

Calif., San Diego—Guardhouse, etc.—Spec. 4582—Bureau Yards & Docks, Navy Dept., Wash., D. C., guard house and shops at Marine Barracks, Naval Base, here, to W. E. Kier Constr. Co., 813 1st Natl. Bank Bldg., $146,176 (240 days). Noted Aug. 24.

Calif., San Francisco—Dredging—Office U. S. Engineer, dredging in Oakland Harbor, 1st Dist., to Amer. Dredging Co., 255 California St., $152,790.

Miscellaneous

PROPOSED WORK

Oil Tanks—Providence, R. I.—Narragansett Electric Lighting Co., Turks Head Bldg., plans concrete and steel fuel oil tank, 1,540,000 gal. capacity, Tallman Lane, near Providence River. Private plans.

Athletic Arena—New Haven, Conn.—De Waltoff Co., 185 Church St., plans athletic arena. $125,000. Private plans.

Dumping Platform and Ramp, etc.—New York, N. Y.—J. H. Delaney, comr. Docks, Pier "A" foot of Battery Pl., rejected bids opened Sept. 1, superstructure on pier at East 35th St. consisting of rein.-con. dumping platform and ramp, Contr. 1773. Will readvertise. Noted Sept. 7.

Levee Work—Tallaluh, La.—Bd. Comrs. 5th Louisiana Levee Dist. sold $100,000 bonds for levee construction and maintenance work.

Freight Terminal—Indianapolis, Ind.—Illinois Central R.R., 135 East 11th Pl., Chicago, having plans prepared 2 story, 30 x 450 ft. freight terminal, brick and steel, also 3 flat loading platforms, 1 umbrella shed and 3 spurs. $200,000. W. Ward, Indianapolis, supervising agt. Private plans.

Dock—Detroit, Mich.—Recreation Dept., 504 Elmwood Ave., having plans prepared 700 ft. concrete dock, 25 ft. wide, on 650 wood piles, rein.-con. stairways to landings for small boats, 24th St. and Detroit River. $50,000. Smith, Hinchman & Grylls, Marquette Bldg., engrs.

Paving Materials—St. Paul, Minn.—H. W. Austin, city purch. agt., rejected bids opened Aug. 28, paving materials for streets in Crocus Hill Dist., 43 blocks, 57,786 sq.yd. 3 in. creosoted wood blocks, 12,270 bbl. portland cement, etc. Noted Aug. 17.

Pipe Line—Miles City, Mont.—Northwestern Public Utilities Co. plans 10 in. pipe line from here into Glendive-Baker oil field. $1,500,000.

Miscellaneous (Continued)

Pipe Line—Walters, Okla.—Wichita Pipe Line Co. plans 22 mi. of 6 in. pipe line from here to Empire City, in Duncan oil field.

Shipping Platform — Oakland, Calif.—Chevrolet Motor Co., 3044 West Grand Blvd., Detroit, Mich., had plans prepared 99 x 500 ft. rein.-con. shipping platform, flat slab construction with frame covering, 50,000 sq.ft. rein.-con. floor supported on concrete piers, frame roof supported on posts 1 story high. $30,000. A. Kahn, 1000 Marquette Bldg., Detroit, Mich., engr.

Power Development—Hull, Que.—Hull Electric Ry. Co., (owned by Canadian Pacific Ry., Windsor St., Montreal), plans power development at Paugon Falls on Gatinsau, to develop 150,000 hp. to supply Ottawa and district. G. G. Gale, mgr.

BIDS DESIRED

Coal Handling Plant—New York, N. Y.—Sept. 29, by Bd. Health, 505 Pearl St., altering and erecting coal handling plant at Riverside Hospital, North Brother Island, Bronx Boro. R. S. Copeland, pres.

Asphalt Mixing Equipment—Pittsford, N. Y.—A. Howard, Fairport, taking bids for complete equipment for installation at asphalt mixing station, here.

Derrick—Phila., Pa.—Robinson Iron & Steel Co., Parker and Umbria Sts., taking bids stiff leg derrick, 40 ft. boom, 3 ton capacity.

Street Flusher—Phila., Pa.—See "Streets and Roads."

Gas Plant Equipment, etc.—Alexandria, La.—Oct. 2, by Comn. Council, furnishing 732 ton 4 in., 519 ton 6 in., 225 ton 8 in., 166 ton 10 in. bell and spigot c.i. gas pipe, 21 ton specials, 12½ ton drip pots, 130 four in., 60 six in., 25 eight in. and 15 ten in. hub end gate valves, 350 service boxes, 55,000 lb. lead wool, 3,000 lb. untarred jute, 6,000 lin.ft. 4 in., 8,200 lin.ft. 6 in., 8,100 lin.ft. 8 in., 5,700 lin.ft. 10 in. and 4,600 lin. ft. 12 in. genuine w.i. pipe, plain ends, twenty 4 in., twenty 6 in., twelve 8 in., four 10 in. and ten 12 in. flanged gate valves and companion flanges D and F, pressure regulators, meters, etc., alternate prices will be considered on standard full weight steel pipe in lieu of wrought iron pipe, the 8, 10 and 12 in. weighing as follows: 28.55, 40.83 and 49.56, also laying 77,826 lin.ft. 4 in., 44,000 lin.ft. 6 in., 13,370 lin.ft. 8 in., and 6,826 lin.ft. 10 in. c.i. pipe, welding and laying 20,000 lin.ft. 2 in., 6,000 lin.ft. 4 in., 8,200 lin.ft. 6 in., 8,100 lin.ft. 8 in., 5,700 lin.ft. 10 in. and 4,600 lin.ft. 12 in. w.i. or steel pipe.

Cement—Turlock, Calif.—Sept. 29, by A. Sorenson, secy. Turlock Irrigation Dist., furnishing and delivering 50,000 to 75,000 bbl. portland cement, f.o.b. Don Pedro Dam, for Turlock and Modesto Irrigation Dists. Noted June 8.

Coal Handling Plant — Melbourne, Victoria, Australia—Dec. 18, by R. Liddelow, secy. State Electricity Comn. of Victoria, 22-32 William St., coal handling plant, for Morwell Power Scheme, Spec. 282; adv. this issue.

BIDS RECEIVED

Electrolier System—Dinuba, Calif.—City, electrolier system incl. 58,000 ft. 1½ Greenfield duct conduit and 58,000 ft. No. 8 Duplex lead covered cable, 395 electroliers Union metal standards, 395 No. 4 Novlaus tops form No. 12, two hundred and seventy-four 400 c.p. and one hundred and twenty 250 c.p. Mazda lamps, 395 risers in lamp columns, 6 open air conduit adapters, from Osborn Electric Co., Turlock, $63,924; Valley Electric Supply Co., 1817 Tulare St., Fresno, $64,200; H. C. Reid Co., 115 Mission St., San Francisco, $65,169. Noted June 8.

CONTRACTS AWARDED

Dumping Platform—New York, N. Y.—J. H. Delaney, comr. Docks, Pier "A" foot of Battery Pl., improving Brooklyn Bridge, Manhattan Boro, incl. rein.-con. dumping platform, to G. B. Spearin, 90 West St., $108,253; water supply, to Altman Plumbing Co., 219 East 25th St., $6,585. Noted Sept. 14.

Jetty—Asbury Park, N. J.—For 600 ft. stone jetty for protection of beach front, to J. A. Howland, Asbury Park (street address not available), $100,000. Noted July 13.

Levee Work — Louisiana — Bd. State Engrs., New Court Bldg., New Orleans, 950 ft. bulkhead at Gretna Levee, to W. M. Wren, Tulane Newcomb Bldg., New Orleans, $18 per ft.; 42,000 cu.yd. Row Levee, Point Coupee Parish, to J. T. Philips, Tenas, $24.50 per cu.yd.; 70,00 cu.yd. Elmwood Levee, to Lawrence, Nixon & Philips, Jackson, Miss., $26 per cu.yd.; 335,000 cu.yd. Eureka Levee, Atchafalaya Levee Dist., to D. B. Hearin, Baton Rouge, (street address not available), $39.75 per cu.yd.; 335,000 cu.yd. Live Oak Alliance Levee, Iberville Parish, to R. T. Clarke, Natchez, Miss., $42.50 per cu.yd.; 30,000 cu.yd. Belmont Levee, St. James Parish, to Lower Coast Constr. Co., 130 Chartres St., New Orleans, $59 per cu.yd.; 75,000 cu.yd. Vancluse Levee, Chicot Co., Ark., to Nicholson Constr. Co., Lake Providence, $38.33 per cu.yd.; 20,000 cu.yd. Belair China Grove Levee, to J. T. Philips, Tenas, $23.70 per cu.yd.; 45,000 cu.yd. Grenada Levee, Iberville Parish, to Gueymard Bros., Carville, $35.50 per cu.yd.

Fish Hatchery—Alexandria, La.—Dept. Conservation, New Court Bldg., New Orleans, fish hatchery here, to Lambert Constr. Co., Alexandria, $35,000. Contractor in market for concrete also 3,200 lin.ft. 36 in., 430 lin.ft. 30 in. and 370 lin.ft. 27 in. concrete pipe, etc.

Levee Work—New Orleans, La.—Bd. State Engrs., New Court Bldg., 17,400 cu. yd. levee work on Lucca Landing, De Sotá landing, Middle Place loop, and Panther Forest, to V. Tardy, Lake Village, Ark., $0.35 per cu.yd.; 43,000 cu.yd. on Seven Oaks, Florence, King Solomons Church, Hunting Lodge and Sterling levees, to W. H. Beard and C. L. Refe, Lake Village, Ark., $0.3491.

Foundation—Des Moines, Ia.—Equitable Inurance Co. of Iowa, Bankers Trust Bldg., foundation for 18 story and basement, 132 x 133 ft., rein.-con., brick, steel, tile and stone, office building, 6th and Locust Sts., to A. H. Neumann Co., 519 Hubbell Bldg., $109,800. Total cost $2,000,000. Noted Aug. 31.

Ornamental Lighting System—St. Paul, Minn.—Installing ornamental lighting system in Crocus Hill Dist., 424 single lights, each 100 candle power, to Donovan Constr. Co., Commerce Bldg., $49,409. Noted Aug. 24.

Piers—Montreal, Que.—Harbor Comrs., 300 ft. extension to Alexander Pier and 300 ft. to King Edward Pier, to Atlas Constr. Co., Belmont St., $295,250 and $314,700 respectively.

Engineering News-Record

(Circulation over 30,000 weekly)

prints more than twice as many announcements advertising contracts to be let than appear in any other one publication

Practically every form of public work and the furnishing of material and supplies were printed in the Official Proposal Columns of *Engineering News-Record* last year. They include calls for bids on:

Boilers
Bridges
Building Alterations
Canal Construction
Cast Iron Pipe
Dams
Drainage
Dredging
Engines
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The Dominant Proposal Medium

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Oct. 2.

Pavement, Curbing and Catch Basins

Noroton, Conn.

Sealed proposals for furnishing all labor and materials for the construction of proposed Drives, Curbing and Catch Basins and necessary drains to be constructed on the grounds of Fitch's Home for Soldiers and Soldiers' Hospital of Connecticut at Noroton Heights, Conn., will be received at the office of Col. Henry J. Seeley at the Soldiers' Home in Noroton until October 2, 1922, at 12:00 a.m. (D.S.T.).

The bids will be opened at the Governor's Office in the State Capitol at Hartford, on October 3rd, 1922, at 11:00 a.m. (D.S.T.).

The bids shall be in accordance with the plans and specifications for the work on file in the office of Col. Henry J. Seeley at the Soldiers' Home, where they may be obtained by bidders upon payment of $5.00, the same to be refunded when plans are returned in good condition.

The principal items of work consist of:
4,614 sq.yd. Penetration Pavement.
4,660 lin.ft. Concrete Curbing.
18 Catch Basins.

Each proposal shall contain the full name of every firm or corporation interested in the same and the address of the person or firm, or President or Secretary of the corporation bidding, and shall be accompanied by a certified check upon a national bank or trust company drawn to the order of The Soldiers' Hospital Board of Connecticut, in the sum of $650, which shall become the property of the State Hospital Board as liquidated damages in case the successful bidder fails to enter into a contract within five (5) days after the award of this contract as herein provided.

The checks of unsuccessful bidders will be returned upon demand and of the successful bidder upon completion of the work in a satisfactory manner, no bond being required.

All bids to be placed in a sealed envelope marked "Bids for Road and Curbing."

The Soldiers' Hospital Board reserves the right to reject any or all bids.

By order of
THE SOLDIERS' HOSPITAL BOARD
OF CONNECTICUT.
JOHN H. THACHER,
Chairman of Executive Committee.

Bids: Oct. 10.

Steam Turbine and Accessories

New Orleans, La.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans up to 12 o'clock, noon, Tuesday, October 10th, 1922, for furnishing one 6,000 kw. STEAM turbine and accessories.

Specifications and blank forms of proposals may be obtained at Room 303, No. 526 Carondelet Street, New Orleans.

The right is reserved to reject any or all bids.

A. G. MOFFAT,
Secretary.
GEO. G. EARL,
General Superintendent.
Aug. 10, 1922.

OFFICIAL PROPOSALS

Bids: Oct. 10.

Concrete Structures: Filter Equipment and Brick Filter House

Greensboro, N. C.

Proposals will be received by the City Council of Greensboro, North Carolina, until 12 o'clock M. Tuesday, October 10th, 1922, for building a Filtration plant and appurtenances.

The work includes the construction and equipment of a six million gallon filter plant, the construction of a coagulation basin with dividing wall, capacity 1,148,000 gallons, and the construction of a mixing chamber. The principal quantities involved are:
8,000 cubic yards of earth excavation.
1,900 cubic yards of concrete.
225,00 pounds of reinforcing steel.
The equipment of six one-million gallon filter units.
80,000 brick laid in filter house walls.
Steel wash water tank of 70,000 gallons capacity.
1,000 GPM motor-operated pump.
Piping, valves, and miscellaneous items.

Plans will be on file and may be seen at the office of the City Manager, Greensboro, N. C., or at the office of The Ludlow Engineers, Winston-Salem, N. C., after September 15th. After that date copies of the Specifications, Bid Blank, and Contract may be obtained from the Engineers or City Manager. For the convenience of prospective bidders, the Engineers will furnish copies of the plans upon application accompanied by a check for ten ($10.00) dollars to cover the cost, or separate prints at one ($1.00) dollar each.

Each bid must be accompanied by a certified check in the sum of $5,000, or 5% of the amount of partial bids.

Proposals will be opened publicly with the usual rights reserved.

P. C. PAINTER,
City Manager.
J. L. LUDLOW,
Consulting Engineer.

Bids: Oct. 9.

Reinforced Concrete Bridge

White Plains, N. Y.

Sealed bids or proposals for the construction of a reinforced concrete arch bridge over the Croton River at the site of the present Van Cortlandt Bridge on the Albany Post Road between the Towns of Cortlandt and Ossining, Westchester County, New York, will be received at the office of the Clerk of the Board of Supervisors, Court House, White Plains, N. Y., until 10:00 a.m., October 9th, 1922.

Proposed bridge to consist of six arches, 48 to 74 foot spans, 40 feet wide.

Specifications, proposal sheets and all information relative to same may be procured at the office of the County Engineer, Court House, White Plains, N. Y., upon making a deposit of ten dollars ($10.00).

BOARD OF SUPERVISORS,
FRED L. MERRITT, Clerk.
September 11, 1922.

OFFICIAL PROPOSALS

Bids: Oct. 10.

Sewage Pumping Station and Grit Chamber

Syracuse, N. Y.

Sealed proposals will be received until 2 o'clock p.m., standard time, October 10, 1922, at the office of the Syracuse Intercepting Sewer Board, 104 City Hall, Syracuse, N. Y., for the machinery and equipment for the Sewage Pumping Station and Grit Chamber now in course of construction at the Sewage Treatment Works of the City of Syracuse.

Equipment included in the contract are the switchboard and control mechanisms, four 24-inch horizontal shaft centrifugal pumps direct-connected to 75 H.P. variable speed A.C. motors, auxiliary vacuum, priming pumps and sump pump, a 10 K.W. motor-generator set, cast iron suction and discharge piping with four 24-inch hydraulically operated gate valves, a 54-inch hydraulically operated sluice gate, three 48-inch by 51-inch electrically operated sluice gates, a 7½ ton hand operated traveling crane, with permission to use same during erection, and a grit cleaning mechanism consisting of tramrail with electrically operated hoist and ½ cubic yard clam-shell bucket; and all necessary wiring and piping connections. All equipment will be erected upon concrete foundations provided by the Board under another contract.

Proposals must be made on blanks to be furnished upon application and must be accompanied by a New York draft or a certified check for $6,000, which is to be deposited therewith as guarantee that the successful bidder will execute the contract within five days after its award.

Drawings, specifications and form of proposals and contracts are on file in the offices of the Board. Copies thereof may be obtained by depositing $10 to insure their return in acceptable condition on or before November 1, 1922.

HARRY J. HAMLIN,
Secretary.

Bids: Oct. 2.

Combined Sanitary and Storm Sewers

Cape Girardeau, Missouri.

Sealed bids will be received until 2:30 o'clock, P.M., October 2nd, 1922, at the Council Chamber by the City Council for the construction of a combined sanitary and storm sewerage system in sewer district No. 5, in accordance with the plans and specifications therefor on file in the office of the City Clerk. Copies of said plans and specifications may be obtained from C. E. Smith & Co., Consulting Engineers, 2073 Railway Exchange Building, St. Louis, Missouri, or Cape Girardeau, Missouri, by depositing $15.00, one half of which will be refunded upon return of the same in good condition within seven days after the award of the contract.

Full information and proposal forms may be obtained from the Consulting Engineers. Estimated cost of work Three Hundred and Fifty-two Thousand Dollars. The right is reserved to reject any or all bids. Bids will be opened at 2:30 o'clock P.M., Monday, October 2nd, 1922.

A. P. BEHRENS,
City Clerk.

Bids: Sept. 27.

Road Work

Trenton, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commission of New Jersey for the construction of the following:

Route No. 14—Section No. 7—Petersburg-Greenfield, Cape May County; estimated amount of "Borrow Excavation" is 56,606 cubic yards, and of compacted gravel surface 22,926 square yards.

Bids will be received at the office of the State Highwawy Commission at the Broad Street Bank Building, Trenton, New Jersey, on Wednesday, Sept. 27, 1922, at 11:00 A.M., Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars ($10.00) upon application to the State Highway Department, 9th floor, Broad Street Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated therein and as required by the 1922 specifications, same to be enclosed in sealed special addressed envelopes bearing the name and address of bidder and the name and section of the Route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that said certified check shall not be less than $500.00 or more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelopes will be furnished on application. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: Sept. 28.

Laboratory Building

Ithaca, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work, Addition to Laboratory Building (South Wing—James Law Hall), at the New York State Veterinary College, Cornell University, Ithaca, N. Y., will be received by Mr. C. D. Bostwick, Comptroller, Cornell University, Ithaca, N. Y., until 12 o'clock noon, (Standard Time), on Thursday, September 28, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3472, 3473, 3474 and 3475. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the office of Mr. C. D. Bostwick, Comptroller, Cornell University, Ithaca, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: August 28, 1922.

Bids: Oct. 3.

Construction of Inlet

Ft. Lauderdale, Fla.

Notice is hereby given that the Board of County Commissioners, Broward County, Florida, will receive bids until 11:00 o'clock a.m., on Tuesday, October 3rd, 1922, for the construction of an inlet from New River Sound to the Atlantic Ocean, near Ft. Lauderdale, as per plans and specifications on file in the Clerk's Office, Courthouse Bldg., Ft. Lauderdale, Florida. Such work shall be let in two contracts, being as follows:—

(a) The dredging of 81,000 cubic yards more or less of earth; and the dredging of 5,000 cubic yards more or less of rock;

(b) The furnishing and placing of 6200 cubic yards more or less of riprap and jetty hearting and of 2500 tons more or less of jetty capping, all in riprap and jetty construction.

Separate bids will be received and separate contracts let for each of the two classes of work mentioned. Copy of plans and specifications may be secured from the Clerk upon payment of $1.00 to cover cost of printing same.

Each bid shall be accompanied by a certified check in the amount of 3% of the bid, guaranteeing that bidder will make contract and bond within ten days of notice of award.

Bond on each contract will be required in the sum of 50% of the amount bid.

Address all bids to the Board of County Commissioners in care of Frank A. Bryan, Clerk, Ft. Lauderdale, Fla.

The Board reserves the right to reject any and all bids.

By order of the Board. August 22nd, 1922.

H. G. WHEELER,
Chairman.

Attest: FRANK A. BRYAN,
Clerk.
Dated August 22, 1922.

Largest Circulation of Any Technical Paper

Engineering News-Record's circulation—over 30,000 weekly—is the largest of any technical paper printed. It includes among its readers practically every contractor, dealer, and manufacturer in the country who is interested in bidding on public works contracts—either local or outside of his immediate vicinity.

Bids: Sept. 27.

Bridge Paving

Trenton, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commission of New Jersey for the following:

For the removal of present wood block pavement and concrete on Passaic River Bridge, Route No. 1, Lincoln Highway, and replacing of same with a reinforced concrete base and wood block pavement including waterproofing.

The estimated area of roadway surface is 24,000 sq.ft.

Bids for the above will be received at the office of the State Highway Commission, Broad Street Bank Building, Trenton, N. J., on Wednesday, September 27, 1922, at 11:00 A.M., Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, N. J., and office of John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J., and may be inspected by prospective bidders. Plans will be furnished on deposit of ten ($10.00) dollars, for doing this work upon application to John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications for this work; same to be enclosed in sealed special addressed envelopes bearing the name and address of bidder and the work bid upon on the outside, and must be accompanied by a

certified check drawn to the order of the State Treasurer for not less than ten (10%) per cent of the amount of the bid, provided that said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelopes will be furnished on application to John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the specifications conditioned for the faithful performance of the provisions of the contract and specifications.

By order o the State Highway Commission.

A. LEE GROVER, Chief Clerk.

Bids: Sept. 26.

Electric Light and Power Plant

Corinth, Miss.

Sealed proposals will be received at the office of the City Clerk of Corinth, Mississippi, up until 7:00 o'clock p.m. of Tuesday, the 26th day of September, 1922, for furnishing materials, labor and constructing according to the plans and specifications, a complete Municipal Electric Light and Power Plant.

The work will be divided into 10 sections. East section shall be a separate and distinct portion of the work and the Council reserves the right to award the contract by sections, any combination of sections or the work as a whole.

A brief description of each section is as follows:

Section No. 1. Power House Building complete and machinery foundations.

Section No. 2. 5′ x 125′ reinforced concrete chimney and foundation.

Section No. 3. Two (2) new 300 horsepower horizontal water tube boiler with steel breeching erected complete including brickwork.

Section No. 4. Two (2) new steam engines of the non-releasing corlis or the uniflow type. Size shall be ample to operate a 375 K.V.A. direct connected 3 phase, alternating current generator at 80% power factor. Furnished and erected complete on Purchaser's foundation. Alternate bids may be submitted on complete Turbine driven or oil driven units of same size as above stated.

Section No. 5. Two (2) new 375 K.V.A. 3 phase 60 cycle, 2300 volt, direct connected type alternator, furnished and erected complete on Purchaser's foundation.

Section No. 6. One (1) steam Turbine Driven Exciter and one (1) Electric Motor Driven Exciter Units furnished and erected complete on Purchaser's foundation.

Section No. 7. One (1) six panel Switchboard including wiring connections between switchboard and Exciters and Generators furnished and erected complete.

Section No. 8. Street Light and Pole line material furnished f.o.b. Corinth, Miss.

Section No. 9. Erection of Street Lighting and Distributing System complete.

Section No. 10. Steam piping, Feedwater Heater, Feedwater Pumps, Traps, etc., furnished and erected complete.

A certified check or Bidders Bonds of five (5%) per cent of the amount of each bid made payable to the Treasurer of the City of Corinth, Mississippi, must accompany each bid. Plans and Specifications are on file with the City Clerk at Corinth, Mississippi, and at the office of the Consulting Engineers, Fuller & Beard, Room 616 Title Guaranty Building, St. Louis, Missouri.

Parties desiring extra copies of Plans and Specifications for their personal use may obtain same from the Engineers. A deposit of $10.00 shall be made for a complete set of Plans and Specifications, $6.00 of which will be returned upon the receipt of the plans and specifications in good condition.

Bids must be sealed and addressed to M. T. Sharp, City Clerk, Corinth, Mississippi, and on the outside of the envelope must be plainly written "Proposals for Municipal Electric Light and Power Plant."

The Mayor and City Council especially reserve the right to reject any or all bids and waive informalities.

T. E. HENRY,
Mayor.

M. T. SHARP,
City Clerk.

OFFICIAL PROPOSALS

Bids: Oct. 6.

Substructure for Water Supply Works

Memphis, Tenn.

Sealed proposals, addressed to the Board of Commissioners of the Memphis Artesian Water Department, and endorsed with the bidder's name and designation of the work bid upon will be received at the office of the Memphis Artesian Water Department at Memphis, Tenn., until 12 o'clock noon, of the 6th day of October, 1922, and then publicly opened and read, for the construction at Memphis, Tenn., of a reinforced concrete reservoir and reinforced concrete substructures of a pumping station, iron removal plant and aerator and for the furnishing and installing of cast iron pipe, valves, drains and appurtenant structures, the work being designated as Contract 6.

The quantities of the principal items are roughly as follows:

Excavation	80,000	cu.yds.
Concrete	15,000	cu.yds.
Reinforcing steel	700	tons.
Cast iron pipe and specials	220	tons.
Valves and sluice gates, sizes 4 inch to 48 inch	75	
Venturi meters, sizes 30 inches and 42 inches	5	
Filter rate controllers	8	

Bids must be made upon the entire work, which will be awarded as a single contract.

Copies of the bidding blanks, bonds, contracts and specifications may be obtained from any of the following offices:

Memphis Artesian Water Department, Memphis, Tennessee.

Fuller & McClintock, 421 Produce Exchange Bldg., Kansas City, Mo.

Fuller & McClintock, 170 Broadway, New York City.

Fuller & McClintock, 319 Summit Cherry Bldg., Toledo, Ohio.

A charge of $20.00 will be made for each set of specifications which charge will be refunded provided the specifications are returned within 30 days after bids are received.

The Water Commission reserves the right to reject any or all bids, to waive any informalities in the bids received, and to accept any bid or bids which they deem most favorable to the interests of the City of Memphis.

By order of the Board of Commissioners of the Memphis Artesian Water Department.

Bids: Oct. 7.

Dredge Work

Atkinson and Alba Townships, Ill.

Sealed bids will be received and opened by the Commissioners of Drainage Union District No. 1 of Atkinson and Alba Townships, Henry County, Illinois, on October 7, 1922, at 2 o'clock P.M., at the Higgins schoolhouse on the Southeast Quarter of Section 15, in Atkinson Township, for the cleaning out and deepening of the Bentley Ditch, the Cunnea Branch, the Irvin Lateral and the Lievens Branch, all being within said district and being a part of its drains. Said work will involve the excavation of approximately 34,282 cubic yards of dirt. Specifications and profiles are on file in the Office of the Clerk of said district in Atkinson, Illinois. Bids must state the amount per cubic yard at which said work will be done. The right is reserved to reject any and all bids.

A. W. ALLEN,
JAY BOOMER,
M. VANDERSNICK.
Commissioners of Drainage Union District No. 1 of Atkinson and Alba Townships, in Henry County, Illinois.

Bids: Oct. 16.

Junior High School Building

Altoona, Pa.

Proposals will be received by the School District of Altoona, Penna., until 8 p.m., October 16th, for the erection and completion of a Junior High School 224 x 232 ft., three stories and basement, fireproof, also proposals for Heating and Ventilation, Plumbing and Electric Work.

Further information will be supplied on application to the Architect.

JULIAN MILLARD,
Registered Architect,
Altoona, Penn.
WM. B. ITTNER,
Consulting Architect.
W. N. DECKER,
Secretary,
Altoona School District.

OFFICIAL PROPOSALS

Bids: Sept. 25.

School Building

Cinnaminson, N. J.

At a meeting of the Board of Education of the Township of Cinnaminson, in the County of Burlington, to be held in the Westfield Public School Building, situate at the intersection of the Moorestown-Riverton Road and Pomona Road, Cinnaminson, Burlington County, New Jersey, on Monday, September 25, 1922, at 8 o'clock in the evening (daylight saving time), separate sealed bids or proposals will be received, opened, and considered for the following:

1. For the erection of, and for all labor, materials, tools and appliances necessary for a two-story and basement brick addition to the said Westfield Public School building, at Cinnaminson, Burlington County, New Jersey.
2. For the construction and installation of, and for all labor, materials, tools, fixtures and appliances necessary for, the heating and ventilating system in said addition to said school building.
3. For the construction and installation of, and for all labor, materials, tools, fixtures and appliances necessary for, the electrical system in said addition to said school building.
4. For the construction and installation of, and for all labor, materials, tools, fixtures and appliances necessary for, the plumbing and drainage system in and for said addition to said school building.

Each proposal shall be based upon plans and specifications for the work prepared by J. Fletcher Street, architect, 129 South Fifth Street, Philadelphia, Pa.; and must be accompanied by a certified check, or by a bid bond issued by a Surety Company authorized to transact business in the State of New Jersey, in favor of the said Board of Education in an amount equal to not less than ten per cent, of the amount of the proposal. Further information as to the terms and conditions of bidding may be obtained upon application to said architect, who will also furnish copies of the said plans and specifications upon deposit of Twenty Dollars for the building plans and specifications and Ten Dollars for the plans and specifications covering each of the other classes of work. Upon return of said plans and specifications promptly after proposals are received said deposits will be refunded.

The Board of Education reserves the right to reject any or all bids or proposals submitted; to waive any informality in the making of the same; and to decide as to the desirability or responsibility of any and all bidders.

By order of the Board of Education of the Township of Cinnaminson.

BENJAMIN LIPPINCOTT,
District Clerk,
Cinnaminson, N. J.

Dated, September 5, 1922.

Bids: Oct. 11.

Repairs to Reservoir

Binghamton, N. Y.

Sealed proposals for Construction—Repairs to Reservoir, at the Binghamton State Hospital, Binghamton, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 P.M. (Standard Time) Wednesday, October 11th, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3972. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Binghamton State Hospital, Binghamton, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.

Dated: September 13, 1922.

OFFICIAL PROPOSALS

Bids: Oct. 3.

Water Works System and Sanitary Sewer System

Haines City, Fla.

Sealed proposals for furnishing material and constructing a Water Works System and a Sanitary Sewer System for the Town of Haines City, Fla., will be received by the Mayor and Council at the City Hall, until 2 P.M., October 3rd, 1922.

The Water Works System will consist of approximately 4 miles of 4 in., 6 in., 8 in. and 10 in. cast iron pipe, with specials, valves and hydrants, a clear water collecting well, pump station and equipment, and a 100,000 gallon elevated tank.

The Sewer System will consist of approximately 1.7 miles of 8 in., 10 in. and 15 in. vitrified pipe, with manholes, flush tanks and appurtenances, and a settling tank and tile under-drain system.

Each proposal must be accompanied by a certified check, payable to the Town of Haines City, Florida, to an amount equal to five (5) per cent of the bid, as a guarantee that the contract will be entered into if awarded. A bond of one hundred per cent (100%) of the contract price will be required. Payments will be made on monthly estimates.

Plans and specifications are on file in the office of the City Clerk, at Haines City, Florida, and with Paul H. Norcross, Consulting Engineer, 1404 Candler Building, Atlanta, Georgia.

Bidders may obtain copies from the Engineer by enclosing certified check for twenty-five ($25.00) dollars, payable to the Town of Haines City, Florida. If blue prints are desired they may be had at the cost of printing. If the plans, specifications and blue prints are returned within thirty days after opening bids, the check for twenty-five dollars will be returned.

R. O. PHILPOT,
President City Council.
JED R. YALE,
City Clerk.

PAUL H. NORCROSS,
Consulting Engineer,
1404 Candler Building,
Atlanta, Georgia.

Bids: Oct. 16.

Sewers

State College, Pa.

Sealed proposals for building approximately 2,700 linear feet of thirty-six (36) inch Storm Water Sewer, together with inlets, catch basins and connections, will be received until eight (8) o'clock P.M. of October 16, 1922, by the Town Council of the Borough of State College, Centre County, Pa., at which time the bids will be publicly opened in the Council Chamber of the borough. All proposals must be submitted on the forms furnished. A certified check for $200.00 made payable to the Borough of State College must accompany the proposal to insure that the successful bidder will enter into contract with the Borough within ten (10) days from the date of notice of award of contract. Plans and specifications and blank forms of proposal may be obtained from the Borough Engineer or the Secretary of Council. The Borough reserves the right to reject any or all bids.

E. J. WILLIAMS.
Secretary of Council.
H. B. SHATTUCK,
Borough Engineer.

State College, Pa.
Sept. 14, 1922.

Bids: Oct. 2.

Bridge Work

Lansing, Mich.

Sealed Bids will be received by the City Clerk of Lansing, Michigan, up to 4:00 p.m., Monday, October 2, 1922, for the construction of a reinforced concrete combined river and grade separation bridge. Estimated cost, not including property damages, $175,000.

Plans and specifications may be obtained from the City Engineer by making a deposit of $50.00.

W. BINTZ.

OFFICIAL PROPOSALS

Bids: Oct. 6.

Garbage Incinerator

Charleston, W. Va.

Sealed proposals will be received by the undersigned until 2 P.M. on the 6th day of October, 1922, for the construction of a plant for the incineration of all garbage collected by the City of Charleston, West Virginia.

The work to be done includes the construction of a refuse incinerator plant complete, tested, accepted, and ready for operation, including the building, flues, chimney, and all appurtenances, and of a capacity of fifty (50) tons for twenty-four hours.

All proposals must be made upon the forms provided therefor and accompanied by a certified check in the sum equal to two and one-half (2½%) per cent of the amount bid.

The Council of the City of Charleston, West Virginia, reserves the right to reject any or all bids.

Specifications and blank proposals may be obtained at the office of the City Manager, City Building, Charleston, West Virginia.

LON H. BARRINGER,
City Manager.

Bids: Oct. 16.

Sanitary Sewers

State College, Pa.

Sealed proposals for building approximately 13,500 linear feet of 10, 8, 6 and 4 inch Sanitary Sewers and house connections, together with man-holes and lamp-holes, will be received until eight (8) o'clock P.M. of October 16, 1922, by the Town Council of the Borough of State College, Centre County, Penna., at which time the bids will be publicly opened in the Council Chamber of the Borough. All proposals must be submitted on the forms furnished. A certified check for $200.00 made payable to the Borough of State College must accompany the proposal to insure that the successful bidder will enter into contract with the Borough within ten (10) days from the date of notice of award of contract. Plans and specifications and blank forms of proposal may be obtained from the Borough Engineer of the Secretary of Council. The Borough reserves the right to reject any or all bids.

E. J. WILLIAMS,
Secretary of Council.
H. B. SHATTUCK,
Borough Engineer.

State College, Pa.
Sept. 14, 1922.

Bids: Sept. 30.

Bridge Repairs

Trenton, N. J.

Sealed proposals will be received by the Joint Commission for the Elimination of Toll Bridges over the Delaware River, between New Jersey and Pennsylvania, at the State House, Trenton, New Jersey, until noon, Standard Time, Saturday, September 30th, 1922, for the repairs to the bridge over the Delaware River at Washington's Crossing.

Proposals must be submitted on the form furnished by the Commission and accompanied by a certified check for the amount of $1,000, made payable to the Treasurer of the Joint Commission, as a guaranty of good faith.

Plans, specifications and estimates of the quantities are on file at the office of Louis Focht, Engineer, at 125 West State Street, Trenton, New Jersey; this being the address to which the bids are to be sent.

All bids are to be submitted in a sealed envelope marked, "Proposals for repairs to the Washington's Crossing Bridge."

The right is reserved to reject any or all bids, and to waive any informality in the bids received.

September 16, 1922.

LOUIS FOCHT,
Engineer to the Joint Commission.

OFFICIAL PROPOSALS

Bids: Dec. 18.

STATE ELECTRICITY COMMISSION OF VICTORIA

Tenders for Plant

Melbourne, Australia.

Tenders are hereby invited for the supply, delivery, etc., of the following for the Morwell Power Scheme.

Copies of Tender Form and Specification and Drawings will be available upon application to: Office of the Bureau of Foreign & Domestic Commerce, United States Department of Commerce, First National Bank Building, CHICAGO, and Office of the Bureau of Foreign & Domestic Commerce, United States Department of Commerce, 734 Custom House, NEW YORK CITY.

SPECIFICATION No. 282. COAL HANDLING PLANT

CHARGE—£2.2.0 for the first 3 copies of Tender Form, Conditions of Contract, Specification and Drawings complete. These charges will be returned on receipt of a bona-fide tender. A fourth copy and any further copies will be supplied for the sum of 10/6 each.

PRELIMINARY DEPOSIT: A Preliminary Deposit of £50.0.0 is to be lodged with tender.

The Specification may be inspected at the above mentioned offices, and also at the office of: The Commissioner for Australia in U. S. A., Room 3012, 61 Broadway, NEW YORK.

The Commission does not bind itself to accept the lowest or any tender.

Tenders on prescribed form, properly endorsed and addressed, must be delivered to the undersigned in Melbourne not later than Noon, 18th December, 1922.

R. LIDDELOW, Secretary,
State Electricity Commission of Victoria,
22-32 William Street,
Melbourne,
Victoria, Australia.

Bids: Oct. 2.

Water Main Extensions

Saranac Lake, N. Y.

Sealed proposals will be received by the Clerk of the Sewer and Water Board of the Village of Saranac Lake, N. Y., until 8:00 o'clock P.M. on Monday, October 2nd, 1922, for the construction of the following extensions to the existing water distribution system of said Village.

2,700 feet of 10 inch, Class No. 100 Universal Water Mains.
4,500 feet of 6 inch, Class No. 130 Universal Water Mains.
2 10 in. Gate Valves and Wayboxes.
12 6 in. Gate Valves and Wayboxes.
22 Double Nozzle Fire Hydrants.

The above quantities are approximate only, for a basis for a uniform comparison of bids.

Bids must be made on proposal blanks furnished by the Sewer and Water Board and must be accompanied by a Certified Check to the amount of $500.00 drawn payable to S. A. Miller, Clerk of the Board.

Proposals must be sealed and delivered to the Clerk and indorsed "Proposals for construction of water mains."

Plans may be seen and proposal blanks, form of contract and specifications secured upon application to the Clerk.

The Sewer and Water Board reserves the right to reject any and all bids.

By order of the Sewer and Water Board.

S. A. MILLER, Clerk,
Saranac Lake, N. Y.
JOHN L. COLLINS, Engineer,
30 Church St., N. Y.

Swart Service Really Serves.
That's worth reading again.
SWART
Contract Bonds
Compensation Insurance
92 William St., New York

OFFICIAL PROPOSALS

Bids: Sept. 28.

Laying Cast Iron Water Pipe and Appurtenances

Poughkeepsie, N. Y.

Sealed proposals will be received by the Board of Public Works at its offices in Eastman Park Mansion on or before 4:00 p.m., (Daylight Saving Time), Thursday, September 28th, 1922, for the laying of cast iron water pipe and appurtenances.

Plans, specifications, form of proposal, bond and contract may be obtained at the office of the Superintendent of Public Works, Poughkeepsie, N. Y., and at the office of Hazen, Whipple and Fuller, Consulting Engineers, 30 East 42nd Street, New York City, upon the deposit of Twenty-five ($25.00) Dollars, which amount will be refunded upon the return of the plans and specifications in good condition.

Quantities of work to be done are approximately:

CONTRACT A

Item 1: 4,800 cubic yards of trench excavation in earth.
Item 2: 3,200 cubic yards of trench excavation in rock.
Item 3: Laying 11,100 linear feet of 24" cast iron pipe furnished by the Board.
Item 4: Placing 50 tons of specials furnished by the Board.
Item 5: Placing gates furnished by Board. Lump sum.
Item 6: Making connections to existing pipes. Lump sum.
Item 7: 80 cubic yards of concrete in agate chambers.
Item 8: 12 cubic yards of concrete in trench.
Item 9: 1,600 pounds steel reinforcing
Item 10: Supporting tracks. Lump sum.
Item 11: Creek crossing. Lump sum.
Item 12: Sheeting left in place.
Item 13: Appurtenances.

CONTRACT B

Item 14: 5,400 cubic yards of excavation in earth.
Item 15: 1,500 cubic yards of excavation in rock.
Item 16: Laying 3,720 linear feet of 20" cast iron pipe furnished by the Board.
Item 17: Laying 5,910 linear feet of 24" cast iron pipe furnished by the Board.
Item 18: Laying 165 linear feet of 30" cast iron pipe furnished by the Board.
Item 19: Placing 45 tons of specials furnished by the Board.
Item 20: Placing gates furnished by the Board. Lump sum.
Item 21: Making connections to existing pipes. Lump sum.
Item 22: 75 cubic yards of concrete in gate chambers.
Item 23: 15 cubic yards of concrete in trench.
Item 24: 1,700 pounds steel reinforcing.
Item 25: Supporting tracks. Lump sum.
Item 26: Creek crossing. Lump sum.
Item 27: Sheeting left in place.
Item 28: Appurtenances.

The proposal shall be accompanied by a certified check drawn upon an incorporated State or National Bank or Trust Company in good credit, within this State, payable to the order of the City of Poughkeepsie for five per cent of the amount of the bid. The successful bidder will be required to give a satisfactory bond for the faithful performance of the agreement in amount equal to fifty per cent of the value of the contract.

The Board of Public Works reserves the right to reject any or all bids.

By order of the Board of Public Works.

THOMAS F. LAWLOR,
Supt.

HAZEN, WHIPPLE & FULLER,
Consulting Engineers,
30 East 42nd Street,
New York City.

CONTRACT BONDS FOR RESPONSIBLE CONTRACTORS
Treat your bonding company as you do your banker; both help you with the CREDIT you require.
ÆTNA CASUALTY AND SURETY COMPANY
HARTFORD, CONN.
AGENTS EVERYWHERE

OFFICIAL PROPOSALS

Bids: Oct. 3.

Sewer Extensions

Saranac Lake, N. Y.

Sealed proposals will be received by the Clerk of the Sewer and Water Board of the Village of Saranac Lake, N. Y., until 8:00 P.M. on Monday, Oct. 2nd, 1922, for the construction of sewers in the said Village, as follows:

900 feet of 8 inch sewer.
5,500 feet of 6 inch sewer.
32 Manholes.

The above quantities are approximate, only for a basis of a uniform comparison of bids.

Bids must be made on proposal forms furnished by the Sewer and Water Board and must be accompanied by a certified check to the amount of $500.00 drawn payable to S. A. Miller, Clerk of the Board.

Proposals must be sealed and delivered to the Clerk, indorsed "Proposal for the construction of Sewers."

Plans may be seen, and Proposal blanks, form of Contract and Specifications may be secured at the office of the Clerk.

The Sewer and Water Board reserves the right to reject any and all bids.

By order of the Sewer and Water Board.

S. A. MILLER, Clerk,
Saranac Lake, N. Y.
JOHN L. COLLINS, Engineer,
30 Church St., N. Y.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, Buffalo, N. Y. —Sealed proposals will be received here until 11 a.m. (Eastern Standard Time), September 28, 1922, and then opened, for dredging and rock excavation in Sandusky Harbor, Ohio. Further information on application.

PROPOSAL FOR SPURDIKES.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9.00 a.m., October 3, 1922, and then opened, for construction of spurdikes at Southwest Pass, Mississippi River. Further information on application.

U. S. GOVERNMENT

OFFICE OF THE CONSTRUCTING QUARTERMASTER, ABERDEEN PROVING GROUND, MD. Sealed proposals will be received in this office until 10:00 A.M., September 30, 1922, and then opened, for construction of twenty frame stable buildings, 29 feet x 140 feet, each for fifty-two horses, at Edgewood Arsenal, Md. Plans and specifications may be obtained at this office, upon the deposit of $10.00, which will be refunded upon the return of same in good condition, or they may be seen at the Quartermaster's Office, Edgewood Arsenal, Md. The right is reserved to accept any or to reject all bids for this project.

OFFICE OF THE CONSTRUCTING QUARTERMASTER, ABERDEEN PROVING GROUND, MD. Sealed proposals will be received in this office until 10:00 A.M., October 18, 1922, and then opened, for the construction of twenty sets of officers' quarters, at Edgewood Arsenal, Md. Plans and specifications may be obtained at this office upon the deposit of $10.00, which will be refunded upon the return of same in good condition, or they may be seen at the Quartermaster's Office, Edgewood Arsenal, Md. The right is reserved to accept any or to reject all bids for this project.

U. S. ENGINEER OFFICE, SAVANNAH, Ga.—Sealed proposals will be received here until 12 noon, September 26, 1922, and then opened, for repairing training walls in Savannah Harbor, Ga. Further information on application.

U. S. ENGINEER OFFICE, HONOLULU, T. H., August 10, 1922.—Sealed proposals will be received here until 11 a.m., October 31, 1922, and then opened, for dredging in Honolulu Harbor, T. H. Further information on application here or to U. S. Engineer Office, 401 Customhouse, San Francisco, Calif.

U. S. ENGINEER OFFICE, NASHVILLE, TENN.—Sealed proposals will be received here until 11 a.m., Oct. 23, 1922, and then opened, for 3 steel dump scows. Further information on application.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y. Sealed proposals will be received here until 12 m., October 5, 1922, and then opened, for dredging and rock removal in East River, N. Y. Further information on application.

U. S. ENGINEER OFFICE, MOBILE, ALA.—Sealed proposals will be received here until 11 o'clock a.m., Oct. 10, 1922, and then opened, for the construction of one 100-ft. Diesel-Electric towboat. Further information on application.

U. S. ENGR. OFFICE, WILMINGTON, DEL.—Sealed proposals will be received here until 11 A.M., October 6, 1922, and then opened, for dredging Tuckerton Creek, N. J. Further information on application.

PROPOSALS FOR CEMENT.—Office Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn.—Sealed proposals for furnishing and delivering 24,000 sacks of Portland Cement will be received at this office until 11 a.m., Sept. 27, 1922, and then opened. Further information on application.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., September 8, 1922.—Sealed proposals will be opened in this office at 3 p.m., October 6, 1922, for the construction, including mechanical equipment, of the United States Post Office at Charles Town, W. Va. Drawings and specifications may be obtained from the Custodian of the site at Charles Town, W. Va., or at this office in the discretion of the Supervising Architect. JAS. A. WETMORE, Acting Supervising Architect.

POSITIONS VACANT

EMPLOYMENT

POSITIONS WANTED

POSITIONS VACANT

ASPHALT inspector capable of controlling mix for sheet asphalt and asphaltic concrete paving mixtures. P-946, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

A STRUCTURAL steel plant located west of Chicago wants a capable and experienced structural engineer to fill a position of responsibility in its engineering department. Position calls for a man of executive capacity. Applicant must have had experience in detailing, checking and designing, and be familiar and experienced with the use of structural steel in connection with building work. State fully age, nationality, education and experience in first letter. P-918, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

CAPABLE coffer-dam foreman wanted for hydro-electric work in South America; must speak Spanish. P-995, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

CARPENTER foreman, experienced in groined arch forms for concrete work. Reply give experience and salary expected. P-917, Eng. News-Record.

DESIGNER and estimator on reinforced concrete, docks, bulkheads, etc., wanted by contracting company; prefer graduate engineer between ages 25 and 30. Box No.

DRAFTSMEN civil, structural, mechanical and electrical men for power plant design and detailing. State fully experience, salary requirements, reporting date. Smith, Hinchman and Grylls, Marquette Building, Detroit, Michigan.

POSITIONS VACANT

DRAFTSMEN, thoroughly experienced in making and checking shop drawings for structural shop. Positions permanent to competent men. Apply giving full information. Whitehead and Kales Company, 2361 Beecher Avenue, Detroit, Mich.

POSITIONS VACANT

DRAFTSMEN; experienced in design of elevating and conveying machinery and structural steel. Positions will probably lead to certain amount of sales work. Give full details of experience and salary expected. P-969, Eng. News-Record.

HIGHER ENGINEERING
(BY MAIL)

Intensive Reinforced Training for Young Engineers

Reinforced Concrete Engineering
Steel Designing, (Estimating)
Bridges, Steel and Concrete.

Wilson Courses provide the practice that every young engineer so badly needs after he leaves college. They duplicate actual designing just as it is done in first-class structural designing offices. They are **actual experience** work, meant to round out your education. Only high-grade men are enrolled for this work.

Get our free literature, if you are ambitious, and want that **ideal course.**

WILSON ENGINEERING CORPORATION
10 Broadway, Hanover, Mass.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Oct. 2	Glenwood Springs, Colo.	Sept. 21
Oct. 2	Saranac Lake, N. Y. Adv. Sept. 21 and 28.	Sept. 21
Oct. 2	Wickliffe, O.	Sept. 28
Oct. 3	Haines City, Fla.	Sept. 7
Oct. 3	St. Louis, Mo.	Sept. 28
Oct. 3	Cedar Grove, La.	Sept. 28
Oct. 5	Marshall, Ill.	Sept. 14
Oct. 6	Memphis, Tenn. Adv. Sept. 21 and 28.	Sept. 21
Oct. 6	New York, N. Y.	Sept. 28
Oct. 10	Greensboro, N. C. Adv. Sept. 14 to 28.	Sept. 14
Oct. 10	Covington, La.	Sept. 28
Oct. 11	Binghamton, N. Y. Adv. Sept. 21 and 28.	Sept. 21
Oct. 19	Newark, N. J. Adv. Sept. 28.	Sept. 7

SEWERS

Sept. 30	Detroit, Mich.	Sept. 28
Oct. 2	Cape Girardeau, Mo.	Sept. 21
Oct. 2	Saranac Lake, N. Y. Adv. Sept. 21 and 28.	Sept. 21
Oct. 2	Alexandria, La.	Sept. 21
Oct. 2	Cleveland Heights (Warrensville P. O.), O.	Sept. 28
Oct. 3	Toronto, Ont.	Sept. 7
Oct. 3	Phila., Pa.	Sept. 28
Oct. 4	Hartsdale, N. Y. Adv. Sept. 28.	Sept. 28
Oct. 5	Maple Heights (Worthington P. O.), O.	Sept. 28
Oct. 10	Syracuse, N. Y.	Sept. 7
Oct. 10	Waseca, Minn.	Sept. 21
Oct. 11	Salt Lake City, Utah	Sept. 28
Oct. 16	State College, Pa.	Sept. 21
Oct. 16	Hackensack, N. J. Adv. Sept. 28.	Sept. 28
Oct. 17	Salt Lake City, Utah	Sept. 28

WASTE DISPOSAL

Sept. 22	Trenton, N. J.	Sept. 7
Oct. 6	Charleston, W. Va. Adv. Sept. 21 and 28.	Sept. 21

BRIDGES

Oct. 2	Lansing, Mich.	Sept. 28
Oct. 2	Ohio	Sept. 28
Oct. 3	Georgia	Sept. 28
Oct. 6	Seattle, Wash.	Sept. 7
Oct. 6	Cincinnati, O.	Sept. 28
Oct. 7	New Jersey Adv. Sept. 28.	Sept. 28
Oct. 9	White Plains, N. Y. Adv. Sept. 14 to 28.	Sept. 21
Oct. 10	Virginia	Sept. 28
Oct. 16	Sacramento, Cal.	Sept. 14
Oct. 19	Chesterfield, S. C.	Sept. 21
Oct. 31	Sydney, Australia	Jan. 12
Jan. 23	Spokane, Wash.	Sept. 21
Sept. 1, 1923,	Sydney, New South Wales, Australia	Aug. 3

DAMS

Oct. 6	Winters, Tex.	Sept. 28

EXCAVATION, DRAINAGE IRRIGATION

Oct. 2	Arcadia, Ga.	Sept. 28
Oct. 3	Ft. Lauderdale, Fla. Adv. Sept. 14 to 21.	Sept. 21
Oct. 3	Merced, Calif.	Sept. 21
Oct. 3	Paradise, Calif.	Sept. 21
Oct. 7	Illinois	Sept. 21
Oct. 10	Red Oak, Ia.	Sept. 28
Oct. 23	Hershey, Neb. Adv. Sept. 28.	Sept. 28
Oct. 27	Minneapolis, Minn.	Sept. 21

STREETS AND ROADS

Bids Close		See Eng. News-Record
Sept. 30	La Porte, Ind.	Sept. 28
Oct. 2	Sullivan, Ind.	Sept. 28
Oct. 2	Paoli, Ind.	Sept. 28
Oct. 2	Warsaw, Ind.	Sept. 28
Oct. 2	Alexandria, La.	Sept. 21
Oct. 2	Vevay, Ind.	Sept. 21
Oct. 2	Noroton Heights, Conn. Adv. Sept. 14 to 28.	Sept. 14
Oct. 2	Ontario	Sept. 21
Oct. 2	Syracuse, N. Y.	Sept. 21
Oct. 2	Sioux Falls, S. D.	Sept. 28
Oct. 2	Cranbury, N. J.	Sept. 28
Oct. 2	Jacksonville, Fla.	Sept. 28
Oct. 2	Starkeville, Miss.	Sept. 28
Oct. 3	Huntsville, Tex.	Sept. 28
Oct. 3	Decorah, Ia.	Sept. 28
Oct. 3	St. Louis, Mo.	Sept. 28
Oct. 3	Quebec	Sept. 21
Oct. 3	Anderson, S. C.	Aug. 31
Oct. 3	Washington	Aug. 31
Oct. 3	Bridgeton, N. J.	Sept. 28
Oct. 3	Winamac, Ind.	Sept. 28
Oct. 3	Bloomfield, Ind.	Sept. 28
Oct. 3	Columbus, O.	Sept. 28
Oct. 3	Long Branch, N. J. Adv. Sept. 28.	Sept. 28
Oct. 4	Michigan	Sept. 21
Oct. 4	Bismarck, N. D.	Sept. 21
Oct. 4	Greenville, S. C.	Sept. 21
Oct. 4	Salt Lake City, Utah	Sept. 28
Oct. 4	Brooklyn, N. Y.	Sept. 28
Oct. 5	St. George, N. Y.	Sept. 28
Oct. 5	Tracy, Calif.	Sept. 28
Oct. 5	Michigan	Sept. 28
Oct. 5	Dallas, Tex.	Sept. 28
Oct. 5	Athens, Tenn.	Sept. 28
Oct. 6	Indianapolis, Ind.	Sept. 28
Oct. 6	Wellington, Kan.	Sept. 14
Oct. 6	Alabama	Sept. 14
Oct. 6	Bonham, Tex.	Sept. 28
Oct. 9	California	Sept. 21
Oct. 9	Laurel, Miss. Adv. Sept. 28.	Sept 28
Oct. 9	West Park (Cleveland P. O.), O.	Sept. 28
Oct. 9	Orange, Tex.	Sept. 28
Oct. 10	Georgetown, Tex.	Sept. 28
Oct. 10	Virginia	Sept. 28
Oct. 10	Michigan	Sept. 28
Oct. 10	Ft. Myers, Fla.	Sept. 21
Oct. 11	Pittsburgh, Pa.	Sept. 28
Oct. 11	Santa Rosa, Calif.	Sept. 28
Oct. 11	Ridgeland, S. C.	Sept. 28
Oct. 13	Iola, Kan.	Sept. 14
Oct. 14	Tennessee	Sept. 28
Oct. 16	Coalmont, Tenn.	Sept. 28
Oct. 16	Dade City, Fla.	Sept. 28
Oct. 16	California	Sept. 28
Oct. 17	Pennsylvania Adv. Sept. 28.	Sept. 28
Oct. 18	Syracuse, N. Y.	Sept. 28
Oct. 19	Charleston, S. C.	Sept. 28
Oct. 24	St. Louis, Mo.	Sept. 28
Jan. 7	Duluth, Minn.	Sept. 28

INDUSTRIAL WORK

Oct. 3	Union Grove, Wis.	Sept. 21
Oct. 5	Marshall, Ill.	Sept. 14
Oct. 16	Cleveland, O.	Sept. 28

BUILDINGS

Sept. 30	Pittsfield, Mass.	Sept. 28
Oct. 2	Westerly, R. I.	Sept. 28
Oct. 2	Cedar Rapids, Ia.	Sept. 14
Oct. 2	Galt, Ont.	Sept. 28
Oct. 2	St. Paul, Minn.	Sept. 28
Oct. 2	West Hartford, Conn.	Sept. 28
Oct. 3	Sacramento, Calif.	Sept. 7
Oct. 5	Cleveland, O.	Sept. 28
Oct. 5	Phila., Pa.	Sept. 28
Oct. 6	Brookville, O.	Sept. 14
Oct. 6	Oakwood (Dayton P. O.), O.	Sept. 28
Oct. 7	Mt. Pleasant, Mich.	Sept. 28
Oct. 9	Johnstown, Pa.	Sept. 28
Oct. 9	Knoxville, Tenn.	Sept. 28
Oct. 9	Minneapolis, Minn.	Sept. 28
Oct. 16	Detroit, Mich.	Sept. 28
Oct. 10	Selma, Calif.	Sept. 21
Oct. 10	Baltimore, Md.	Sept. 21
Oct. 16	Altoona, Pa. Adv. Sept. 21 and 28.	Sept. 21
Oct. 16	Port Huron, Mich.	Sept. 28
Oct. 16	Patchogue, N. Y.	Sept. 28
Oct. 17	Racine, Wis.	Sept. 21
Oct. 19	Athens, O.	Sept. 28
Oct. 19	Phoenix, Ariz.	Sept. 28
Oct. 20	Logan, O.	Sept. 28
Oct. 31	Creedmoor (Jamaica P. O.), N. Y. Adv. Sept. 28.	Sept. 28

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Oct. 2	Steel Buoys—Staten Island, N. Y.	Sept. 21
Oct. 3	Spur Dikes—New Orleans, La. Adv. Sept. 21 and 28.	Sept. 21
Oct. 4	Telephone System—Tuskegee, Ala.	Sept. 14
Oct. 5	Dredging — New York, N. Y. Adv. Sept. 7 to 28.	Sept. 7
Oct. 5	Remodeling—Boone, Ia.	Sept. 28
Oct. 6	Dredging — Wilmington, Del. Adv. Sept. 7 to 28.	Sept. 7
Oct. 6	Post Office — Charleston, W. Va.	Sept. 14
Oct. 7	Cement—Wash., D. C.	Sept. 21
Oct. 9	Oil Storage House—Brooklyn, N. Y. Adv. Sept. 28.	Sept. 28
Oct. 10	Towboat—Mobile, Ala. Adv. Sept. 7 to 28.	Sept. 14
Oct. 11	Hospital — Tupper Lake, N. Y. Adv. Sept. 28	Sept. 21
Oct. 11	Remodeling — Mare Island, Calif.	Sept. 21
Oct. 11	Quarters, etc. — San Diego, Calif.	Sept. 21
Oct. 11	Earthwork, St. Louis, Ill. Adv. Sept. 28.	Sept. 28
Oct. 13	Pump, etc.—Wash., D. C.	Sept. 28
Oct. 16	Earthwork—Yuma, Ariz.	Sept. 14
Oct. 16	Hospital—Chelsea, N. Y. Adv. Sept. 28.	Sept. 28
Oct. 16	Mechanical Equipment — Chelsea, N. Y.	Sept. 28
Oct. 18	Quarters—Edgewood, Md. Adv. Sept. 21 and 28.	Sept. 21
Oct. 20	Dredge Tenders — Phila., Pa.	Sept. 28
Oct. 23	Dredging — Providence, R. I. Adv. Sept. 28.	Sept. 28
Oct. 23	Dump Scows — Nashville, Tenn. Adv. Sept. 21 and 28.	Sept. 21
Oct. 24	Pier Removal, etc. — Chicago, Ill. Adv. Sept. 28.	Sept. 28
Oct. 31	Dredging—Honolulu, H. T.	Aug. 31

MISCELLANEOUS

Oct. 2	Pier—Vancouver, B. C.	Sept. 7
Oct. 2	Gas Plant Equipment, etc.—Alexandria, La.	Sept. 21
Oct. 3	Dumping Units, etc. — Ft. Lauderdale, Fla.	Sept. 28
Oct. 4	Levee—New Orleans, La.	Sept. 28
Oct. 5	Air Compressor, etc. — New York, N. Y.	Sept. 28
Oct. 6	Crushed Rock — Fresno, Calif.	Sept. 28
Oct. 9	Coal Hopper Equipment, etc. —Northville, Mich.	Sept. 28
Oct. 10	Steam Turbine, etc.—New Orleans, La. Adv. Aug. 17 to Sept. 28.	Aug. 17
Oct. 18	Brick—Wash., D. C.	Sept. 28
Nov. 4	Transformers, etc. — Melbourne, Australia	Aug. 17
Dec. 18	Coal Handling Plant — Melbourne, Victoria, Australia	Sept. 21

Where name of official is not given inquiries shoud be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. C., Lumberton — See "Streets and Roads."

O., Wellsville—Takes bids about Nov. 15 new water supply system. W. J. Sherman Co., Wellsville, engrs.

Kan., Morrill—Waterworks and sewerage systems, to Hybskman & Wiley, Seneca, $22,770 and $21,829 respectively. Noted Aug. 17.

S. D., Rapids City—Having plans prepared new waterworks system, (gravity supply). $175,000. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs.

Mo., Trenton—Had revised plans prepared for waterworks improvements. Plans election to vote on $135,000 bonds for same. Burns & McDonnell, Interstate Bldg., Kansas City, engrs.

Col., Boulder—Making plans rein.-con. reservoir, 10,000,000 gal. capacity. $100,000. Burns & McDonell, 402 Interstate Bldg., Kansas City, Mo., engrs.

Ariz., Flagstaff—Making plans new water supply system, incl. reservoir 100,000,000 gal. capacity. $500,000. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs.

Wash., Marble—J. White Co. having surveys made and takes bids in spring, earth daam 600 ft. long, 60 ft. high, flumes, wood and concrete pipe, also structures for 1,000 acre irrigation project. $200,000-$300,000. J. W. Beardsley, Marble, engr.

Waterworks (Continued)

Ont., Windsor—Having plans prepared filtration plant. $125,000. Prices wanted on all materials and equipment. James, Proctor & Redfern, Excelsior Life Bldg., Toronto, engrs.

BIDS DESIRED

N. Y., New York—Oct. 6, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains on subway bridge over Bronx River and on highway bridge over New York, New Haven & Hartford R.R. also in Westchester Ave. and Edgewater Rd., Bronx Boro.

La., Cedar Grove—Oct. 3, waterworks and sanitary sewerage system, incl. pumping plant, reservoir, disposal plant, 67,007 ft. 2, 4, 6, 8 and 10 in. water pipe, 57,056 ft. 8, 10, 12 and 15 in. sewer pipe, valves, hydrants, etc. E. T. Archer & Co., New England Bldg., Kansas City, Mo., engrs.

La., Covington—Oct. 10, by R. W. Badon, mayor and Town Council, building waterworks and sewerage systems, incl. c.i. and galvanized pipe and fittings, hydrants, valves and boxes, motor driven pumping sets, reservoir, elevated tank, pumphouse, sewer pipe, and pumps, etc. Kramer Eng. Co., Magnolia, Miss., consult. engrs. Noted Feb. 9.

O., Columbus—See "Streets and Roads."

O., Wickliffe—Oct. 2, 6,760 ft. 4-10 in. c.i. mains in Worden and Wade Aves., also grading and laying sidewalks on Euclid Ave. $43,600. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Mo., St. Louis—Oct. 3, by Bd. Pub. Serv., City Hall, furnishing and delivering 160 ton special castings, $12,000; two hundred seventy 4-36 in. hub or stop valves, and one 6 in. and one 12 in. tap valves, $18,500; 300 fire hydrants 5½ in. valve and 4½ in. nozzle of special St. Louis standard, $20,000; 3,387 ton 6-36 in. Grade A coated c.i. pipe, $150,000. E. E. Wall, 312 City Hall, water comr.

BIDS RECEIVED

Ore., Grants Pass—Grants Pass Irrigation Dist., opened bids Sept. 15, 2 pumping plants, one 9,000 g.p.m., 154 ft. head. 450 h.p. motor, other 4,500 g.p.m., 141 head, 200 h.p. motor direct connected, automatic compensator control, from Lea Courtenay Co., East Ferry and Main Sts., Newark, N. J., $7,509; DeLaval Steam Turbine Co., L. C. Smith Bldg., Seattle, Wash., $7,570; Power Equipment Co., 806 Lewis Bldg., Portland, $7,650. Engrs. est. $9,000. Noted July 27.

CONTRACTS AWARDED

O., Sebring—Water purification plant, to E. J. Landor, Renkert Bldg., Canton, $41,270.

O., Steubenville—R. P. Price, dir. Pub. Serv., furnishing 127 ton Class "C" c.i. pipe, f.o.b. Steubenville, to Federal Asphalt Co., Hamilton, $116,145. Noted Sept. 7.

Mich., Detroit — Water Bd. will build water mains in Wilshire Dr., McLean, Wetherby, Sanford, Northfield, Halleck, Meade, Hasse, Hildale and Rochester Aves., incl. 5,475 ft. 6 in. and 250 ft. 8 in. c.i. pipe, by day labor. T. A. Leisen, Waterworks Park, engr.

Wis., Milwaukee—To United States Cast Iron Pipe & Fdry. Co., 122 South Michigan Ave., Chicago, 183 ton Class A water pipe $51.75 per ton, 5 ton special castings $145 per ton, total $10,195.

Utah, Ogden — Furnishing and laying 550 ton c.i. pipe, valves, etc., to F. W. Spencer Co., State St., Salt Lake City, $49,202. Noted Aug. 31.

Calif., Grenada — Grenada Irrigation Dist., rebuilding pumping plants, to L. Youdall, Commercial Bank & Savings Bldg., Stockton, $5,255; structures for 24 mi. canals, incl. checks, etc., to D. M. Reid, Grenada, $7,369; 14 mi. new canals and deepening 7 mi. present canals to G. Milne, Ft. Jones, $18,671. Bids for reconstructing dam were rejected, work will be done by day labor. Noted Sept. 21.

Ont., Port Credit—Pumping equipment for pumphouse, to Turbine Equipment Co., 73 King St. W., Toronto; hydrants to Dominion Steel Products Co., Brantford. Engrs. total est. $45,000. Noted Aug. 17.

Sewers

PROPOSED WORK

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., withdrew bids which were to be opened Sept. 8, sewer in Howland St., etc. Received no bids Sept. 8, repairs to outlet flume from Jamaica Sewage disposal plant to creek flowing into Jamaica Bay. Will readvertise. Noted Sept. 7.

N. C., Lumberton — See "Streets and Roads."

Mich., Detroit — Having plans prepared 1⅓ mi. storm sewer in Bedford Rd., 9 ft. 6 in. diam., 3 ring brick or monolithic concrete. J. W. Reid, city engr.

Ill., South Beloit (Beloit, Wis. P. O.)—Bd. Local Impvts. soon receives bids outfall sewer, bulkhead, etc., in Sanitary Dist. 1, 2½, 3, 3½ and 4 ft. rein.-con. pipe. $78,000. L. A. Parsons, pres. R. Butterman, Goodwin Blk., Beloit, Wis., engr. G. L. Clausen, 139 North Clark St., Chicago, consult. engr.

Que., Montreal—Plans 480 ft. of 2 x 3 brick sewer in Bellechasse St. from De Normandville to Chambord Sts. $3,689, 324 ft. 2 x 3 brick and 1,560 ft. 12 in. tile sewer in Sherbrooke St. from Des Erables to Wurtele Sts. $2,529 and $47,178 respectively, 1,264 ft. 2 x 3 brick sewer in Cote des Neiges Rd. from existing sewer north of Trafalgar Ave. northerly, $12,480. R. Bauset, city clk.

Ont., Hamilton—Having plans prepared sewers in Cope, Barton, Kenilworth, Brittania and Harmony Sts. $700,000. Prices wanted on materials. E. R. Gray, city engr.

BIDS DESIRED

N. Y., Hartsdale—Oct. 4, by Bd. Comrs. Hartsdale Sewer Dist., Wilson St., constructing and completing sewerage system in town of Greenburgh. R. W. Briggs, secy.; adv. this issue.

N. J., Hackensack—Oct. 16, by Hackensack Impvt. Comn., Municipal Bldg., 346 State St., for sewer work, Contr. 4. L. Lozier, Bank Bldg., Main and Mercer Sts., engr.; adv. this issue.

Pa., Phila.—Oct. 3 by F. H. Caven, dir. pub. wks., for 6,300 ft. 2 ft. 3 in. x 1 ft. 6 in. brick sewer in Ridley St. from Limekiln Pike to 20th St., Smedley St. from Moyamensing Ave. to Pollock St., 16th St. from Moyamensing Ave. to Pennsylvania R.R., 16th St. from 68th Ave. to Haines St., 67th Ave. from 15th to 18th Sts., $32,000; 3,300 ft. 2 ft. 3 in. x 1 ft. 6 in. brick sewer in Holbrook Ave. from Elmwood to Buist Aves., Mentor St. from C to D Sts., Moyamensing Ave. to 15th to 18th Sts., Penn St. from Henry to Vaux Sts., Pollock St. from Moyamensing Ave. to Broad St., $27,000; 3,908 ft. 30 in. brick and tile sewer in Bigler St. from Moyamensing Ave. to Broad St., Colna St. from Moyer to Thompson Sts., Colorado St. from 18th St. to Pennsylvania R.R., Dickens Ave. from 64th to Gross Sts., 15th St. from Pennsylvania R.R. to Moyamensing Ave. J. A. Vogelson, City Hall, engr.

La., Covington—See "Waterworks."

O., Columbus—See "Streets and Roads."

O., Cleveland Heights (Warrensville P. O.)—Oct. 2, 7,670 ft. 8-24 in. vitr. and 5,615 ft. 36 and 48 in. segmental block sewers in Blanche and Hyde Park Aves., Ridgefield and South Compton Rds. $56,157. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

O., Maple Heights (Worthington P. O.)—Oct. 5, sewers in Bway. Sewer Dist. To exceed $25,000. C. W. Courtney, 506 Leader-News Bldg., Cleveland, engr.

Mich., Detroit—Sept. 30, by Dept. Pub. Wks., 3,440 ft. Ryan Ave. Arm of Seven Mile Rd. Sewer in Ryan Ave. from Minnesota Ave. to Seven Mile Rd., 1,760 ft. of 4 x 6 ft., 985 ft. 3 ft. 8 in. x 5 ft. 6 in., 662 ft. 2 ft. 10 in. x 4 ft. 3 in. egg, 33 ft. 20 in. crock; 2,628 ft. Fenelon Ave. Arm of Seven Mile Rd. Sewer in Fenelon Ave. from Seven Mile Rd. to Nevada Ave., 1,370 ft. 4 x 6 ft., 655 ft. 3 ft. 8 in. x 5 ft. 6 in., 603 ft. 3 ft. 2 in. x 4 ft. 9 in. egg; 1,840 ft. 7 ft. 9 in. cylinder in Edison Ave. Arm Sewer in Edison Ave. from 3rd St. to Woodward Ave.; 2,993 ft. Huston Ave. Arm of Gratiot Ave. Sewer in Huston Ave from Gratiot to Peoria Ave., 1,400 ft. 4 ft. 6 in., 1,423 ft. 4 ft., 50 ft. 3 ft. cylinder, 40 ft. 24 in., 40 ft. 18 in., 40 ft. 15 in. crock: 2,572 ft. Westminster Ave. Arm of Bates St. Sewer in Westminster Ave. from Brush to Russell Sts., 1,550 ft. 5 ft. 9 in., 958 ft. 5 ft. cylinder, 22 ft. 5 ft., 42 ft. 3 ft. 2 in. x 4 ft. 9 in. connection, 24 ft. 12 in. c.i. pipe, 30 ft. 12 in. crock. J. W. Reid, city engr.

Utah, Salt Lake City—Oct. 11, by City Comrs., 20,000 ft. 8-12 in. sanitary sewers Extension 409. $58,000. S. Q. Cannon, city engr.

Utah, Salt Lake City—City Comrs. receiving bids 30,000 ft. 8-36 in. concrete or vitr. tile sewers in Farmers Ward. $133,000. S. Q. Cannon, city engr.

Utah, Salt Lake City—Oct. 17, by City Comrs., 29,000 ft. 8-18 in. concrete or vitr. tile sewers in Sewer Extension 410, Northwest Dist. $94,000. S. Q. Cannon, city engr.

Calif., Tracy—See '"Streets and Roads."

BIDS RECEIVED

N. J., Newark—Passaic Valley Sewerage Comrs., 128 Market St., opened bids Sept. 19, 3rd and 4th Ave. local sewer connections, from Arnolt-More, Inc., 45 Clinton St., $59,000; Harrison & Stillman Co., Paterson (street address not available), $71,500.

O., West Park (Cleveland, P. O.)—W. Dahm, dir. Pub. Serv., opened bids Sept. 13, storm and sanitary sewers in Munn Rd. from Warren to Triskett Rd., 5,200 ft. 8-24 in. vitr. pipe; from Randall & Cooper, Lorain, $24,661; T. E. Jackson, 10714 Amor Ave., Cleveland, $29,664. Noted Sept. 7.

Mich., Springwells — For (1) 3,447 ft. Section. 10 main sanitary sewer, incl. 1,447 ft. 72 in., 730 ft. 66 in., 570 ft. 60 in., 333 ft. 48 in. and 344 ft. 42 in. brick or monolithic concrete pipe, (2) 5,058 ft. Sect. 14, incl. 609 ft. 72 in., 749 ft. 66 in., 570 ft. 60 in., 333 ft. 48 in. and 344 ft. 42 in. brick or monolithic concrete pipe, from Detroit Drainage Constr. Co., 5099 Lemay Ave., Detroit, (1) $65,578; J. Porath, 745 Griswold St., Detroit,, (1) $70,764, (2) $103,677; C. M. Davis, 3-154 General Motors Bldg., Detroit, (1) $73,980, (2) $104,103; R. Mercier, 5435 Wesson Ave., Detroit, (2) $103,946. Noted Sept. 7.

Calif., Modesto—Storm sewers in Dist. 4, from Frederickson & Shannon, Cory Bldg., Fresno, $58,970; Heafey, Moore & McNair, 2030 High St., Oakland, $62,500. Noted Aug. 31.

CONTRACTS AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewer in Brown Pl., etc., to J. F. Clancy, Inc., 460 Lockwood Ave., Astoria, $27,433. Noted Sept. 14.

N. Y., New York—H. Bruckner, pres. Bronx Boro, sewers in West Kingsbridge Rd., to M. Del Balso, 660 West 221st St., $2,952; Phillips Ave., to J. V. Timoney Constr. Co., 320 East 201st St., $14,930; Lafayette Ave., to Knight & Dimicco, 448 East Tremont Ave., $14,878; Liebig Ave., to Gregorri & Gabrielle, $4,844; White Plains Ave., etc., to McLaughlin & Buckley, 337 East 134th St., $28,828. Noted Sept. 21.

Pa., Phila.—Sewage disposal plant, 40th Ward, general contract to Jackson & Co., 119 South 4th St., $153,900; mechanical equipment, to Sanitary Corp., 165 Bway., New York City, $49,000. Noted Sept. 14.

Ky., Hazard—Sanitary sewerage system, to Hord Constr. Co., Huntington, W. Va., $56,682. Noted Sept. 7.

Kan., Kansas City — For 2 mi. storm sewer for Armourdale, 6 ft. diameter, flood gate and force pump, to T. M. Torson Constr. Co., 73rd St. and Metropolitan Tracks. Engrs. est. $145,000.

Kan., Morrill—See "Waterworks.".

O., Cleveland—Sewers in Carnegie Ave to D. Zullo, 10501 Hudson Ave., $10,671; Aspinwall Ave. and Saranac Rd. also Pearl Rd. Relief sewer, to Manson Co., 335 The Arcade, $27,967 and $58,042 respectively; Roseland Ave., to Hadded Mall Co., Schofield Bldg., $16,720. Noted Sept. 21.

Wis., Rice Lake — Sewers in various strets, incl. 15,740 lin.ft. 8-15 in. vitr. sewer pipe, 255 y's, 51 manholes, to Pastoret Constr. Co., 308 Sellwood Bldg., Duluth, Minn., $26,743. Noted Sept. 7.

Waste Disposal

BIDS RECEIVED

N. J., Trenton—City Comrs., Municipal Bldg., opened bids Sept. 22, 2 story, 50 x 50 ft., brick and steel addition to crematory, incl. 4 new incinerators, Southard St., from Ballard, Sprague & Co., Inc., 200 5th Ave., New York City, $58,363; C. J. Smith Constr. Co., 202 Academy St., $63,329; Decarie Incinerator Co., McKnight Bldg., Minneapolis, Minn., $68,150. Noted Sept. 7.

CONTRACTS AWARDED

Pa., Greensburg—Boro., 2 story, 32 x 45 ft. garbage disposal plant, with 100 ft. brick stack, 5 ft. diam. at top and 10 ft. base, two 20 ton incinerators, to Burrell & Snyder, Coulter Bldg.

Bridges

PROPOSED WORK

Mich., Crystal Falls—State Hy. Dept., Lansing, soon takes bids building Bridge 360205, with 2 rein.-con. arches, 240 ft. long, 24 ft. roadway, two 6 ft. walks. F. F. Rogers, state highway comr.

Mich., Detroit—Pennsylvania R.R., 1368 Penobscot Bldg., plans 600 ft. steel viaduct at Union Depot, 3rd St. B. V. Summerville, 1368 Penobscot Bldg., engr.

BIDS DESIRED

New Jersey—Oct. 7, by Joint Comn. for Elimination of Toll Bridges over Delaware River, between New Jersey and Pennsylvania, at State House, Trenton, for repairs to bridge over Delaware River between Montague Twp., Sussex Co., N. J., and Milford, Pike Co., Pa. L. Focht, 125 West State St., Trenton, engr.; adv. this issue.

Bridges (Continued)

Virginia—Oct. 10, by H. G. Shirley, chn. State Hy. Com., Richmond, 24 ft. rein.-con. beam bridge, 19 ft. over Sulphur Springs Branch, Route 11, Project 256, Tazewell Co; 55 ft. rein.-con. beam bridge, 19 ft., over South Fork Clynch River, Route 11, Project 256, Tazewell Co; 82 ft. rein.-con. beam span bridge, 19 ft., over North Fork Clynch River, Route 11, Project 256, three 25 ft. clear spans; 113 ft. bridge 19 ft., over Beaver Creek, Route 3, Project 170, Henry Co., three rein.-con. spans. G. P. Coleman, Richmond, highway comr.

Ohio—Oct. 2, by W. H. Duffy, dir. Pub. Serv., Columbus, raising existing span and building new spans, etc., for Rathbone Bridge, 1,100 ft. long, 16 or 18 ft. wide, across Scioto River in Concord Twp., Delaware Co. $120,000. R. H. Simpson, City Hall, Columbus, engr. Noted Sept. 14.

O., Cincinnati — Oct. 6, Hamilton Co., substructure, concrete floor and 700 lin.ft. waterbound macadam roadway for approaches to Bridge 7, 950 lin.ft. long, on Cleves Warsaw Rd. 209, Green Twp., 5,000 cu.yd. earth excav., 650 cu.yd. dry excav. for abutments, 150 cu.yd. 1-1½-3 and 1,400 cu.yd. 1-2-4 concrete, 30,000 lb. reinforcing, 800 cu.yd. crushed stone and 200 cu.yd. screenings, etc., $29,988; superstructure for above bridge incl. one 240 ft. riveted steel truss span, 285 ton riveted steel, $28,500. E. A. Gast, Hamilton Co. Court House, engr.

Mich., Lansing—Oct. 2, by city clerk, rein.-con. combined river and grade separation bridge. $175,000. W. Bintz, city engr.

BIDS RECEIVED

Mass., Lowell—Bd. Pub. Serv., City Hall, opened bids Sept. 20, rebuilding Lundberg St. Bridge over Boston & Maine R.R., 120 ft. span, 45 ft. wide, from Z. A. Hole, Lowell, $41,358; McClintic-Marshall Co., Pottstown, Pa., $45,764; Boston Bridge Wks., 47 Winter St., Boston, $52,008. Engrs. est. $40,000. Noted Sept. 14.

Del., Wilmington—New Castle Co. repairing Fennimores Bridge over Appoquinimink Creek, in St. Georges Hundred, one 122 ft. steel truss span, from Delaware Constr. Co., Wilmington, (street address not available), $21,873; Scott & Wells, Towns End, $25,683; T. R. Claringbold, Newark, $27,539.

CONTRACTS AWARDED

Mass., South Boston (Boston P. O.) — New York, New Haven & Hartford R.R., South Sta., Boston, wooden trestle, 170 ft. long, and loop track, at Northampton St. freight yards, to Wilson & English Constr. Co., 10 High St., Boston. Engrs. est. $25,000.

North Carolina—State Hy. Dept., Raleigh, rein.-con. bridges and culverts on State Project 528, Davidson Co., and State Project 608, Anson Co., to J. A. Peterson, Montgomery, Ala. (street address not available), $65,843 and $69,234 respectively; State Project 858, Mitchell Co., to R. M. Thurmond & Co., Lynchburg, Va., $38,516; State Project 784, Wilkes Co., to E. P. Robinson, North Wilkesboro, $29,536; State Project 712, Ashe Co., to J. T. Plott, Greensboro, $81,424; State Project 157 B, Martin Co., to Batson-Cook Co., West Point, Ga., $37,845; State Project 157 A, Martin Co., to J. A. Marrow, Clarksville, Va., $34,161; State Project 822, Cleveland Co., to J. A. Kreis, Holston Bank Bldg., Knoxville, Tenn., $37,380. Noted Sept. 14.

Ohio—See "Streets and Roads."

Indiana—State Hy. Dept., Indianapolis, constructing 31 ft. 6 in. steel truss bridge over Drainage Ditch, State Rd. 2-L, Whitley Co., to W. B. Hill, Ligonier, $1,995; 182 ft. 7 in. skew type steel truss bridge (wood block floor and painting), over Pigeon Creek, State Rd. 10-A, Vanderburgh Co., to A. G. Schenk, Mt. Vernon, $6,218; 72 ft. skew type steel truss (substructure only) over Robbins Ditch, State Rd. 15-F, Starke Co., to A. L. Blum and J. W. Parr, Hamlet, $3,886; 16 ft. rein.-con. slab, over Drainage Ditch, State Rd. 27-C, and 18 ft. rein.-con. slab over Scott Ditch, State Rd. 27-C, Kosciusko Co., to Elkhart Bridge and Iron Co., Elkhart, $2,633 and $6,135 respectively; steel truss bridge, with three 198 ft. spans and one 49 ft. span, (wood block floor and painting), over Wabash River, State Rd. 31-A, Vermilion Co., to O. Kirtley, Plainfield, $17,198. Noted Sept. 7.

Mich., Hillman—District Engineers, Alpena, for Bridge 600,401, 150 ft., two 75 ft. rein.-con. girders, 20 ft. roadway, to J. Nelson, Alpena, $32,129. Noted Sept. 7.

Ia., Manchester—Supervs. Delaware Co., to Winn Constr. Co., Muscatine, 16 culverts and extensions, 1 truss, 1 I beam and 1 slab bridge, $23,600 (concrete figure $21.63 per cu.yd.); to Parsons & Meyer, Dyersville, 8 culverts and extensions, 1 I beam $7,100 (concrete figures $21.56.)

Wash., Ellensburg—Northern Pacific Ry., 5th and Jackson Sts., St. Paul, concrete and steel bridge, 100 ft. span, over Wilson Creek, here, to Widell Co., Mankato, Minn., (labor only.) $10,000; Owner to furnish materials, cost complete, $20,000. Noted May 11.

Dams

PROPOSED WORK

N. H., Bristol—Utilities Power Co., Meredith, plans rein.con. dam, (Ambursen type) 1,200 ft. long, 55 ft. high, also hydro-electric power plant, on Pemigewasett River, Ayers Island, between here and New Hampton. $1,000,000. Engineer not announced.

S. D., Rapid City—North Divide Irrigation Assn., plans concrete dam in Rapid River, at Rapid City, also terminal reservoir at Farmingdale to irrigate 35,000 acres. $500,000. Swartz & Spitzen, Rapid City, engrs.

BIDS DESIRED

Tex., Winters—Oct. 6, dam, incl., 173 cu.yd. concrete, 13,100 cu.yd. earth excav., 2,600 sy.yd. rip rap, 40 lin.ft. jetty. $300,000. U. Stephens, Ballinger, engr.

CONTRACTS AWARDED

Wis., Waubeka (Fredonia P. O.)—E. J. Klissig will build 280 ft. concrete dam, 10 ft. high, also improve mill race with new concrete flume, etc., incl. 100 cu.yd. concrete, by day labor. J. Donohue, 606 North 8th St., Sheboygan, engr.

Railways

PROPOSED WORK

British Columbia—Canadian Pacific Ry., Winnipeg, Man., and Great Northern Ry., King St. Sta., Seattle, Wash., plan 8 mi. branch line from Elko to Philips Bridge plant of Wigwam Pulp & Paper Co., $200,000. J. M. R. Fairbairn, Montreal, Que., ch. engr. of former. A. H. Hogeland, St. Paul, Minn., ch. engr. of latter.

CONTRACTS AWARDED

Massachusetts — See "Bridges" under South Boston.

New York—Transit Comn., 49 Lafayette St., New York, installing tracks for 239th St. Yard of White Plains Rapid Transit R.R. Co., to M. Del Balso, 660 West 221st St., New York, $211,229. Noted Sept. 21.

Excavation, Drainage, Irrigation

PROPOSED WORK

Mass., Westboro—Town Drainage Comn. plans draining and improving land of Assabet River Drainage Dist. $40,000. Private plans.

Miss., Darling—Squirrel Bayou D. D., Quitman Co., had plans prepared 9 mi. open ditches, 4-10 ft. base, to reclaim about 3,000 acres wet land, 80,000 cu.yd. excav. (walking dredge), Morgan Eng. Co., Goodwin Institute, Memphis, Tenn., engrs.

Ia., Centerville—See "Miscellaneous."

Calif., Oakland—Making plans improving 1 mi. harbor front, earth and rock fill, 1,000 ft. wide, 6,000 ft. long, dredging channels to 35 ft. depth, building 5 story docks, etc. R. Beebee, City Hall, harbor engr.

Calif., Woodland — Reclamation Dist. 1600, c/o E. A. Brown, secy., 1st Natl. Bank Bldg., Berkeley, had plans prepared raising levees, 256,530 cu.yd. earthwork, $38,479; relocating levee, 75,000 cu.yd. earthwork, $11,250, removing old levee 50,000 cu.yd., $7,500; overhaul and clean main and drainage canals $20,000; 20 lin.ft. 36 in. suction pipe with 4 ft. concrete pier, $500. G. E. Meck, Forum Bldg., Sacramento, engr.

BIDS DESIRED

Fla., Arcadia—Oct. 2, by Bd. Supervs. Limestone D. D., c/o Cravens & Kimmell, engrs., Arcadia, 91,000 cu.yd. excavation. Contractor also asked to buy one Bay City dredging machine now on ground.

Ia., Red Oak—Oct. 10 by Supervs. Montgomery Co. at office C. Nimrod, aud., 6 mi. open ditch D.D. 8, 242,000 cu.yd., excav.; 1 mi. D.D. 9, 72,000 cu.yd. C. D. Forsbeck, Red Oak, engr.

Neb., Hershey — Oct. 23, by Drainage Dist. No. 1, Lincoln Co., at office of W. A. Kelly, drain comr., Hershey, 22.8 mi. open drain ditches and 6 mi. tile drains; adv. this issue.

CONTRACTS AWARDED

N. J., Plainfield—Common Council about 46,000 cu.yd. excav. from old railroad embankment, to H. C. Howe, Sherman, N. Y., $0.395 per cu.yd. Noted Sept. 7.

Miss., Grenada—Potococowa Creek D.D., Carroll and Grenada Counties, floodway consisting of 2.27 mi. open channels, and 3.2 mi. of levee channels, 90 ft. base, incl. 391,500 cu.yd. drag line excav., to Hutchinson & Oakford, 712 Peoples Life Bldg., Peoria, Ill., $61,944. Noted Aug. 17.

Ia., Council Bluffs — Pottawattamie Co straightening Mosquito Creek and tributaries in D.D. 22, 15 mi. ditches, 507,500 cu.yd. excav., to E. A. Wickham & Co., 19 Scott St., $80,000.

Streets and Roads

PROPOSED WORK

New Hampshire—F. E. Everett, comr. State Hy. Dept., cancelled bids opened Sept. 13, constructing 1.5 mi. State Highway, 18 ft., in Rochester, crushed gravel. $25,000. Noted Sept. 7.

New Hampshire—State Hy. Dept., Concord, plans paving 0.038 mi. Project 147, rein.-con., Merrimac Co., $7,479; 0.68 mi. Project 153, bituminous macadam, Grafton Co., $20,000.

Massachusetts—State Hy. Dept., Boston, plans rein.-con. paving 5.247 mi. Project 92, Norfolk Co. $256,751. A. W. Dean, 413 State House, Boston, engr.

N. Y., Niagara Falls—Plans paving 802 ft. 8th St., 30 ft., granite, wood block, brick, asphalt or concrete. $25,100. Estimate based on granite or wood block. W. B. Bennett, city engr.

N. Y., Rochester—Plans paving Joseph Ave., asphalt. $33,000. C. A. Poole, city engr.

Pa., Scranton—Plans grading, paving and curbing South Webster Ave. from Lackawanna R.R. to Maple Ave., sheet asphalt on concrete, with concrete curbs. $29,619.

Pa., Wilkes-Barre—Plans grading, paving and curbing Dyer Lane, sheet asphalt with red stone curbing; Market St., Belgian block and sheet asphalt, brick gutters. $25,000. F. H. Gates, city clk.

Maryland — State Hy. Dept., Baltimore, plans concrete paving 1 mi. Project 84, Anne Arundel Co. $28,380. J. N. Mackall, chn.

Md., Baltimore—Plans grading, curbing and paving with sheet asphalt on 6 in. concrete, Kenoak Ave. from Old Pimlico Rd. to Cross Country Blvd., and Cross Country Blvd. from Kenoak to South Aves; cement concrete paving Morello Rd. from Ailsa to Strathmore Aves., Etta Vista Ave. from St. Helens to Strathmore Aves., St. Helens Ave. from Morello Rd. to Etta Vista Ave., Ailsa Ave. from Morello Rd. to 150 ft. east. R. K. Compton, 214 East Lexington St., chn. and ch. engr.

North Carolina — State Hy. Dept., Raleigh, rejected bids opened Aug. 30, grading and paving 7.57 mi. State Project 901, Buncombe Co. $180,000. Will readvertise. Noted Sept. 14.

North Carolina—State Hy. Dept., Raleigh, plans 18 ft. pavement through Red Springs and soil road from Hoke Co. line to northern limits of Red Springs, 2 mi. top soil and ½ mi. paving, State Project 391, Robeson Co., $26,000; 2.25 mi. macadam surface on causeway, 20 ft., State Project 352, New Hanover and Brunswick Counties, $32,000. C. M. Upham, state highway engr.

N. C., Ashboro—Sold $135,000 bonds for paving, laying sidewalks, etc.

N. C., Lumberton—Sold $200,000 bonds for paving, sewer and water improvements.

N. C., New Bern—Craven Co. plans 17-20 mi. road from Clark to Dover, shell rock. $240,000. D. W. Richardson, Dover, comr.

N. C., Raleigh — North Carolina State Hospital for Insane plans grading, curbing and paving 1.87 mi. driveways at hospital, here, asphalt on concrete, 16 ft. $60,000. G. F. Syme, Raleigh, engr.

Ind., Hammond—Lake Co. plans grading and gravel surfacing 39,000 ft. C. Oliver Holmes Rd., 16 ft. $74,500. R. Seely, Hammond, engr.

Michigan — State Hy. Dept., Lansing, soon takes bids grading and gravel surfacing 4½ mi. Assessment Dist. Rd. 348, Calhoun and Barry Counties. $6,000 to $7,000 per mile. F. F. Rogers, state highway comr.

Mich., Detroit—Plans paving with 3½ in. sheet asphalt on 8 in. concrete 6,700 sq.yd. Seminole Ave. from Harper to Auburn Aves., 26 ft., $23,430, 550 sq.yd. Indiana Ave. from Grand River to Fullerton Aves. 26 ft., $2,650, 13,400 sq.yd. Six Mile Rd. from Grand Trunk R.R. to Arlington Ave. 36 ft., $67,850, also 14 alleys with one course concrete, 15, 16, 17, 18 and 20 ft wide, totaling $45,375. J. W. Reid, city engr.

Ia., Bettendorf—Making plans and receives bids in spring 8,672 sq.yd. concrete paving, and 7,300 sq.yd. concrete or asphaltic concrete with combined curb and gutter. $55,000. A. F. Abramson, clk.

Streets and Roads (Continued)

Minnesota—State Hy. Dept., St. Paul, plans gravel surfacing 16.9 mi. Project 280 in Cass Co., $182,468; 8.56 mi. Project 287, Murray Co., $50,751; 12.24 mi. Project 294, Lesner Co., $171,025. State Hy. Dept., 1246 University Ave., St. Paul, engrs.

Kan., Kansas City—Wyandotte Co. takes bids about Oct. 17, paving and grading 1 mi. road and 2 mi. Golden Belt Highway, both 18 ft. waterbound macadam. O. K. Williamson, Court House, engr.

N. D., Fargo—Cass Co. rejected bids Aug. 25, gravel surfacing 18 mi. Red Trail Highway from Mapleton westerly. $30,000. W. R. Tucker, aud. Noted Aug. 17.

Missouri—State Hy. Dept., Jefferson City plans 6.586 mi. road from Kenneth to Paragould, 24 ft., Federal Aid Project 199, Dunklin Co., 17,834 cu.yd. earth excav., 9,123 cu.yd. borrow, 34,828 sq.yd. concrete pavement 7,048 sq.yd. specification A gravel pavement, 54.9 cu.yd. concrete masonry, etc.; 3.306 mi. road from Atchison Co. to Andrew Co. lines, 24 ft., State Aid Project 20.190, Holt Co., 32,475 cu.yd. earth excav., 3,374 cu.yd. borrow, 203.9 cu.yd. concrete masonry, 13,837 lb. reinforcing for concrete masonry, etc.; 6.015 mi. road from Chillicothe northwardly, 24 ft., State Aid Project 20.193, Livingston Co., 41,362 cu.yd. earth excav., 17,680 cu.yd. borrow 259.8 cu.yd. concrete masonry, etc.; 3.08 mi. Kings Highway from Portageville to Hayti, 24 ft., Federal Aid Project 173 A, Pemiscot Co., 5,052 cu. yd. earth excav., 9,538 cu.yd. borrow; 28,825 sq.yd. specification A gravel pavement, 15 ft. wide, 10 in. at center 8 in. at edges, 50.8 cu.yd. concrete masonry, etc.; 4.931 mi. road from Shannon to Ripley Counties, 24 ft., State Project R 42-Sect. 4, Ripley Co., 40,078 cu. yd. earth excav., 18,628 cu.yd. per 100 ft. overhaul, 239.1 cu.yd. concrete masonry, etc.; 4.886 mi. road from Houston to Phelps Co. line, 24 ft., State Project Route 7, Sect. 77, Texas Co., 19,482 cu.yd. earth and 1,320 cu.yd. rock excav., 381 cu.yd. borrow, 10,550 cu.yd. per 100 ft. overhaul, etc. B. H. Piepmeier, state highway engr.

Tex., Alpine—Brewster Co. voted $300,000 bonds to grade and gravel surface 80 mi. State Highway 12. Noted Aug. 31.

Tex., Bonham—Fannin Co. making plans grading and concrete paving 7.2 mi. State Highway 5 in Honey Grove Rd. Dist., 18 ft. $228,555. P. B. Price, Honey Grove, resident engr. Rd. Dist. 4. A. S. Godde, co. engr.

Tex., Decatur—Attorney Generals Dept., Austin, approved $150,000 bond issue for road improvements incl. Meridian Highway, in Wise Co. L. W. Taylor, co. engr.

Tex., Vernon—Wilbarger Co. making plans grading and surfacing 2.24 mi. State Highway 5 west from Oklaunion, 18 ft., 141.5 cu.yd. concrete and 13,739 lb. reinforcing in drainage structures, 1,200 lin.ft. concrete curbing, 12,514 cu.yd. earth excav., 24,176 sq.yd. concrete pavement, 72,938 lb. reinforcing, $88,625; grading and paving 5.69 State Highway 5, east and west of here, 18 ft., 2,400 lin.ft. concrete curbing, 6,732 cu.yd. roadway and 4,204 cu.yd. borrow excav., 49,056 sq.yd. concrete pavement, 65 sq.yd. concrete, 2,491 cu.yd. gravel, $176,755; 3.62 mi. State Highway 5 from 3 mi. east of Tolbert to Pease River, 18 ft., 32,909 cu.yd. earth excav., 38,255 sq.yd. concrete pavement, 116,860 lb. reinforcing, 189 cu.yd. concrete and 15,433 lb. reinforcing in drainage structures. $141,937. J. B. Nabors, co. engr.

Tex., Waco—McLennan Co. making plans grading, gravel surfacing with bituminous topping 3.7 mi. State Highway 7 east of McGregor, 16 ft. $33,465. M. Hannah, co. engr.

Nevada—State Hy. Dept., Carson City, plans gravel surfacing 10 mi. Project 55 and 11.9 mi. Project 56, Churchill Co., $109,733 and $246,606 respectively; concrete paving 1.43 mi. Project 59, Lyon Co., $60,153, 3 mi. Project 65, Washoe Co., $91,685. G. W. Borden, state highway engr.

Wash., Seattle — Rejected bids opened Sept. 8, paving 11th Ave., et al. $26,999. Will readvertise. J. D. Blackwell, Hoge Bldg., engr.

Calif., Bakersfield—Had plans prepared grading, paving, etc., California Ave., 164,980 sq.ft. grading, 121,628 sq.ft. grading and paving with 1½ in. Warrenite bitulithic on 4 in. asphaltic concrete, 8,826 sq.ft. concrete gutter, 2,349 lin.ft. concrete curb, etc. W. D. Clark, city engr.

Calif., Fresno—Had plans prepared grading, paving, etc., Ferger Ave. between Olive and Belmont Aves., 132,054 sq.ft. grading, 83,670 sq.ft. asphalt pavement, 9,194 sq.ft. concrete gutter, 3,785 lin.ft. concrete curb, 17,923 sq.ft. concrete sidewalks, etc.; Thorne Ave. between Hedges and Belmont Aves., 138,890 sq.ft. grading, 113,900 sq.ft. asphaltic pavement, 12,012 sq.ft. concrete gutter, 2,442 lin.ft. concrete curb, etc.; Mariposa St. between F and G Sts., 25,208 sq.ft. grading, 24,032 sq.ft. asphalt pavement, 1,129 sq.ft. concrete gutter. W. Stranahan, city engr.

Calif., Oakland — Alameda Co., making plans paving 6 mi. Livermore-Pleasanton Rd., probably concrete. G. Posey, co. surv.

Calif., Tracy—Had plans prepared grading and surfacing 4th and 6th Sts., 3,160 cu.yd. grading, 114,547 sq.ft. 1½ in. Topeka top, 4,815 lin.ft. combination curb and gutter, 4,934 ft. concrete shoulders, etc. W. D. Harrington, city engr.

Que., Montreal—Plans pavements on 592 ft. Annette St., 13 ft., $3,940, 3,180 ft. Casgrain St. 40 ft., $41,965, 1,990 ft. Regent St. 30 ft., $20,550, 3,120 ft. Dechateaubriand St. 30 ft., $38,257, 1,766 ft. St. Catharine St. 20 ft., $12,694, 1,930 ft. Des Erables St. 30 ft., $19,341, 1,153 ft. Bordeaux St., 31 ft., $11,323, 3,269 ft. St. James St. 50 ft., $43,378, 1,010 ft. Centre St. 45 ft., $15,330, 1,520 ft. Lacasse St. 24 ft., $13,865, 1,758 ft. Chambord St. 30 ft., $11,457; concrete sidewalks on 300 ft. Lacasse St. 6 ft., $1,760, 2,065 ft. Notre Dame St. 5 ft., $12,414, 732 ft. St. Zotique St. 10 ft., $7,870, 345 ft. Bellechasse St. 11 ft., $2,831, 1,389 ft. Christophe Colomb St., 6 ft., $7,634, 7,384 ft. DeLaRoche St. 15 ft., $25,938, 1,600 ft. 9th Ave. 5 ft. $5,060, 217 ft. Perras St. 5 ft., $2,294, 480 ft. Jeanne Mance St. 5 ft., $1,898, 232 ft. Pine Ave. 12 ft., $1,570, 1,990 ft. Regent St. 5 ft., $7,730, 1,964 Monk Blvd. 6 ft., $7,590, 241 ft. Florence St. 5 ft., $1,143, 860 ft. Belmore Ave. 5 ft., $2,772, 7,130 ft. 7th Ave. 5 ft., $29,778, 1,768 ft. Rosemount Blvd. 5 ft., $6,468, 1,758 ft. Chambrod St. 5 ft., $7,133, 2,009 ft. Old Orchard Ave. 5 ft., $8,870; cement slab sidewalks on 12,880 ft. St. Adele St. 4 ft., $10,549, 2,700 ft. Fabre St. 4 ft., $2,156, 275 ft. Denormandville St. from Civic 1693 to Beaubien St. 4 ft., $246, and 290 ft. from Beaubien St. southerly, 4 ft., $246, 475 ft. Chambord St. from Beaubien St. to Civic 1661, 4 ft., $393, and 1,668 ft. from Beaubien St. to Civic 1668, 4 ft., $293, 2,950 ft. Frontenac St. 4 ft., $2,387, 2,328 ft. Verville St. from Abraham to Dickson Sts. 4 ft., $1,940, and 4,650 ft. from 4 ft. Beaumont to Dickson Sts. 4 ft., $3,850, 5,932 ft. Stuart St. 4 ft. $14,774, 7,409 ft. Lanoraie Ave. 4 ft., $5,968, 2,844 ft. Ball St. 4 ft., $2,349, 478 ft. Stanley Park, 4 ft., $400, 790 ft. Real St. 4 ft., $631. H. A. Terreault, dir. pub. wks.

British Columbia—W. H. Sutherland, minister pub. wks., Victoria, takes bids early in spring, paving 7¼ mi. Pacific Highway from international boundary towards Vancouver, 6 in. concrete. $300,000. P. Philip, Pub. Wks. Dept., Victoria, engr.

BIDS DESIRED

N. Y., Brooklyn—Oct. 4, by E. Riegelmann, boro pres., Boro Hall, repaving portion of roadway of Flatbush Ave. extension between Concord and Nassau Sts., roadway of Furman St. from Fulton St. to Atlantic Ave., roadway of South 9th St. from Kent to Wythe Aves., all foregoing grade 1 granite; roadway of Utica Ave. from Fulton to Bergen Sts., roadway of Neptune Ave. from West 36th St. to Warehouse Ave., both permanent asphalt.

N. Y., St. George—Oct. 5, by J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving roadway of Washington Ave. from Richmond to South Aves. also roadway of Henderson Ave. from Pelton Ave. to Bway., bituminous concrete.

N. Y., Syracuse — Oct. 18 (change of date), by Bd. Contract & Supply, 4,960 sq. yd. Jasper St., 25 ft., $29,460; 5,790 sq.yd. Highland St., 27 ft., $34,860; 5,400 sq.yd. Teall Ave., 34 ft., $30,120; 6,130 sq.yd. Shuart Ave., 25 ft., $38,770; 11,550 sq.yd. Grand Ave., 25 ft., $60,930; 9,580 sq.yd. Cooleridge Ave., 25 ft., $56,080; 3,830 sq. yd. Merriman Ave., 25 ft., $23,210; 6,280 sq.yd. Kellog St., 25 ft., $43,210; 4,090 sq. yd. Castle St., 30 ft., $24,400; 10,840 sq.yd. Crouse Ave., 32 ft., $60,640; 7,880 sq.yd. Walnut Ave., 34 ft., $55,190. Bids will be received on asphalt, brick, bituminous concrete, Portland cement concrete, and stone and concrete curbs. N. L. Pitts, City Hall, engr. Noted Sept. 21.

N. J., Bridgeton—Oct. 3, constructing approximately 17,500 sq.yd. sheet asphalt on cement concrete on State Highway Route 6, Sect. 12-A, Shiloh Rd. and Broad St. Remington & Vosbury, city engrs.

N. J., Cranbury—Oct. 2, by Twp. Com., paving 1.6 mi. Dey Rd. from Cranbury-South River Rd. westward, 10,739 sq.yd. concrete and 4,260 cu.yd. gravel surface, pipe, etc.

N. J., Long Branch—Oct. 3, by Bd. City Comrs. paving Atlantic Ave. from Ocean Ave. to Liberty St., asphalt on concrete. J. W. Seaman, city engr.; adv. this issue.

Pennsylvania — Oct. 17, by State Hy. Dept., Harrisburg, reconstructing 30 mi. rein.-con., 18 mi. bituminous on concrete or rein.-con., and 1 mi. bituminous macadam pavement, also rein.-con. bridge. G. H. Biles, asst. highway comr.; adv. this issue.

Pa., Pittsburgh—Oct. 11, by Comrs. Allegheny Co., reconstructing 3,200 ft. Dravosburg Rd., 18 ft., asphaltic concrete, $30,000.

Virginia—Oct. 10, by H. G. Shirly, chn. State Hy. Com., Richmond, 2.48 mi. concrete roadway, Route 3, Project 170, 18 ft., Henry Co., 25,726 cu.yd. excav., 902 lin.ft. pipe, 8,926 cu.yd. concrete, 5,112 lb. reinforcing; 1.84 mi. concrete roadway, Route 18; Project S. 219, 12 ft., Halifax Co., 5,500 cu.yd. excav., etc.; 5 mi. bituminous macadam roadway, Route 3, Project 192 A 18 ft., Augusta Co., 39,518 cu.yd. excav., 175 cu.yd. concrete, 20,867 lb. reinforcing; 1.03 mi. bituminous macadam roadway, Route 11, Project 217 A, 18 ft., Dickenson Co., 8,071 cu.yd. excav.; 1.98 mi. bituminous surface treated macadam, 1.89 mi. Route 11, Project 256, 16 ft. Tazewell Co., 13,508 cu.yd. excav., 234 cu.yd. concrete; 0.99 mi. surface treated macadam, Route 21, Project 130, 12 ft., Fauquer Co., 3,845 cu.yd. excav.; 1.405 mi. surface treated macadam, Route 21, Project 203, 12 ft., Fauquer Co., 8,488 cu.yd. excav., 112 cu.yd. concrete, 7,240 lb. reinforcing. G. P. Coleman, highway comr.

N. C., Kenansville—Oct. 9, by Duplin Co. Highway Comn., topsoiling about 15 mi. road from Alum Springs to Cobbs School House. $45,000. L. A. Beasley, Kenansville, chn.

S. C., Charleston—Oct. 19, by Sanitary & Drainage Comn., 39 Broad St., improving 9.55 mi. sections of road between Tide Water Creek and Atlantic Coast line crossing near Meggetts, 62,190 cu.yd. common excav., 12,420 sq.yd. rein.-con. and 88,426 sq.yd. plain concrete surfacing, 807 lin.ft. rein.-con. pipe, 7,375 lb. reinforcing, etc.

S. C., Ridgeland—Oct. 11, by Jasper Co. Hy. Comn., improving 9.79 mi. Sect. of Columbia-Savannah Highway between here and Gillisonville, 45,893 cu.yd. common excav., 1,500 cu.yd. strippings, 24,094 cu. yd. sand clay or gravel surfacing, etc.

Fla., Dade City—Oct. 16 by Highlands Special Road and Bridge Dist., Pasco Co., 100 mi. road improvements. J. W. Turner, Lakeland, engr.

Fla., Jacksonville—Oct. 2, Comrs. Duval Co. constructing road bed in 2 mi. San Jose Blvd., 16 ft., 11,000 cu.yd. earth excav., 6,000 ton bituminous macadam, also creosoted wood bridge over Christopher Creek, etc. $25,000. G. B. Hills Co., Barnett Bldg., engrs.

Miss., Laurel—Oct. 9, by Mayor and Bd. Comrs. brick paving, gravel surfacing, etc. J. H. Pace, street comr.; adv. this issue.

Miss., Starkeville—Oct. 2, by Hy. Comrs. Special Dists. 1 and 4, Oktibbeha Co., constructing Sturgis-West Point, Maben and Bradley Rds. in Dist. 4, and Double Springs Rd. in Dist. 1. J. R. Lang, chancery clk.

Tennessee—Oct. 14, by State Hy. Dept., Nashville, grading and surfacing 2.21 mi. road from city limits to Belle Meade Road, Federal Aid Project 87, 24 ft., 2 in. bituminous concrete on 6 in. concrete. D. Q. McComb, ch. engr.

Tenn., Athens—Oct. 5, by F. Stephenson, city recdr., paving, etc., Jackson, Washington, Ingleside and Madison Sts., incl., 28,317 sq.yd. paving, 9,439 cu.yd. excav., 649 lin. ft. 12 in. pipe and trenching same, 3,000 lin.ft. 18 in. pipe, 175 cu.yd. concrete, 19,764 lin.ft. curb, etc. R. P. Knight, mayor.

Tenn., Coalmont—Oct. 16, by Grundy Co. Hy. Com., grading 5½ mi. highway from foot of mountain in Paynes cove to Franklin Co. line. J. B. Cochran, co. engr.

O., Columbus—Oct 3, by W. H. Duffy, dir. Pub. Serv., grading, curbing, laying water services and sewer connections and paving North St. from High St. to Neil Ave., 550 ft. long, 60 ft. wide, brick $8,402, asphalt $7,365. Pembroke Ave. from Eldridge to Parkwood Aves., 441 ft. long, 50 ft. wide, brick $5,166, asphalt $4,548. Dunedin Rd. from High St. to Indianola Ave., 2,378 ft. long, 60 ft. wide, brick, $74,886, asphalt $67,271. Morgan St. from Broad to Broderick Sts., 161 ft. long, 40 ft. wide, brick, $2,542, asphalt $2,202. Alley west of Linwood Ave. from Mound to Fulton Sts., 410 ft. long, 25 ft. wide, brick $3,382, concrete $2,694, alley west of Linwood Ave. from alley north of Fair to Madison Aves., 223.5 ft. long, 20 ft. wide, brick $2,434, concrete $1,738, 6,350 sq.yd. cement sidewalks on 18 streets, $17,417. R. H. Simpson, city engr.

O., West Park (Cleveland, P. O.)—Oct. 5, paving West 136th St., Kirton and Wakefield Aves., brick or asphalt. To exceed $25,000. J. Reitz, City Hall, engr.

O., Wickliffe—See "Waterworks."

Ind., Bloomfield—Oct. 3, by Comrs. Greene Co., gravel surfacing 12,500 ft. Pearl West Rd., 16 ft. $25,000. L. F. Parker, Bloomfield, engr.

Streets and Roads (Continued)

Ind., Indianapolis — Oct. 6, by Comrs. Marion Co., concrete paving 2.8 mi. English Rd., 26,895 sq.yd. concrete on concrete, 10,200 cu.yd. earth excav., 3,300 cu.yd. fill, 199 cu.yd. concrate for bridge. $83,638. J. J. Griffith, Courthouse, engr.

Ind., Laporte—Sept 30, by Comrs. Laporte Co., gravel surfacing 28,000 ft. Bear Rd. $57,188, 9,000 ft. Bell Rd. $26,000, 14,300 ft. Sellerr Rd. $32,489, all 16 ft. P. Summy, Laporte, engr.

Ind., Paoli—Oct. 2, by Comrs. Orange Co., paving 8,056 ft. Jerry Smith Rd., 18 ft., crushed stone. $26,000. A. Boyd, Paoli, engr.

Ind., Sullivan—Oct. 2, by Comrs. Sullivan Co., gravel surfacing 12,000 ft. W. T. Dix Rd., 16 ft., $33,323. W. L. Sisson, Sullivan, engr.

Ind., Warsaw—Oct. 2, by Comrs. Kosciusko Co., gravel surfacing 15,500 ft. Levi Fruit Rd., 16 ft. $29,752. S. S. Boggs, Warsaw, engr.

Ind., Winamac—Oct. 3, by Comrs. Pulaski Co., gravel surfacing 74,185 ft. Jacob Getz Rd., 16 ft., $50,000; 2.75 mi. Redline Rd., 18 ft., $29,000; 15,900 ft. Burns Rd., 16 ft., $28,000. R. E. Nutt, Winamac, engr.

Michigan—Oct. 5, by State Hy. Dept., Lansing, grading and surfacing 5.38 mi. State Trunk Line Rd. 18-13, Midland Co., 36,726 cu.yd. excav., 79.3 cu.yd. 1:2:4 concrete, 187.5 cu.yd. 1:3:6 concrete, 3,706 lb. reinforcing, etc. $40,000. Noted Sept. 21.

Michigan—Oct. 10, by State Hy. Dept., Lansing, grading and surfacing 1.064 mi. State Trunk Line Rd. 22-9, 20 ft. Grand Traverse Co., 4,097 cu.yd. excav., 11,490 sq.yd. asphalt, concrete or bituminous concrete. F. F. Rogers, state highway comr.

Ia., Decorah—Oct. 3, by Auditor Winneshiek Co., grading 6.25 mi. Federal Aid Project 98, Sect. C, from here toward Calmar, 109,536 cu.yd. earth, 693 cu.yd. loose rock and 2,770 cu.yd. solid rock excav., $26,000; Primary Rd. Project 121, Sect. F, from Calmar north toward here, 23,798 cu. yd. excav., 12,234 lin.ft. 6 in. tile, etc., $7,000. F. W. Arneson, Decorah, engr.

Minn., Duluth—Jan. 7, by F. W. Borgen, aud. St. Louis Co., concrete paving on crushed rock, 2 mi. road between Eveleth and Gilbert, to form connecting link of Trunk Highway and State Rd. 3. $80,000. R. W. Acton, co. engr.

S. D., Sioux Falls—Oct. 2, paving 12,199 sq.yd. 8th St. from Weber to Cliff Aves., portland cement, bituminous concrete, or sheet asphalt; curbing 10 blocks 8th St. from Weber to Asylum Aves., and from 2nd Ave. to tracks. $32,000. W. C. Leyse, city aud.

Mo., St. Louis—Oct. 3, by Bd. Pub. Serv., 208 City Hall, recutting old granite block, supplying additional granite block and paving same with cement grout filler on 5,000 ft. Bway. from Chippewa to Arsenal Sts. $95,000. W. M. Horner, 300 City Hall, engr.

Mo., St. Louis—Oct. 24, by Bd. Pub. Serv., 208 City Hall, recutting old granite block, supplying additional granite block and paving same with cement grout filler on 2,300 ft. Easton Ave. from Kingshighway to Marcus Ave. $30,000. W. M. Horner, 300 City Hall, engr.

Tex., Bonham—Oct. 9, Comrs. Fannin Co. grading, gravel surfacing, etc., certain roads in Dist. 4, 62,174 cu.yd. earth, 861 cu.yd. borrow, 7,750 cu.yd. overhaul, 160 cu.yd. solid and 680 cu.yd. loose rock excav., 322 lin.ft. 18-48 in. corrugated iron pipe, 65,214 lb. reinforcing and 191,000 lb. structural steel, 36,478 gal. bituminous material, 2,000 cu.yd. concrete, 350,000 cu.yd. hauling road material. A. J. Goode, Bonham, engr.

Tex., Dallas—Oct. 5, by A. C. Allen, judge Dallas Co., grading, surfacing, etc., 14.12 mi. State Highway 6, Lancaster Pike, 4,185 lin.ft. combined concrete curb and gutter, 89,430 cu.yd. roadway, 20,918 cu.yd. borrow, 4,200 cu.yd. solid and 1,200 cu.yd. loose rock excav., 161,854 sq.yd. 2 in. bituminous macadam, 1,682.4 cu.yd. concrete, 40,016 cu.yd. native stone, 27,394 cu.yd. crushed stone, 159,180 lb. reinforcing and 66,778 lb. structural steel. $574,060. Nagle-Witt-Rollins Eng. Co., Courthouse, dist. engrs.

Tex., Georgetown—Oct. 10, by F. D. Love, judge, Williamson Co., surfacing road already graded, 11.5 mi. State Highway 2-C between here and Travis Co. line, 108,317 sq.yd. bituminous macadam, alternate bids on ¾ in. or 1 in. native limestone rock asphalt or 1 in. and 1½ in. inverted penetration asphalt topping. $50,000. R. A. Nichols, co. engr.

Tex., Huntsville—Oct. 3, by Mayor, paving various main streets, 4,000 lin.ft. curbing, 2,500 cu.yd. earth excav., 9,500 sq.yd. concrete or rock asphalt on concrete. $30,000. H. O. Leigh, city secy.

Tex., Orange—Oct. 9, by E. S. McCarver, judge Orange Co., grading and surfacing 7.3 mi. Mauriceville Rd., 16 ft. 230 cu.yd. concrete, 10,000 cu.yd. earth excav., 16,733 lb. reinforcing, 15,000 cu.yd. surfacing, $46,500; 4.25 mi. Lower Beaumont Rd., 14 and 18 ft., 6,200 cu.yd. earth excav., 110 cu.yd. concrete, 6,656 lb. reinforcing, 7,400 cu.yd. gravel or shell surfacing, $26,000; 2 mi. Oil Field Rd., 18 ft., 12,000 cu.yd. earth excav., 21,120 sq.yd. concrete, $62,500. J. E. Johnson, co. engr.

Utah, Salt Lake City—Oct. 4, by City Comrs., 54,000 ft. concrete curb and gutter Capitol Hill Dist. $153,000. S. Q. Cannon, city engr.

California—Oct. 16, by State Hy. Comn., Sacramento, grading and gravel surfacing 13.5 mi. Sneath Rd. and Half Moon Bay Rd. A. B. Fletcher, state highway engr.

Calif., Santa Rosa—Oct. 11 by Supervs. Sonoma Co., grading and asphalt surfacing 3.05 mi. Petaluma-Sonoma Highway, Sect. B, 9,000 cu.yd. unclassified excav., 2,680 cu.yd. crushed rock, 32,166 sq.yd. asphaltic surfacing, etc. R. P. Smith, Santa Rosa, engr.

Calif., Stockton—Oct. 3, by Supervs. San Joaquin Co., 1.5 mi. Thomas Rd., 2350 cu. yd. grading, 3,050 ton road gravel, 1,030 ton crushed rock top course, 480 ton dressing for oil, 400 bbl. asphaltic oil; 1.5 mi. Jack Tone Rd., 3,000 cu.yd. grading, 3,800 ton road gravel; 2.5 mi. Kettleman Rd. and Quimby Ave., 2,600 cu.yd. grading, 5,330 ton gravel, 1,820 ton crushed rock top course, 850 ton dressing for oil, 700 bbl. asphaltic oil; 3.04 mi. Brackharshner Rd., 3,500 cu.yd. grading, 4,900 ton road gravel, 1,660 ton crushed rock top course, 770 ton dressing for oil, 510 bbl. asphaltic oil, 34.27 cu.yd. rein.-con. for culverts; 4 mi. Peters Rd., 5,700 cu.yd. grading, 7,750 ton road gravel; 3.39 mi. Willow Glen Rd., 4,200 cu.yd. grading 5,200 ton macadam rock; 2 mi. Mt. Diablo Ave., 1,740 cu.yd. grading, 2,920 ton crushed rock base, 1,170 ton crushed rock top course, 590 ton dressing for oil, 480 bbl. asphaltic oil. F. E. Quail, co. surv.

Calif., Tracy—Oct. 5, by city Trustees, grading, paving, etc., Roosevelt, Taft, Windeler, West 6th, 9th and 10th Sts., 5,705 cu.yd. grading, 226,558 sq.ft. 4 in. gravel base with 2 in. asphaltic macadam top, 13,755 lin.ft. concrete curb and gutter, 3,350 lin.ft. 4 in. w.i. mains, 620 ft. of 6 in. vitr. sewer pipe, etc. $66,000. W. D. Harrington, city engr

BIDS RECEIVED

New York—H. S. Sisson, comr. State Hy. Dept., Albany, opened bids Sept. 20, improving (1) 8.91 mi. Highway 8135 Wawbeek-Lake Clear Jct., Part 1, Franklin Co., engrs. est. $283,225 (2) 0.99 mi. Highways 1651-5683 Mt. Morris Village: Main St. also Chapel and Main Sts., Livingston Co., engrs. est. $93,022 (3) 3.47 mi. Highway 1650, Pompey-Fabius, Onondaga Co., engrs. est. $117,040 (4) 1.74 mi. Highway 5686, Schuyler Lake-Cooperstown, Otsego Co., engrs. est. $70,463 (5) 1.48 mi. Highway 5682 New Jersey State Line-Nyack, Part 4, Rockland Co., engrs. est. $57,666 (6) 4.08 mi. Highway 8136 New Jersey State Line-Nyack, Part 3, Rockland Co., engrs. est. $167,573, reconstructing (7) 0.54 mi. Repair Contr. 3028 Highway 208, Cortland Co., engrs. est. $19,613 (8) 4.7 mi. Repair Contr. 3027 Highways 254 and 255, Monroe Co., engrs. est. $146,112 (9) 2.23 mi. Repair Contr. 3023 Highways 188 and 5576, Ontario Co., engrs. est. $74,723, from

J. A. Laporte, 9 St. Josephs Terrace, Albany, (1) $247,832.

C. J. Burgess Co., Marcy, (1) $254,830.

Bricon Constr. Co., Inc., Buffalo (street address not available) (1) $262,974.

Rochester Foundation Co., Inc., Rochester (street address not available) (2) $85,837.

A. Yesu & Son, 27 Carroll St., Binghamton, (2) $90,655.

H. C. Schroeder, 416 Merchantile Bldg., Rochester, (2) $91,838 (9) $73,853.

Lane Constr. Corp., 37 Colony St., Meriden, Conn., (3) $105,632.

Mondo Constr. Co., Inc., City Bank Bldg., Syracuse, (3) $108,345.

C. D. Murray, 701 Westcott St., Syracuse, (3) $109,185.

Morrell Vrooman, Inc., Gloversville, (4) $67,625.

Guile & Ellsworth, New Berlin (street address not available) (4) $68,367.

O'Day & Ambrose, Binghamton (street address not available) (4) $68,968.

C. Vanderbilt Genl. Contg. Co., Inc., 24 Elizabeth St., West New Brighton, (5) $54,727 (6) $162,644.

D. Schoentag, Inc., John St., Saugerties, (5) $56,711 (6) $165,723.

Ludke Bros., 33 Hockeborn Ave., Auburn, (7) $19,435.

F. W. and J. J. Crouch, 84 Bronson Ave., Rochester, (8) $131,452.

Wieberg Bros., R.F.D., Forks, (8) $133,130.

M. H. Ripton, Rochester (street address not available) (8) $135,082.

M. C. Soper, 82 Cayuga St., Seneca Falls, (9) $74,438. Noted Sept. 7.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids Sept. 25, grading, flagging and curbing (1) East 37th St., (2) 82nd St., repaving (3) Navy St., (4) Nassau Ave., (5) Wallabout St., (6) 23rd St., from F. Persicano, 350 Fulton St., (1) $1,550; T. B. Scott, 671 Halsey St., (1) $1,598, (2) $1,65; C. Gallagher, 745 Dean St., (1) $1,654, (2) $1,683, (3) $8,071, (4) $40,053, (5) $34,164, (6) $21,323; Grimm Constr. Co., 170 McKinley St., (2) $1,683; L. Mangieri, 190 31st St., (2) $1,694; Greico Bros., 172 Russell St., (3) $8,729, (4) $40,293, (5) $34,842; Necaro Co., 97 Court St., (4) $42,827, (5) $37,480, (6) $22,217; M. J. O'Hara, 557 3rd St., (6) $21,022. Noted Sept. 21.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., opened bids Sept. 25, widening and repaving (1) 57th St., (2) 25th St., (3) 26th St., (4) 20th St., (5) 30th St., etc., from P. J. Kearns Contg. Co., 2306 Creston Ave., (1) $18,539, (2) $15,418, (3) $14,617, (4) $29,211; Sicilian Asphalt Paving Co., 41 Park Row, (2) $16,022, (3) $16,205, (5) $14,682; Regan Towers Co., 124 West 121st St., (4) $30,540; Brusstar Constr. Co., Harlem River and 150th St., (5) $14,080; Asphalt Constr. Co., 208 Bway., (5) $14,449. Noted Sept. 21.

O., Shaker Heights (Cleveland, P. O.)—Paving East 161st and East 163rd Sts., South Morland Blvd. from Lee Rd. to Fernway Ave., and South Morland Blvd. from Onaway Ave. to Lee Rd., from Cleveland Trinidad Paving Co., The Arcade, Cleveland, $297,982; A. M. Pejsa, Euclid Heights Blvd., Cleveland Heights, $333,409.

O., West Park (Cleveland P. O.)—Opened bids Sept. 13, paving with (a) asphalt, (b) brick, (1) Nichols Ave., (2) West 120th St. from Lorain to Cloverdale Aves., (3) West 125th St. from Linnett to Thrush Aves., (4) West 135th St. from Lorain to Cross Aves., (5) Lucille Ave., (6) Williams Ave., (7) West 123rd St. from Lorain Ave. to Triskett Rd. (1-7 inclusive), involve 11,920 cu.yd. excav., 229,442 sq.ft. brick on 6 in. concrete, 26,138 sq.yd. asphalt and 18,346 lin.ft. stone curb, (8) West 128th St., (9) West 123rd St. from Linnett Ave. to West 122nd St., (10) West 122nd St., (11) West 139th St. (8-11 inclusive) involve 7,110 cu.yd. excav., 135,140 sq.ft. concrete base, 135,140 sq.ft. brick or 14,621 sq.yd. asphalt and 10,434 lin.ft. stone curb, (12) West 126th St., (13) West 119th St., (14) West 125th St., from Lorain Ave. to Triskett Rd., (15) West 125th St. from Lorain to Linnett Aves. (12-15 inclusive) involve 5,080 cu.yd. excav., 95,650 sq.ft. 6 in. concrete base, 95,650 sq.ft. brick or 10,650 sq.yd. sheet asphalt and 7,960 lin.ft. stone curb, (16) Elsienna Ave., (17) West 123rd St. from Lorain to Triskett Aves., (18) West 129th St., (19) West 120th St. from Linnett to Thrust Aves., (20) West Park Rd. (16-20 inclusive) involve 10,010 cu.yd. excav., 211,848 sq.ft. brick on 6 in. concrete or 23,539 sq.yd. asphalt and 16,402 lin.ft. stone curb, from

W. McHugh Co., c/o Pavers Exch., Society for Savings Bldg., Cleveland, (1a) $29,475, (3a) $11,119, (5a) $17,580, (6a) $14,647, (8a) $19,727, (8b) $26,681, (9a) $8,474, (9b) $11,462, (10a) $12,089, (10b) $14,718, (11a) 21,830, (11b) $29,715, (12a) $12,365, (13a) $4,376, (13b) $5,969, (14a) $15,630, (14b) $23,174, (15b) $19,414, (16a) $14,685, (17a) $15,083, (18a) $18,254, (19a) $11,783, (20a) $36,815.

Baldwin Bros., 4500 Euclid Ave., Cleveland, (1b) $33,286, (8b) $25,166, (14b) $21,885, (18b) $23,360.

Roehl Bros., West 25th St. and Clark Ave., Cleveland, (2b) $23,173, (10b) $13,177, (20b) $47,780.

Highway Constr. Co., Elyria, (4a) $18,278, (7a) $15,878, (12a) $13,289, (13a) $4,865, (15a) $15,097, (18a) $19,191.

General Asphalt Paving Co., Marshall Bldg., Cleveland, (8a) $21,474, (9a) $9,177, (10a) $12,916, (11a) $23,973, (15a) $15,123.

Fischer & Williams, (9b) $12,122.

Freshwater Constr. Co., Natl. Bldg., Cleveland, (11b) $29,461, (13b) $6,022, (14a) $18,069, (19b) $24,812.

Garland Bros., Pavers Exch., Society for Savings Bldg., Cleveland, (16a) $15,828, (17a) $16,598, (19a) $11,865. Noted Sept. 7.

Michigan — State Hy. Dept., Lansing, grading and surfacing 1.855 mi. State Trunk Line Rd. 32-4, Sect. D, Montmorency Co., incl. 31,475 cu.yd. excav., 17,412 sq.yd. gravel, from Louks & Fenton, Whittemore, $27,316; Cadwell & Sons, Boyne City, $27,534; G. A. Leszczynski, Harbor Beach, $28,765.

Streets and Roads (Continued)

Michigan—State Hy Dept., Lansing, opened bids Sept. 20, grading and surfacing 4472 mi. State Trunk Line Rd., 39-3, Ionia Co., incl. 1,750 cu.yd. excav., 41,909 sq.yd. gravel, from A. E. Chase & Son, St. Johns, $29,911; Saginaw Constr. Co., Saginaw, (street address not available), $32,287; Fonty, Stockey & Wolcott, Delta, O., $38,146. Noted Sept. 14.

Minnesota—State Hy. Dept., St. Paul, opened bids Sept. 15, grading State Project 2-99, 192,682 cu.yd. excav., Benson, Swift Co., from Kremer & Hog, 1727 LaSalle Ave., Minneapolis, $40,339, S. J. Groves & Sons Co., 306 Globe Bldg., Minneapolis, $40,859, Barnard & Curtiss, 613 Globe Bldg., Minneapolis, $42,020.

Tex., Coleman—Coleman Co. grading, gravel surfacing, etc., 10.58 mi. Highway 7, Federal Aid Project 303, incl. 44.9 acres clearing, 49,678 cu.yd. borrow, 21,670 cu.yd. roadway, 4,007 cu.yd. loose and 4,295 cu.yd. solid rock excav., 1,687.4 cu.yd. concrete, 187,050 lb. reinforcing, from Scarbrough & Davis, 100 Gaston Bldg., Dallas, $85,848; Wear & Thomas, Rogers, $86,842; F. P. Holt, Austin, (street address not available) grading and surfacing only, $46,924. Engrs. est. $87,477.

Tex., Mason—Mason Co. grading and gravel surfacing 14.25 mi. State Highway 9, Federal Aid Project 293, 18 ft., from F. P. Holt, Austin, $76,096; Kuykendall & Shelton, Temple, $82,038; R. G. Buckner & Sons, McDade, $82,758. Noted Sept. 7.

Utah, Salt Lake City—Salt Lake Co. Comn., hardsurfacing 2.2 mi. 48th St. south from 9th St. east to Holiday Rd., (1) bitulithic, (2) concrete, (3) tarvia, from Moran Paving Co., Felt Bldg., (1) $49,603; Gibbons & Reed, Keams Bldg., (1) $51,104, (3) $43,732; Campbell Paving Co., Newhouse Bldg., (1) $52,446, (2) $59,238, (3) $43,782; Strange & Uallandingham, Utah Savings and Trust Bldg., (2) $59,945; Gilkerson Constr. Co., Ness Bldg., (2) $62,286; E. Smith, Keams Bldg., (3) $46,295. Noted Aug. 31.

Wash., Seattle—Opened bids Sept. 15, improving Alki Ave., (a) 35,800 sq.yd. concrete, (b) 3,000 lin.ft. asphaltic, (c) 7250 lin.ft. concrete, (d) 5,500 lin.ft. integral curbing, (e) 3,700 lin.ft. concrete sidewalk, (f) 1,400 cu.yd. earth excav., (g) 7,000 cu.yd. subgrade, from R. G. Stevenson, 1327 Northlake Ave., (a) $1.75, (b) $0.70, (c) $0.35, (d) $0.35, (e) $1.40, (f) $0.65, (g) $0.65, total $121,456, J. L. Smith, Pioneer Bldg., (a) $1.75, (b) $0.70, (c) $0.45, (d) $0.25, (e) $1.40, (f) $0.55, (g) $0.40, total $122,327, D. H. Traphagen, Walker Bldg., (a) $1.80, (b) $0.65, (c) $0.27, (d) $0.30, (e) $1.40, (f) $0.50, (g) $0.20 total $123,390, engrs. est. $120,216; paving Taylor Ave., and changing street car track, (a) 1,800 sq.yd. 7 in. asphalt, (b) 1,700 sq.yd. sandstone, from V. Ramaglia, 4415 Corliss Ave., (a) $2, (b) $2.50, etc., total $36,694; J. L. Smith, Pioneer Bldg., (a) $2, (b) $2.50, etc., total $38,480, engrs est $37,295.

Calif., San Francisco—Improving Collingwood St. between 21st and 22nd Sts., (a) constructing rein.-con. retaining and step support walls, stairways, landing coping, drains, gutters, curb armored offsets (b) 625 ft. 12 in. vitr. sewer (c) 110 ft. 8 in. (d) 250 ft. 6 in. (e) 110 ft. 10 in. pipe culverts (f) 23,500 cu.yd. cut, from Eaton & Smith, 407 11th St., (a) $25,000 (b) $3.50 (c) $3.50 (d) $3 (e) $2 (f) $1.30, total $70,700; Schultz Constr. Co., 46 Kearney St., (a $30,000 (b) $4.20 (c) $3.80 (d) $2.75 (e) $3.30 (f) $1.58, total $84,233.

Que., Montreal—R. Bauset, city clk., opened bids paving Greene Ave. from St. Ambroise to St. James Sts., incl. 5,150 sq.yd. 3 in. sheet asphalt, from Sicily Asphaltum Paving Co., 60 St. Viateur St., $27,965; Quinlan, Robertson & Janin Co., 52 Duluth Bldg., $27,990; B. Brault Ltd., 2855 Rosemount Blvd., $30,653.

Que., Montreal—Opened bids asphalt pavements on (1) 4,080 sq.yd. of 3 in. Cartier St. from Demontigny to Lafontaine St. (2) 3,640 sq.yd. of 2 in. St. Valier St. from Belanger to St. Zotique Sts. (3) 3,100 sq.yd. of 2 in. Bericourt St. from Hadley St. to Monk Blvd. (4) 8,600 sq.yd. Hadley St. from Church Ave. to Dubois St. (5) 2,650 sq.yd. of 2 in. Sheppard St. from Hochelaga to Amity Sts. (6) 8,400 sq.yd. of 3 in. Rouen St. from Frontenac St. to Canadian Pacific Ry., concrete sidewalks on (7) 2,500 sq.yd. Rosemount Blvd. from 1st Ave. to Cote St. Michel Rd., 5 ft. (8) 1,100 sq.yd. Clarke St. from Mozart to Atlantic Sts., 5 ft. (9) 4,100 sq.yd. Omer St. from Notre Dame to Dubuisson Sts. 5 ft. (10) 3,081 sq.yd. Maplewood Ave. from Northmount to Decelles Sts., 4 ft. (11) 2,400 sq.yd. Beaubien St. from De la Roche St. to Papineau Ave., 6 ft. (12) 980 sq.yd. Drolet St. from Faillon to Francois Coppee Sts., 6 ft. (13) 1,084 sq.yd. Jarry St. from Boyer to Lajeunesse Sts., 5 ft., from B. Brault Ltd., 2855 Rosemount Blvd., (1) $19,222 (2) $17,091 (3) $17,014 (4) $41,997 (5) $11,523 (6) $46,814; Quinlan, Robertson & Janin Ltd., 52 Duluth Bldg., (1) $19,272 (3) $16,564 (4) $39,500 (6) $47,667; Sicily Asphaltum Paving Co., 60 St. Viateur St., (2) $17,660; F. Lapan, 601 Lacordaire St., (7) $10,268 (8) $5,995 (9) $18,314; Duranceau & Duranceau, 152 Hamilton Ave., (7) $11,220 (8) $5,790 (10) $15,365 (11) $10,560; Rondou, Corlier & Co., 3506 Christophe Colomb St., (12) $5,121 (13) $6,762.

CONTRACTS AWARDED

N. Y., New York—H. Bruckner, pres. Bronx Boro, to Asphalt Constr. Co., 2197 Madison Ave., paving West 230th St. $11,050, Hornaday Pl. $6,021, grading, curbing and laying sidewalks, etc., Whitlock Ave. from Southern Blvd. to bridge over Port Morris branch of New York Central R.R. $9,530; to Casper Helbock, 633 Wales Ave., grading, etc. Seymour Ave. $19,866; to M. Del Balso, 660 West 221st St., Whitlock Ave. from East 148th St. to Leggett Ave. $19,344. Noted Sept. 21.

N. Y., Richmond Hill—Dept. Parks, Municipal Bldg., New York, improving main drive in Forest Park, here, to H. E. Kordes, 2577 Cooper St., Brooklyn, $72,931. Noted Sept. 14.

N. J., Somerville—Somerset Co. paving 2 mi. New Brunswick-Millstone Rd., concrete, to Utility Constr. Co., 5 Spring St., New Brunswick, $79,909.

Pa., Phila.—To Eastern Paving Co., Colonial Trust Bldg., paving Lebanon Ave., Ardleigh and Stafford Sts., $26,020, Torresdale Ave. from Lewis to Kinsey Sts., $29,082, Torresdale Ave. from Gillingham to Kennedy Sts., $37,773; to United Paving Co., Colonial Trust Bldg., Lebanon Ave., $21,720; to J. J. Hughes, 1716 Race St., Rising Sun Ave., $116,850. Noted Sept. 14.

W. Va., Charleston—To Andrews Asphalt Paving Co., 717 Rentschler Bldg., Hamilton, O., paving with oil asphalt 1 mi. Goshorn St. and Piedmont Rd., 32 ft., $26,025, 0.9 mi. Greenbrier, Randolph and Madison Sts., 32 ft., $25,834, paving with Trinidad and oil asphalt 0.6 mi. California and Glenwood Aves., Wyoming, 7th and Elm Sts., 32 ft., $18,712; to G. T. Fogle & Co., Charleston, (street address not available), paving with oil asphalt 0.4 mi. 2nd Ave., 24 ft., $8,669, 0.8 mi. Virginia St., 32 ft., $34,089.

W. Va., Welch—McDowell Co. surfacing with rock asphalt Project 2166, to W. Sudduth, Bluefield, $219,725; 5½ mi. Project 2168, to Albert Bros., Charlottesville, Va., $203,400. Noted May 25.

North Carolina—State Hy. Dept., Raleigh, asphaltic concrete surfacing 7.85 mi. State Project 608, Anson Co., to R. M. Hudson Co., Salisbury, $76,177; grading, clearing and asphalt paving 10.47 mi. State Project 822, Cleveland, Co., to Elliott & Sons, Spartanburg, S. C., $329,882; grading, asphaltic paving and retaining walls on 7.85 mi. State Project 608, Anson Co., to Lampton & Burks, Cornelius, S. C., $244,773; grading, reconstructing base course and 5 in. concrete base and 2 in. asphalt paving on 3.88 mi. State Project 615 Cabarrus Co., to Thompson-Caldwell Constr. Co., Mooresville, $89,765; grading and asphaltic paving 9.87 mi. State Project 460, Orange Co., to R. M. Hudson Co., Salisburg, $269,850; grading, asphaltic paving, rein.-con. bridges and culverts on 9.55 mi. State Project 658, Mecklenburg Co., to Union Paving Co., 30th and Locust Sts., Phila., $242,508; grading and plain concrete paving 7.03 mi. State Project 328, Columbus Co., to L. L. Tindall, Waterford, Wis., $199,429, 2.52 mi. State Project 785, Wilkes Co., to D. J. Brookshire & Co., North Wilkesboro, $71549 10.24 mi. State Project 528, Davidson Co., to Hagedorn Constr. Co., Thomasville, $322,804, 9.81 mi. State Project 589, Rockingham Co., to Chitwood & Driscoll, Reidsville, $295,432, 4.83 mi. State Project 876, Rutherford Co., to Fiske-Carter Constr. Co., Masonic Temple Bldg., Greenville, $132,968, 3.4 mi. State Project 765, Surry Co., to Campbell Constr. Co., Georgia Home Bldg., Columbus, Ga., $102,442; grading, plain concrete paving, rein.-con. bridges and culverts on 7.14 mi. State Project 184, Pitt Co., to Pub. Service Production Co., Terminal Bldg., Newark, N. J., $187,742, 1.58 mi. State Project 821, Cleveland Co., to Davis-Wilcox Constr. Co., Bessemer City, $54,720, 8.8 mi. State Project 412, Durham Co., to L. L. Tindall, Waterford, Wis., $229,621 2.1 mi. State Project 590, Rockingham Co. and 2.22 mi. State Project 761, Surry Co., to G. R. Martin, Salisbury, $60,084 and $70,304 respectively; grading, clearing and waterbound macadam paving 8.98 mi. State Project 380, Pender Co., to C. W. Lacy, Wilmington, $147,466; grading, clearing and gravel surfacing 11.06 mi. State Project 712, Ashe Co., to J. T. Plott, Greensboro, $98,392; grading, topsoiling and Class "B" concrete on 15.8 mi. State Project 882, Rutherford Co., to C. R. Willard & Son, Spartanburg, S. C., $68,825, 12.41 mi. State Project 157 A, Martin Co., to Jamison Bros., High Point, $43,852; grading, topsoiling and retaining walls, 4.97 mi. State Project 784, Wilkes Co., clearing, grading and topsoiling 7.12 mi. State Project 106, Bertie Co., also grading, draining, clearing, topsoiling, and Class "B" concrete on 12.36 mi. State Project 157 B, Martin Co., to J. F. Mulligan Constr. Co., North Wilkesboro, $48,614, $32,061 and $44,333 respectively. Noted Sept. 14.

S. C., Charleston—Sanitary and Drainage—Comrs. Charleston Co., surfacing 2.17 mi. road between Navy Yard and port terminals, incl. 5,564 cu.yd. common excav., 20,374 sq.yd. concrete surfacing, to Poe Constr. Co., Greenville, $53,121. Noted Aug. 17.

Tenn., Livingston—Paving various streets, waterbound macadam, to B. Williams, Murfreesboro, $25,000.

Ky., Henderson—Comr. Pub. Wks. and Property, improving 5,315 ft. 2nd St., to Indiana Constr. Co., Kokomo, Ind., $58,912. Noted Aug. 10.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading 3.96 mi. Sects. "D-2" and "E" Alliance-Minerva Rd., Stark Co., and 2.093 mi. Sect. "E" Canton-Canal Dover Rd., Tuscarawas Co., to F. J. Mann & Sons, Ashland, $27,852 and $19,783 respectively; 3 mi. Sect. "A" Canton-Canal Dover Rd., and 2.229 mi. Sect. "B" Canton-Canal Dover Rd., both Tuscarawas Co., to C. G. Fuller, Canal Dover, $18,237 and $17,831 respectively; 1.187 mi. Sect.: "C" Stryker-Evansport Rd., Williams Co., to E. E. Manley, Mt. Pelier, $14,879; 2.58 mi. Sect. "D" Stryker-Evansport Rd., Williams Co., to J. Carey, Archibold, $4,065; reconstructing bridge on Sect. "K" Jackson-Pomeroy Rd., to P. C. Adams, Jackson Co., $4,039. Noted Sept. 21.

O., Cleveland—Paving driveways in Highland Park Cemetery, 2 course concrete, to Garland Bros., Pavers Exch, Society for Savings Bldg., $47,123. Noted Sept. 21.

O., Cleveland—Cuyahoga Co., Court House, paving Detroit Rd. 4, to Enterprise Paving & Constr. Co., 8444 Bway., $110,227. Engrs. est. $132,178. Noted Sept. 21.

O., Cleveland—Cuyahoga Co., Court House, paving S.O.M. Center Rds., 3 and 4, 13,300 cu.yd. excav., 13,040 ft. 5 x 20 ft. stone curb, 10,490 lin.ft. 4 in. vitr. sewer pipe, to Freshwater Constr. Co., Natl. Bldg., $323,086. Engrs. est. $324,724. Noted Sept. 7.

O., Youngstown—Paving Pointview Ave. also Neilson Ave., from Powers Way to Pointview Ave., asphalt, to Kelley & Meyer, South Side Bank Bldg., $20,472 and $27,218 respectively; Lafayette St. and Salt Springs Rd., asphalt, to L. Tiberio, 1 Ellenwood Ave., $16,840 and $7,033 respectively.

Ind., Albion—Noble Co., gravel surfacing 11.4 mi. Krieger Rd., 24 ft., and 5.2 mi. A. J. Rich Rd., 18 ft., to Baker, Agerter & Thompson, Indianapolis (street address not available), $105,473 and $47,551 respectively. Engrs. est. $114,533 and $55,523. Noted Aug. 24.

Ind., Hammond—Lake Co., crushed stone and gravel surfacing 14,530 ft. Leo Bixeman Rd., 16 ft., to See Teaming & Supply Co., Hammond, $27,400. Archts. est. $36,814. Noted Sept. 14.

Ind., New Albany—Floyd Co., gravel surfacing 31,287 ft. Elizabeth and New Albany Ridge Rd., 16 ft., to J. E. Hodgins, 6th and Jefferson Sts., Louisville, Ky., $59,975. Engrs. est. $55,000. Noted Aug. 24.

Ind., Spencer—Owen Co., surfacing County Line Rd., crushed stone, to P. Rauff & Burch, Paragon, $28,426. Engrs. est. $31,000.

Mich., Detroit—To R. J. Powelson, 6415 Iroquois Ave., paving with one course concrete 1,400 sq.yd. Alley 1567, 16 ft., $4,201. 660 sq.yd. Alley 1575, 18 ft., $1,986, 430 sq.yd. Alley 1576, 18 ft., $1,291; to Otis Cement Constr. Co., 806 Hammond Bldg., 700 sq.yd. Alley 1570, 18 ft., $2,130, 1,290 sq.yd. Alley 1574, 20 ft., $3,863; to Smith Trucking Co., 3325 West Euclid Ave., 1,150 sq.yd. Alley 1568, 18.67 ft., $3,469, 830 sq.yd. Alley 1569, 20 ft., $2,498, 410 sq.yd. Alley 1571, 18 ft., $1,420; to A. F. Lester, 1631 Dime Bank Bldg., 1,550 sq.yd. Alley 1572, 20 ft., $4,653; to J. Porath, 745 Griswold St., 1,270 sq.yd. Alley 1573, 20 ft., $3,864.

Mich., Detroit—Pennsylvania R.R., 1368 Penobscot Bldg., grading and paving 6,000 sq.yd. Summit St. team tracks, stone and concrete, to Meredith & McVaugh, 220 Horton Ave., $30,000.

Streets and Roads (Continued)

Ill., Waukegan—Road and Bridge Committee at office C. E. Russell, co. supt. highways, Court House, paving Sect. X-15 D. Grand Ave. from Gurnee westerly to Lake Villa Rd., portland cement concrete to Liberty Eng. and Constr. Co., 4238 Grand Blvd., Chicago, $97,863. Noted Aug. 17.

Wis., Wauwatosa—Concrete paving, etc., 10th, Windsor, and Thomas Aves., 55th and 58th Sts., to Jacobus & Winding Concrete Constr. Co., 1 State St., $33,373. Noted Aug. 24.

Ia., Burlington—To W. J. Miller, Burlington, paving Mt. Pleasant St., 25,231 sq.yd. concrete $2.70, 851 sq.yd. brick $5.50, 8,000 sq.yd. macadam $0.50, 8,400 ft. integral curb $0.35, 4,824 cu.yd. excav. $0.50. Noted Sept. 22, 1921.

Ia., Iowa City—To Moore-Young Constr. Co., Waterloo, concrete paving 11,616 sq. yd. Primary Rd. Project 11, $2.76 per sq. yd., 5,040 lin.ft. concrete curb and gutter $1.25 per lin.ft., 8,733 cu.yd. excav. $0.70.

Ia., Le Mars—Plymouth Co. grading 15 mi. primary road between Remsen and Kingsley, Divs. 1 and 2, Federal Aid Project 181, 197,325 cu.yd. excav., to C. F. Betz, 305 Iowa Bldg., Sioux City, $0.179 per cu.yd. for Div. 1, $0.177 for Div. 2.

Ia., Sioux City — Paying 17,960 sq.yd. Lakeport Rd. from Meyers Ave. to south city limits, to C. F. Lytle, 504 Nebraska St., $3.05 per sq.yd.; 7,960 sq.yd. Smithland Rd. from South Olive St. to city limits, to Pickus Eng. & Constr. Co., 2316 East 3rd St., 5,600 sq.yd. concrete $2.95 and 2,360 sq.yd. strips $3.09.

Kan., Ft. Scott—Paving various streets with vitr. brick, to Thogmartin & Gardner, Ft. Scott, $41,217.

Tex., Coleman—Coleman Co. grading and gravel surfacing 17.72 mi. State Highway 7, Federal Aid Project 194, 16 ft., to Womack Constr. Co., Sherman, $135,857. Noted Aug. 17.

Tex., McKinney—Coliln Co. resurfacing with 5 in. gravel, 18 mi. Celina Rd. Dist. 7, 14 ft., to L. Laney, Celina, $14,100, 14,000 cu.yd. gravel furnsihed by county $28,500, engrs. est. $46,750; surfacing road already graded, 7 in. rock base and 5 in. gravel top on 10 mi. Pike Dist., Rd. Dist. 18, 14 ft., to G. Stiff, McKinney, $32,500, 27,300 cu.yd. local surfacing furnished by county $1,800, engrs. est. $37,730; 20 mi. Plano Rd. Dist. 29, 14 ft., to D. H. Purvis & Son, Ft. Worth, $70,100, 54,800 cu.yd. surfacing furnished by county, $20,000, engrs. est. $99,110.

N. M., Roswell—Grading, curbing, guttering and paving various streets, to New Mexico Constr. Co., Albuquerque, $170,000. Noted July 13.

Nevada—State Hy. Comn., Carson City, grading and bituminous concrete paving 1.59 mi. Project 48, Washoe Co., to Clark & Henry, Reno, $46,360. Noted Aug. 31.

Utah—State Rd. Comn., Salt Lake City, grading and gravel surfacing 9.04 mi. road from Levan to Chicken Creek Dam 18 ft., to Paxton, Dorrity & Black, Kanosh, $54,039. Engrs. est. $54,680. Noted Aug. 31.

Washington—State Hy. Dept., Olympia, paving 5 mi. Sunset Highway from Issawuah to Preston, King Co., to Coluccio & Erickson, 1642 Lane St., Seattle, 40,546 sq. yd. cement concrete, $1.97, 3,286 lin.ft. concrete gutter $0.80, 23,840 cu.yd. earth excav. $0.60, 930 cu.yd. solid and 1,320 cu.yd. loose rock excav., $2 and $1 respectively, total $132,603; 3.25 mi. National Park Highway from Elbe to Rainier Park Junction, Pierce Co., to R. N. Bartlett, Jefferson, Ore., 34,170 sq.yd. cement concrete, $2.20, 5,070 cu.yd. earth excav. $0.35, etc., total $86,101; grading and graveling 7 mi. State Rd. 4 from Tonasket east, Okanogan Co., to Anderson & Nelson, Moison, 64,110 cu.yd. earth excav. $0.24, 23,290 cu.yd. loose and 2,310 cu.yd. solid rock excav. $0.50 and $1 respectively, 11,130 sq.yd. gravel surfacing $1.95, total $68,748. Noted Aug. 31.

Oregon—State Hy. Dept., Salem, plain concrete, paving 3.64 mi. Project 73, in Washington and Yamhill Counties, to Cummings & LaPoint, McMinnville, $94,075.

Calif., Crescent City—Grading and paving various streets, to Federal Constr. Co., Call Bldg., San Francisco, $206,000. Noted Aug. 17.

Calif., Fresno — Grading and paving Farris Ave. between Belmont and Hedges Sts., to California Road and Street Impvt. Co., Bank of Italy Bldg., $40,054; N and Butler Sts. between Stanislaus and O Sts., W. F. Hanrahan, Griffiths-McKenzie Bldg., $104,931. Noted Sept. 21.

Calif., Marysville—Paving various street intersections, 366,367 sq.ft. 1½ in. warrenite bitulithic on 3½ in. bituminous, to Warren Constr. Co., Bacon Bldg., Oakland, $95,300.

BRIDGE—CLARKSVILLE, TENN.

Following are lowest three bids opened Sept. 14 by State Highway Dept., Nashville, for constructing bridge over Cumberland River, near Clarksville, (A) Nashville Bridge Co., Ft. Shelby Ave., Nashville, (awarded contract); (B) Gould Contg. Co., Nashville; (C) Virginia Bridge & Iron Co., Memphis. The unit bids were as follows:

	A	B	C
1,150 sq.yd. rock asphalt surface 2½-in.	$3.00	$2.75	$3.25
256.19 cu.yd. class A concrete	19.50	19.00	20.50
37,891 lb. deformed steel bars	.05	.05	.06
1,033,357 lb. fabricated structural steel	.0719	.0725	.0728
37,590 lb. steel castings	.092	.107	.125
398 lb. iron castings	.055	.10	.073
Extended totals	$88,119	$88,905	$91,219

SEWER—PORTLAND, ORE.

Bids were opened by city, Aug. 22, for constructing Lents District Sewer, (A) J. F. Shea, Henry Bldg.; (B) Jaconsen-Jensen Co., 407 Stanton St.; (C) Miracle Concrete Corp. All bids based on progress payments, Ordinance No. 41529. The unit bids were as follows:

Section A	A	B	C
Monolithic sewer laid 6,328 lin.ft. 76 in.	$16.90	$16.00	$18.40
770 lin.ft. 61x74 in.	15.40	19.00	16.50
4,280 lin ft. 61x63 in.	14.90	15.50	15.10
5,960 lin.ft. 61x60 in.	14.40	15.00	14.80
2,510 lin.ft. 61x57 in.	13.90	14.00	14.60
2,540 lin.ft. 61x53 in.	13.40	13.50	14.50
Section B			
665 lin.ft. 56x71 in. monolithic sewer laid in open cut	14.90	21.50	15.60
4,240 lin.ft. 56x71 in. monolithic sewer laid in tunnel, earth	16.40	24.00	20.00
100 lin.ft. 56x71 in. monolithic sewer laid in solid rock	16.40	20.00	20.00
4,240 lin.ft. tunnel excavation for 56x71 in. sewer, earth	18.50	17.00	16.50
100 lin.ft. tunnel excavation for 56x71 in. sewer, solid rock	21.50	20.50	16.50
4,000 lin.ft. 8 in. drain in gravel	.40	.60	1.00
Extended totals all items (61 items)	$693,110	$698,450	$719,333

WATER-WORKS—OGDEN, UTAH

Following are lowest three bids opened Aug. 29, by city, for constructing water-works extension No. 1, (A) F. W. Spencer & Co., Ogden, (awarded contract); (B) Wheelwright Constr. Co., Ogden; (C) C. F. Dinsmore & Co., Eccles Bldg. These bids are notable because, as stated in a letter to the Editor on p. 533 of this issue, the award of the contract for cast-iron pipe means that for the first time this material will be used instead of steel in the Ogden water-works distribution system. The unit bids were as follows:

Schedule No. 1	A	B	C
5,000 cu.yd. earth excavation and backfilling	$0.50	$0.34	$0.56
100 cu.yd. gravel fill	.50	.50	2.00
7 ton standard cast iron fittings	185.00	150.00	175.00
1,520 lin.ft. furnishing and laying cast iron pipe 6 in. diameter	1.40	1.25	1.26
9,300 lin.ft. furnishing and laying cast iron pipe 12 in. diameter	3.00	3.14	2.98
2,350 lin.ft. furnishing and laying cast iron pipe 14 in. diameter	3.85	3.96	3.70
100 lin.ft. furnishing and laying cast iron pipe 18 in. diameter	5.70	5.75	5.70
27 furnishing and placing 6 in. double gate valves	31.00	30.40	35.20
10 furnishing and placing 12 in. double gate valves	88.00	86.00	91.10
4 furnishing and placing 14 in. double gate valves	131.75	129.00	130.01
1 furnishing and placing 16 in. double gate valves	204.00	170.00	165.10
1 furnishing and placing 18 in. double gate valves	313.25	235.00	230.00
7 fire hydrants, 2½ in. hose connection and 4½ in. steamer connection	122.50	100.00	106.10
3 fire hydrants, 2½ in. hose connections	99.70	80.00	83.17
1 taking out and removing fire hydrants	15.00	7.00	16.00
1 removing and resetting fire hydrants	20.00	12.00	24.00
100 lin.ft. taking up and removing old mains 4 in. to 8 in.	.02	.04	.10
100 lin.ft. taking up and removing old mains 10 in. to 14 in.	.30	.15	.20
300 lin.ft. lowering existing mains 6 in. to 8 in. diameter	.10	.20	.50
100 lin.ft. lowering existing mains 10 in. to 14 in. diameter	.25	.25	.90
10 cutting in special castings to existing mains 6 in. to 14 in.	10.50	15.00	35.35
10 cutting in valves to existing mains 6 in. diameter	9.00	5.00	25.25
10 cutting in valves to existing mains 8 in. to 12 in. diameter	10.00	10.00	40.00
33 two-piece valve box with 3½ ft. maximum length	6.50	5.60	6.50
10 two-piece valve box with 4 ft. maximum length	7.00	6.00	7.00
2 12 in. diameter Ross regulator	342.00	492.50	500.00
1 manhole "A" complete in place with rim and cover	110.00	75.00	120.00
1 cast iron frame and cover "A"	20.00	30.00	36.00
10 cu.yd. furnishing and placing class "A" concrete	9.40	17.50	16.00
10 cu.yd. furnishing and placing class "B" concrete	9.40	15.00	15.00
10 cu.yd. furnishing and placing class "C" concrete	9.00	13.00	14.00
Extended totals	$49,202	$49,538	$50,094
Schedule No. 3			
3.75 tons standard cast iron fittings, M.J.	$272.00	$230.00	$270.00
1,520 lin.ft. furnishing and laying M.J. pipe 6 in. in diameter	1.03	.91	.92
9,300 lin.ft. furnishing and laying M.J. pipe 12 in. in diameter	2.35	2.30	2.35
2,350 lin.ft. furnishing and laying M.J. pipe 14 in. in diameter	3.02	3.05	3.10
100 lin.ft. furnishing and laying M.J. pipe 18 in. in diameter	4.67	4.60	4.60
Schedule No. 4			
3.75 ton standard cast iron fittings M.J.	$272.00	$230.00	$270.00
1,520 lin.ft. furnishing and laying M.J. pipe 6 in. in diameter	.90	.80	.80
9 300 lin.ft. furnishing and laying M.J. pipe 12 in. in diameter	2.09	2.05	2.10
2,350 lin.ft. furnishing and laying M.J. pipe 14 in. in diameter	2.75	2.81	2.85
100 lin.ft. furnishing and laying M.J. pipe 18 in. in diameter	4.11	4.18	4.20

*Pipe in Schedule 3, galvanized and dipped; in Schedule 4, dipped. 4. All other items in Schedules 3 and 4 are the same as in Schedule 1.

Ont., Paris—C. B. Parker, town clk., and F. Barber & Associates, Ltd., consult. engrs., 40 Jarvis St., Toronto, 5,883 sq.yd. concrete pavement and curbs on Dundas and Dumfries Sts., to Hamilton Contg. Co. Home Bank Bldg., Hamilton. Engrs. est. $26,000. Noted Sept. 7.

Industrial Works

PROPOSED WORK

Me., Dexter—A. Abbott Co. plans to rebuild 2 story plant recently destroyed by fire. $100,000. Private plans.

N. H., Bristol—See "Dams."

Mass., Springfield—B. J. Shaw, 125 St. James Circle, plans 3 story, 78 x 112 garage, brick, Harrison Ave. $100,000.

Mass., Worcester—Waldorf System, Inc., 169 High St., Boston, having plans prepared by J. M. Gray, archt., 112 Water St., Boston, 1 story bakery, etc., 12,000 sq.ft. floor space, brick and concrete, Arch and Summer Sts., here. $40,000.

R. I., East Providence (Providence P. O.)—Atlantic Refining Co., 715 Hospital Trust Bldg., Providence, plans large receiving and distributing oil plant, about 20 storage tanks, pump houses, garages, etc., at Kettle Point, off Barrington Parkway. Private plans.

R. I., Pawtucket—J. and P. Coats, Inc., 366 Pine St., soon lets contract 2 and 3 story, 95 x 370 ft. and 95 x 270 ft. mill additions, brick and timber. $375,000. Private plans

N. Y., New York—I. Feldman, c/o C. B. Meyers, archt. and engr., 31 Union Sq., had plans prepared 2 story, 105 x 110 ft., brick,

Industrial Works (Continued)

steel and concrete garage, plain foundation, West 150th St. $85,000.

N. Y., Rochester—Don-O-Lak Co. plans rebuilding portion of its paint and varnish plant destroyed by fire. $50,000. Architect not announced.

N. Y., Rochester—Jensen-McCollum, Inc., plans 1 story, 18 ft. high, 45 x 100 ft. garage and 36 x 75 ft. and 25 x 50 ft. auto sales and service station, brick, tile and steel, Main St. $45,000. F. T. Jensen, in charge.

Pa., Altoona — Penn Central Light & Power Co., 1809 Union Ave., plans to vote on $165,000 bonds for improving plant and lines.

Pa., Greenville—Greenville Steel & Iron Co. having plans prepared for 1 story, 150 x 500 ft. rolling mill, 1 story, 100 x 150 ft. open hearth, both steel and corrugated metal, 1 story, 60 x 450 ft. boiler house, 1 story, 50 x 150 ft. machine shop, both brick and steel, 3 story, 50 x 100 ft. warehouse, rein.-con. and brick. $3,500,000. Private plans. Noted Aug. 24.

Pa., McKees Rocks—Chesebrough Mfg. Co., 17 State St., New York City, soon lets contract 2 story and basement, 106 x 143 x 195 x 198 ft. brick finishing building, 1 story, 36 x 39 ft. brick boiler house, 1 and 2 story, 31 x 103 ft. tank house, etc., Stowe Twp. $1,000,000. Hunting-Davis Co., Century Bldg., Pittsburgh, archts. Noted June 8.

Pa., Oil City—E. M. Bowen having plans prepared by W. H. Crosby, archt., Masonic Bldg., 3 story and basement, 70 x 80 ft. brick and steel repair shop. $45,000.

Pa., Phila.—Northern Storage Co. soon takes bids 3 story, 60 x 80 ft. rein.-con., brick and steel storage building, plain foundation, 11th and McKean Sts. $100,000. I. W. Levin, Liberty Bldg., archt.

Pa., Pitcairn—Pennsylvania R.R., Broad St. Sta., Phila., soon lets contract 62 x 107 ft. paint storage and airbrake shop, 1 story, 103 x 424 ft. paint shops and bake oven, 1 story, 14 x 26 ft. oil house, 1 story, 43 x 203 ft. store house and welfare building, 1 story, 16 x 31 ft. oxygen and acetylene storage building, all foregoing brick; 1 story, 40 x 200 ft. rivet cutting building, 1 story, 100 x 760 ft. freight car repair shop, steel frame with galvanized iron siding. $500,000. A. C. Shand, Broad St. Sta., engr.

Pa., Pittsburgh—P. H. Butler Co., 17th and Pike Sts., having plans prepared by Hunting & Davis Co., archts., Century Bldg., 4 story and basement, 67 x 110 ft. brick and tile addition to warehouse, 17th and Pike Sts. $150,000.

Pa., Pittsburgh—Hanlon Gregory Galvanizing Co., 24th St., having plans prepared by J. E. Dwyer, archt., Forbes Murray Bldg., 1 story, 100 x 400 ft. mill, 56th and Butler Sts. $100,000.

D. C., Wash.—J. McReynolds, 819 14th St., N. W., having plans prepared by F. B. Pyle, archt., Evans Bldg., show rooms and service station. $150,000.

W. Va., Charleston—Libby Owens Co., Nicholas Bldg., Toledo, O., plans six 2 story, 45 x 250 ft. factory additions, brick and steel, here. $300,000. Devore Co., 908 Nicholas Bldg., Toledo, O., engrs.

W. Va., Charleston—Owens Bottle Co., 1401 Nicholas Bldg., Toledo, O., plans 1 story, 300 x 360 ft. factory addition, steel and rein.-con. $150,000. Devore Co., 908 Nicholas Bldg., Toledo, O., engrs.

W. Va., Nitro—Nitro Pencil Co., plans rebuilding factory recently destroyed by fire. $90,000. Architect not announced.

Fla., Orlando—Orlando Utilities Co. plans 75 x 175 ft. electric generating plant, to be operated in conjunction with waterworks plant. $300,000.

Ala., Birmingham—Lehigh Portland Cement Co., Young Bldg., Allentown, Pa., plans cement plant, near here, 1,000,000 bbl. per year capacity. Architect not announced.

O., Cincinnati—J. A. Fay & Egan Co., John and Front Sts., having revised plans prepared by C. M. Stegner, archt. and engr., 1,700 Union Trust Bldg., 1, 2 and 3 story, rein.-con., brick and steel machine shop, 80,000 sq.ft. floor space, Paddock Rd. and Tennessee (Bond Hill) Ave. $400,000.

O., Cleveland—City plans 3 story, brick, steel and timber or concrete warehouse, East 79th St. and Woodland Ave. $150,000. H. Kregelius, 604 City Hall, archt.

O., Cleveland—J. Mathers, 2061 West 20th St., had plans prepared by W. Markowitz, archt., 228 Union Bldg., 1 story, 66 x 66 ft., brick and timber garage, plain foundation, 1860 West 22nd St. $40,000.

Ill., Waukegan — Hewes Garage, 334 North Genesee St., having plans prepared by Natl. Constr. Co., engrs., 490 Virginia St., Milwaukee, Wis., 2 story, 50 x 66 ft. garage addition, rein.-con. and brick, plain foundation, here. $40,000.

Wis., Jefferson—Probst Bros., c/o E. Probst, having plans prepared 1 story, 50 x 90 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000. Private plans.

Wis., Sheboygan—Schneidewind & Zehms, 1401 Indiana Ave., plans 2 story, 70 x 100 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation, Indiana Ave. $45,000. Architect not selected.

Ont., Niagara Falls—Rome Wire Co., Rome, N. Y., plans 2 story, 40 x 250 ft. brick and steel factory. To exceed $75,000. Architect not announced.

B. C., Vancouver—Adkison & Dill, local capitalists, 325 Howe St., are seeking franchise from City Council to build central heating plant and distributing system to burn lumber mill waste. $500,000 to $1,000,000 depending on demand for service. Another syndicate headed by H. A. Flood, 1213 Ave. A, Tacoma, Wash., is also trying to obtain this franchise.

B. C., Vancouver—Seaman Paper Mills, 208 South La Salle St., Chicago, Ill., plan paper mills, here. $3,000,000. V. D. Simons, 39 South La Salle St., Chicago, Ill., engr.

BIDS DESIRED

Conn., Stamford—Emmens & Abbott, archts., Washington Bldg., taking bids 3 story, 75 x 100 ft. factory addition, brick and steel, plain foundation, Beckley Ave., for S. and J. Gruber, 544 Main St. $60,000.

N. Y., Batavia—P. W. Minor & Son, State St., taking bids 4 story, 43 x 140 ft., concrete and steel addition to factory. $100,000. F. H. Homelius, c/o owner, archt.

N. Y., Creedmoor (Jamaica P. O.)—See "Buildings."

N. Y., New York—A. Lewisohn, 61 Bway., 2 story, 175 x 230 ft., brick, steel and concrete garage, plain foundation, 4360 Bway. $75,000. Work will be done by separate contracts. Private plans.

Pa., Manor—Amer. City Eng. Co., engrs., Peoples Bank Bldg., Pittsburgh, taking bids 1 story and basement, 110 x 130 ft. and 30 x 65 ft. brick machine shop and foundry, here, for Robertshaw Mfg. Co., Youngwood.

Pa., Phila.—General Electric Co., River Rd., Schenectady, N. Y., taking bids 140 x 175 ft. addition to factory, rein.-con., brick and steel, plain foundation, 7th and Willows Sts., here. Private plans.

O., Cleveland—Oct. 16, by Bd. Educ., East 6th St. and Rockwell Ave., 4 story and basement, 104 x 144 ft., brick, steel and rein.-con. warehouse, plain foundation, East 63rd St. and Waterman Ave. $250,000. W. R. McCornack, East 6th St. and Rockwell Ave., archt. Noted July 6.

Mich., Detroit—See "Buildings."

Ill., Chicago—Dubin & Eisenberg, archts., 19 West Washington St., receiving bids 3 story and basement, 50 x 100 ft. factory, rein.-con., brick and steel, 1006-10 West Madison St. Owner's name withheld.

Ill., Chicago—E. P. Rupert, archt., 19 South La Salle St., receiving bids 1 story, 100 x 150 ft., rein.-con., brick and steel garage, Cicero Ave. near George St., for Luther Bros., 3523 North Cicero Ave. $60,000.

Ill., Chicago — Z. E. Smith, archt., 305 East 55th St., receiving bids 1 story, 75 x 160 ft., rein.-con., brick and steel garage, Ogden and Ridgeway Sts., for F. G. Arnold Co., c/o architect. $50,000.

Ill., Chicago—A. V. Teisen, archt., 4504 North Kedzie Ave., receiving bids 1 story, 110 x 1125 ft. rein.-con., brick and steel garage and store, Irving Park Blvd. and Richmond St. $50,000. Owner's name withheld.

Wis., Green Bay — Foeller & Schoeber, archts., Nicollet Bldg., taking bids 2 story, 100 x 105 ft. dairy and power boiler house, brick, rein.-con. and steel, plain foundation, for Fairmont Creamery Co., 200 North Bway. $60,000.

Wis., Milwaukee — E. G. Schroeder Co., engrs. and archts., 405 Bway., taking bids 1 story, 130 x 150 ft. factory and office, brick and steel, plain foundation, Keefe Ave., for Milwaukee Air Power Pump Co., 886 3rd St.

Wis., Milwaukee—M. Tullgren & Sons, archts., 425 East Water St., taking bids 1 story, 30 ft. high, 75 x 150 ft. film storage house, brick and concrete, plain foundation, Wells and 8th Sts., for Republic Bldg. Co., c/o Architects. $60,000. Noted Nov. 24.

CONTRACTS AWARDED

Me., Old Town—Old Town Woolen Co., 4 story, 60 x 90 ft. storage warehouse, brick and timber, to H. Purrington Co., Waterville, $60,000.

Mass., East Braintree (Boston P. O.)—Massachusetts Oil and Refining Co., 209 Washington St., Boston, will build steel and concrete oil separator structure, Quincy Ave., here, by day labor. $50,000. Private plans.

Mass., Indian Orchard (Springfield P. O.)—Indian Orchard Co., Indian Orchard, 1 story, 40 x 60 ft., brick and concrete boiler house, plain foundation, at plant, to Casper Ranger Constr. Co., 20 Bond St., Holyoke, Archts. est. $75,000.

Mass., Springfield—B. E. Shaw, 125 St. James Circle, 3 story, 80 x 112 ft. garage, brick, concrete and steel, plain foundation, to E. Radding Constr. Co., 186 Worthington St. Archts. est. $100,000.

Mass., Springfield—Victor Sporting Goods Co., Birne Ave., 3 story, 43 x 150 ft. factory, brick and concrete, plain foundation, Birnie Ave., to F. T. Ley & Co., Inc., 499 Main St. Archts. est. $75,000.

Mass., Worcester—A. J. Booth, c/o E. T. Chapin, archt., 340 Main St., will build 3 story, 95 x 103 ft. garage and service station, brick and rein.-con., plain foundation, Park St., by day labor. $150,000.

R. I., Manville—Manville Co., 1 and 2 story addition to plant, 50,000 sq.ft. floor space, brick and steel, plain foundation, to C. B. Maguire Co., Turks Head Bldg., Providence. Archts. est. $100,000.

R. I., Providence — New Down Town Garage, Inc., 704 Industrial Trust Bldg., 2 story garage and service station, rein.-con. and brick, plain foundation, Richmond St., to F. L. Pierce, 201 Union Trust Bldg. Archts. est. $150,000.

N. Y., Albany—Kushrer & Cooperberg, 15 Central Ave., 2 story, 65 x 240 ft., rein.-con., brick and steel garage, Columbia St., to Panzieri & Hogan, 90 State St., $75,000.

N. Y., Dunkirk—Skelton Shovel Co., c/o Chamber of Commerce, large shovel factory, East Lake Rd., to Frid Constr. Co., Buffalo (street address not available). Engrs. est. $125,000. Noted Aug. 24.

N. J., Atlantic City — Philadelphia & Reading R.R., Reading Terminal, Phila., 1 story, 71 x 100 x 157 ft. warehouse and 1 story, 30 x 60 ft. garage, Baltic and Delaware Aves., here, to F. A. Havens Co., 845 North 19th St., Phila.

Pa., Phila.—Traylor Eng. Co., 8 story, 124 x 205 ft. rein.-con., brick and steel factory, plain foundation, Broad and Lehigh Aves., to W. Steele & Sons, 16th and Arch Sts., $455,000.

O., Cleveland—M. Braduloo, 9123 Laisy Ave., 1 and 2 story and basement, 68 x 109 ft., brick and timber bakery and commercial building, East 116th St. and Buckeye Rd., to J. K. Vanis, 13701 Kinsman Rd. Archts. est. $45,000.

O., Cleveland—A. Sogg, archt., 319 Hippodrome Bldg., 2 story, 35 x 50 ft., ice cream factory, brick and timber, plain foundation, 10521 Superior Ave., to De Lorenzo & Botempo, Finance Bldg., for J. O. Stein, 822 Leader-News Bldg.., Archts. est. $40,000. Noted Aug. 24.

Mich., Detroit—Kroger Grocery & Baking Co., 817 Main St., Cincinnati, O., 2 and 3 story, 55 ft. high, 203 x 424 ft. bakery and warehouse, rein.-con. and brick, plain foundation, Merritt Ave., to J. Finn & Co., 7720 Plymouth Rd., $300,000.

Mich., Detroit—Pennsylvania R.R., 1368 Penobscot Bldg., steel frame for first unit of freight house, 1 story, 68 x 700 ft., 3rd and Larned Sts., to Amer. Bridge Co., 2273 Beecher Ave., $200,000; foundation work and piers to W. E. Wood Co, 1805 Ford Bldg., $75,000. Completed building to be of brick, steel and concrete.

Mich., Hamtramck (Detroit P. O.)—Dodge Bros., Jos. Campau Ave., Detroit, will build 8 story, 200 x 400 ft. rein.-con. and brick factory, plain foundation, Jos. Campau Ave., by day labor. $1,500,000. Smith, Hinchman & Grylls, 800 Marquette Bldg., Detroit, engrs. Noted Sept. 14.

Ill., Chicago — Florence Art Co., c/o Minchin, Spitz & Co., archts., 19 West Jackson Blvd., 4 story, 50 x 108 ft. factory, rein.-con., brick and steel, North California Ave. and George St., to J. H. Bickley, 10 South La Salle St. Archts. est. $125,000.

Ill., Chicago—Illinois Publishing and Printing Co., 327 West Madison St., 3 story, 125 x 240 ft. printing plant, rein.-con., brick and steel, La Salle and 26th Sts., to Simpson Constr. Co., 133 West Washington St. Archts. est. $500,000. Noted Aug. 17.

Industrial Works (Continued)

Ill., Oak Park—Snow Bros., 1011 South Blvd., 1 story, 66 x 165 ft. garage, rein.-con., brick and steel, 1028 South Blvd., to G. McClintock, 107 North Park Ave. Archts. est. $50,000.

Calif., Oakland—Hebern Electric Code, Inc., Bank of Italy Bldg., 3 story, 100 x 200 ft. rein.-con. factory, 8th and Harrison Sts., to P. J. Walker Co., Monadnock Bldg., San Francisco, $150,000. Noted Aug. 24.

Buildings

PROPOSED WORK

Mass., Easthampton — High School — Town having sketches made by P. B. Johnson and R. B. Warner, archts., 310 Main St., Springfield, 2 story, 104 x 256 ft., brick. $250,000. Noted March 9.

Mass., Pittsfield—High School—Plans 3 story, brick plain foundation, East and 2nd Sts. $500,000. Architect not selected.

Mass., Springfield—Store and Office—E. Radding, 264 Main St., plans to convert church into theatre, and erect office building on land in front of church, State St. $175,000. Owner will probably build.

Mass., Worcester—Church—Grace Episcopal Church, c/o H. D. Brewer, chn. building com., 19 Oxford St., soon lets contract 1 story and basement, 60 x 180 ft., brick, stone and steel, Main and State St. $300,000. Coolidge & Carlson, 89 State St., Boston, archts. Noted June 1.

Mass., Worcester—Clubhouse—Worcester Hebrew Athlete Club, 60 Green St., plans clubhouse. $150,000. E. H. Pofcher, chn. Architect not selected.

R. I., Pawtucket—School and Convent—St. Edwards Roman Catholic Church, Hope and Weeden Sts., soon lets contract 2 story and basement, 70 x 102 ft. school, and 2 story 37 x 80 ft. convent, brick, steel frame. $150,000. J. F. O'Malley, 75 Westminster St., Providence, archt.

Conn., Hartford—Business—S. S. Nelson, 290 Trumbull St., having plans prepared by F. C. Walz, archt., 407 Trumbull St., 6 story, 100 x 130 ft., brick, concrete and steel, Church St. $200,000.

N. Y., Brooklyn—Exchange—New York Telephone Co., 15 Dey St., New York, having plans prepared by McKenzie, Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., New York, brick, steel and stone, plain foundation, 3rd Ave., here. $425,000.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., soon lets contract brick, steel and stone, plain foundation, East 184th St. $200,000. McKenzie, Voorhies & Gemlin, 342 Madison Ave., archts. and engrs. Noted April 20.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., soon lets contract 12 story, brick, steel and stone addition, plain foundation, West 36th St. $1,200,000. McKenzie, Voorhies & Gmelin, 342 Madison Ave., archts. and engrs. Noted May 18.

N. Y., New York — Hotel — Belleclaire Hotel, Bway. and 77th St., having plans prepared 10 story, brick, steel and stone addition, plain foundation, 77th St. near Bway. W. Guzzardi, owner. Private plans.

N. Y., New York — School — Bd. Educ., 500 Park Ave., having plans prepared by C. B. J. Snyder, archt. and engr., Concord St. and Flatbush Ave., Brooklyn, P. S. 121, brick, steel and stone, plain foundation, East 102nd St. and 2nd Ave. $500,000.

N. Y., Niagara Falls—Hospital—Niagara Falls Memorial Hospital, 640 11th Ave., plans large addition and improvements to hospital. $250,000. Architect not announced.

N. Y., Phelps—School—Plans $175,000 bond issue for new school in Dist. 8. Architect not selected.

N. Y., Saratoga Springs—High School—Bd. Educ. rejected bids opened Sept. 18, new high school, Lake Ave. $400,000. Will readvertise. Coffin & Coffin, 522 5th Ave., New York archts. and engrs. Noted Aug. 31.

N. J., Camden—Terminal—Philadelphia & Reading R.R., Reading Terminal Sta., Phila., soon takes bids 1 story, 42 x 115 ft. and 2 story, 105 x 328 ft. terminal buildings, Kaighs St., here. S. Wagner, Phila., ch. engr.

Pa., Altoona—Business Block—Bell Telephone Co., 13th and Arch Sts., Phila., plans 6 story and basement, 110 x 140 ft. rein.-con., brick and steel, 12th Ave. and 16th St., here. $1,000,000. Architect not selected.

Pa., Beaver—College—Beaver College plans college buildings. $1,000,000. J. W. Thorburn, pres.

Pa., Grove City—Hotel—Grove City Hotel Corp., c/o C. Harshaw, Grove City, having plans prepared by Owsley Co., archts., 1301 Mahoning Bank Bldg., Youngstown, O., 4 story, 100 x 100 ft. rein.-con., brick and steel. $150,000. Noted Sept. 7.

Pa., Merion Sta. — Academy — Sisters of Mercy soon take bids 4 story and basement, 45 x 70 ft. and 45 x 192 ft. stone, here. $200,000. F. F. Durang, 1220 Chestnut St., Phila., archt.

Pa., Phila. — Office — Insurance Co. of North America, 232 Walnut St., soon takes bids 20 story, rein.-con., brick and steel, plain foundation, 16th and Arch Sts. $1,500,000. Stewartson & Page, 315 South 15th St., archts. Stone & Webster, Real Estate Trust Bldg., engrs.

Pa., Pittsburgh — Court House — Comrs. Allegheny Co., Court House, having plans prepared by Rutan, Russell & Wood, archts., Century Bldg., altering and building addition to court house, 5th Ave. and Grant St. $450,000.

x **Pa., Wilkes-barre**—Business—F. P. Slattery plans 3 story, 60 x 70 ft. brick, South Main St. $150,000. Architect not announced.

Del., Newark—Library—University of Delaware conducting campaign to raise $230,000 for library on campus. E. C. Johnson, chn. campaign com.

Del., Newark—High School—Bd. Educ. plans 2 and 3 story, 140 x 260 ft. Total cost $400,000, full appropriation not available. Portion of building will be contracted for at this time, $160,000 available. Gilbert & Betelle, 546 Broad St., Newark, N. J., archts.

D. C., Wash.—Apartment—J. M. Donn, archt., 1147 Connecticut Ave., N. W., preparing plans 8 story, 112 x 112 ft. apartment. $1,000,000. Owner's name withheld.

D. C., Wash. — College — Christian Brothers, Armendale, Md., having plans prepared by Murphy & Ohnsted, archts., 1413 H St., N. W., for brick and stone college buildings, here. $500,000.

D. C., Wash.—Hotel—Powhatan Hotel Co., 18th St. and Pennsylvania Ave., N. W., plans 10 story addition. $500,000. Architect not selected.

W. Va., Morgantown—Chemistry—University of West Virginia, c/o State Bd. Control, Charleston, had plans prepared by Davis & Dunlop, archts., 1713 Samson St., Phila., 4 story and basement, 79 x 254 ft. and 40 x 79 ft., brick and steel. $400,000.

N. C., Durham — Temple — Masonic Lodges soon take bids temple, Main and Roxboro Sts. $200,000. Architect not announced.

N. C., Washington—Schools—Oct. 17, to vote on $300,000 bonds for new school buildings.

N. C., Winston-Salem—Market—City having plans prepared market, probably rein.-con., 6th and Cherry Sts. $300,000. Architect not announced.

La., Baton Rouge — Church — Methodist Episcopal Church South having plans prepared by R. Spencer, archt., Goodwyn Institute, Memphis, Tenn., 1½ story, limestone. $200,000.

O., Bellaire—High School—Nov. 7, to vote on $350,000 bonds for high school, 35th and Guernsey Sts. H. P. Rodewig, pres. Bd. Educ.

O., Cincinnati — Apartment — Vernon Manor Co., 16 East 7th St., had sketches made by Garber & Woodward, archts. and engrs., 2803 Union Central Insurance Bldg., 7 story and basement, 90 ft. high, 140 x 208 ft., rein.-con. and brick, plain foundation, Burnet and Oak Aves. $1,500,000.

O., Cincinnati — Home — Sisters of St. Joseph, Bway. St., had sketches made by Crowe & Schulte, archts. and engrs., 914 Main St., 3 story, 120 x 175 ft., brick, plain foundation, Oak and Reading Rds. $300,000.

O., Cleveland — Commercial — Upper Euclid Co., c/o W. A. Greenlund, treas., Williamson Bldg., having plans prepared by Walker & Weeks, archts., 1900 Euclid Ave., 2 story and basement, 60 x 150 ft., brick, steel and stone, Euclid Ave. and East 97th St. $150,000.

O., Cleveland — Police Headquarters — City having plans prepared by A. E. Skeel, archt., 4500 Euclid Ave., converting 6 story, brick, steel, marble and tile building at 203 St. Clair Ave. into police headquarters. $150,000. T. C. Martinec, City Hall, dir. pub. safety.

O., Cleveland Heights (Warrensville P. O.)—Apartment—M. Arnoff, 10025 North Blvd., Celveland, plans 4 story and basement, 48 suites, brick and steel, Cedar Rd. near Fairmount Blvd., here. $450,000. Private plans.

O., Cleveland Heights (Warrensville P. O.)—Apartment—M. Makoff, 2740 East Blvd., Cleveland, having plans prepared by A. F. Janowitz, archt., Permanent Bldg., Cleveland, 3 story, 44 x 185 ft., brick, steel and concrete, here. $250,000.

O., Massillon—School—Bd. Educ. having plans prepared by C. W. Bates, archt., 77 12th St., Wheeling, W. Va., and 604 Marshall Bldg., Cleveland, 2 story and basement, brick, steel and concrete, North St. $250,000. E. P. McConnaughy, pres.

Mich., Dearborn —Laboratory — Ford Motor Co., Highland Park, (Detroit P. O.) had plans prepared by A. Kahn, engr., 1000 Marquette Bldg., Detroit, 1 story, 200 x 800 ft. brick and steel, plain foundation. $250,000.

Mich., Detroit—Office—Wormer & Moore, 514 Griswold St., having plans prepared by Bonnah & Chaffee, archts., 528 Farwell Bldg., 8 story and basement, 60 x 120 ft. rein.-con., stone, brick and terra cotta, plain foundation, Park and Montcalm Aves. $250,000.

Mich., Holland — School — Robinson & Campau, archts., 715 Michigan Trust Bldg., Grand Rapids, takes bids in spring, 3 story and basement, 110 x 160 ft., River Ave. here, for Bd. Educ. $260,000.

Mich., Lansing — Office—Wolverine Insurance Co., 303 West Allegan St., having revised plans prepared by E. A. Bowd, archt., 127 West Allegan St., 5 story, 40 x 90 ft. brick, Allegan St. $150,000.

Mich., Owosso—Schools—E. J. Willman, school supt., having plans prepared by Lane, Davenport & Peterson, archts., 2320 Dime Bank Bldg., Detroit, three 2 story and basement, ward schools, brick and steel, plain foundation. $200,000.

Mich., Royal Oak (Detroit P. O.) — Market—Main St. Market, c/o F. D. Madison, archt., 415 South Washington St., having plans prepared 2 story and basement, 60 x 110 ft. concrete, brick and steel, plain foundation, 5th and Main Sts. $150,000.

Mich., St. Johns — High School — Bd. Educ. having sketches made by S. D. Butterworth, archt., Prudden Bldg., Lansing, 2 story and basement, concrete, brick and steel, plain foundation. Election in November to vote on $175,000 bonds.

Ill., Chicago—Nurses Home—Illinois Post Graduate Hospital, 24th and Dearborn Sts., plans 73 x 121 ft., rein.-con., brick and steel, Jackson Blvd. and Lincoln St. $150,000. W. J. Noble, secy. Architect not selected.

Ill., Chicago — Office — A. S. Alschuler, archt., 28 East Jackson Blvd., preparing plans 3 story, 105 x 125 ft., rein.-con., brick and steel, Congress and Laflin Sts. $250,000. Owners name withheld.

Ill., Chicago — Office — Woltersdorf & Barnhard, archts., 138 North La Salle St., preparing plans 13 story, 118 x 125 ft., rein.-con., brick and steel, Madison and Hamlin Sts. $1,250,000. Owners name withheld.

Ill., Highland Park — Hospital — Shankland & Pingrey, archts., 209 South La Salle St., Chicago, preparing plans 2 story, 40 x 150 ft. addition to hospital, here. $150,000. Owners name withheld.

Ill., Oak Park — Apartment-Hotel — B. Ruglen c/o B. L. Steif, archt., 64 West Randolph St., Chicago, having plans prepared 3 story, 125 x 143 ft., rein.-con., brick and steel, Washington Blvd. $250,000.

Wis., Fond du Lac—Church and Auditorium—Immanuel Trinity Congregation, 13 South Portland St., plans 2 story, brick, rein.-con. and stone, plain foundation. $150,000. J. H. Becker, pastor. Architect not selected.

Wis., Juda—High School—Bd. Educ. c/o J. W. Roderick, clk., plans 2 and 3 story, 60 x 150 ft., brick, rein.-con. and stone, plain foundation. $150,000. Architect not selected.

Wis., Kenosha—Hotel—S. Schwartz, 927 North Sheridan Rd., Waukegan, Ill., rejected bids 5 story, rein.-con. and brick, plain foundation, Main St., here. $175,000. Will readvertise. M. Tullgren & Sons, 425 East Water St., Milwaukee, archts. Noted July 13.

Wis., Milwaukee — Apartment—Glengyle Realty Co., 97 Wisconsin St., rejected bids 2 story and basement, 40 ft. high, 110 x 118 ft., brick and rein.-con., plain foundation, Stowell Ave. $160,000. Will readvertise. Voelz & Siebert, 373 Bway., archts. Noted July 27.

Wis., Milwaukee—Theatre and Office, etc. Grand & Sixth Bldg. Co., c/o O. Brachman, 425 East Water St., having plans prepared by M. Tullgren & Sons Co., archts., 425 East Water St., and C. W. and G. L. Rapp, associated archts., 190 North State St., Chicago, 7 story and basement, 85 ft. high, 150 x 205 ft., rein.-con., brick and tile, plain foundation, 6th and Grand Sts. $2,000,000.

Wis., Viroqua—High School—Bd. Educ. plans 3-4 story, brick, rein.-con. and steel, plain foundation. $150,000. C. F. Dahl, clk. Architect not selected.

Ia., Des Moines—Apartment—B. J. Kavanagh, Fleming Bldg., having plans prepared by Vorse, Kraetsch & Kraetsch, archts., S. & L. Bldg., 4 story and basement, rein.-con., brick, tile and stone, Grand and West 10th St. $250,000.

Ia., Des Moines — High Schools—Bd. Educ. had plans prepared by Proudfoot, Bird & Rawson, archts., 810 Hubbell Bldg.,

Buildings (Continued)

two 2 story and basement, rein.-con., brick, tile and stone, junior high schools, one on East 25th and University Sts., other on 31st and Center Sts. $275,000 each. G. L. Garton, secy.

Ia., Waterloo—Hotel—Arcade Hotel Co., c/o G. C. Janney, Waterloo, having plans prepared 4 story and basement, 110 x 150 ft.. rein.-con., brick, tile and stone. $300,000. Private plans.

Mo., Marshall—High School—Bd. Educ. having plans prepared by Owen, Payson & Casmell, archts., 505 Interstate Bldg., Kansas City, and takes bids in about 3 weeks, 3 story and basement, 150 x 152 ft., rein.-con. and brick.

Tex., San Antonio—Auditorium—City having plans prepared by R. Cameron, archt., Frost Bldg., 3 story, brick and steel, plain foundation. $500,000. Noted Feb. 9.

Colo., Denver—School Administration—Had plans prepared by W. N. Bowman, archt., Central Savings Bank Bldg., 2 story and basement, 30 ft. high, 100 x 125 ft., rein.-con., brick, terra cotta and tile, 14th and Tremont Sts. $150,000.

Wash., Spokane—Temple—Masonic Order, 1108 Riverside Ave., having plans prepared and probably take bids in spring, 3-5 story, brick, steel and stone, Main St. $300,000. Rigg & Vantyne, Peyton Bldg., archts.

Calif., Alameda — Hospital — Alameda General Hospital Corp., c/o C. E. Rogers, archt., Phelan Bldg., San Francisco, having plans prepared 3 story, San Jose Ave. $200,000.

Calif., San Francisco—School—City and San Francisco Co. having plans prepared by J. Reid, Jr., city archt., 1st Natl. Bank Bldg., 3 story and basement, rein.-con. and tile, Van Ness Ave. near Hayes St. $800,000.

Calif., San Jose—College—State College for Teachers, having plans prepared by G. B. McDougall, state archt., Forum Bldg., Sacramento, college incl. home economic building, industrial training and machine shops, etc., 7th and San Antonio Sts., here. $205,000.

BIDS DESIRED

Mass., Holyoke—Office—Hadley Falls Trust Co., 369 High St., taking bids 8 or 10 story, 60 x 100 ft., steel frame, High St. $200,000-$250,000. G. P. B. Alderman, 316 High St., archt. Noted March 9.

Mass., Pittsfield — School — Sept. 30, by School Bd., 3 story, 12 rooms and auditorium, brick. $175,000. G. B. Haynes, 184 North St., archt.

R. I., Westerly — School — Oct. 2, by School Bd., 1 story, 117 x 153 ft., brick, steel and concrete. $150,000. Hoppin, Field & Pierce, 31 Market Sq., archts.

R. I., Westerly — School — Oct. 2, by School Bd., 2 story and basement, brick and concrete, plain foundation, Pleasant and High Sts. $150,000. Hoppin, Field & Pierce, 31 Market Sq., Providence, archts.

Conn., West Hartford—High School—Oct. 2, by B. I. Miller, town mgr., 2 story and basement, 200 x 210 ft., rein.-con., steel and brick, plain foundation, South Main St. $450,000. W. T. Marchant, 36 Pearl St., Hartford, archt.

N. Y., Creedmoor (Jamaica, P. O.)—Hospital, etc.—Oct. 31, by State Hospital Comn., 25 Bway., New York, kitchen and dining room building, central heating and lighting plant, and buildings for chronic patients (north and south) etc., at Creedmoor Div., Brooklyn State Hospital, here. L. F. Pilcher, Albany, state archt.; adv. this issue.

N. Y., Jamestown — Lodge — Building Com. B.P.O.E., taking bids 3 story, 80 x 120 ft., brick, steel, pressed brick and tapestry brick, East 4th and Pine Sts. $160,000. E. W. Curtis, chn. C. C. Pederson, 119 Lakeview Ave., archt. Noted April 20.

N. Y., New York—Apartment—M. Paterno, 200 West 72nd St., 14 story, brick, steel and stone, plain foundation, Park Ave. and 86th St. $1,500,000. Work will be done by separate contracts. Private plans.

N. Y., Patchogue—High School—Oct. 16, by Bd. Educ., brick, steel and stone, plain foundation. $500,000. Tooker & Marsh, 101 Park Ave., New York, archts. and engrs. Noted Sept. 14.

Pa., Beaver Falls — High School — Bd. Educ. and Carlisle & Sharrer, archts., Jenkins Arcade, Pittsburgh, taking bids 3 story and basement, 68 x 129 ft. brick, stone and tile addition. $150,000. Noted June 22.

Pa., Bridgeport — High School — H. C. Richards, archt., 608 Chestnut St., Phila., taking bids 2½ story, 69 x 164 ft. rein.-con., brick and steel, plain foundation, for Bd. Educ.

Pa., Johnstown — High School — Oct. 9, by School Dist., 601 Swank Bldg., constructing Cochran School, 3 story, brick and stone, steel frame has been erected. $350,000. J. E. Adams, Nemo Bldg., archt. Noted Aug. 31. Former bids rejected.

Pa., Phila. — Bank and Office — A. H. Brockie, archt., 254 South 15th St., taking bids 6 story, 39 x 138 ft. brick, steel and marble, 1510-1512 Chestnut St., for Corn Exch. Bank, 1510-12 Chestnut St.

Pa., Phila. — Oct. 5, by F. E. Hahn, archt., 1112 Chestnut St., 5 story and basement, 140 x 141 ft. rein.-con., brick, steel and stone, plain foundation, Broad and Pine Sts., for Y.M.H.A., Ash St. Noted May 4.

Tenn., Knoxville — Church — Oct. 9, by Daugherty & Gardner, archts., Stahlman Bldg., Nashville, 4 story, 140 x 200 ft., Main St., for First Baptist Church, 630 South Gay St. $300,000. Noted July 20.

O., Athens—Gymnasium—Oct. 19, by Bd. Trustees Ohio University, 2 story and basement, 107 x 160 ft., brick, stone and concrete, on campus. $200,000. F. L. Packard, New Hayden Bldg., Columbus, archt. Noted Sept. 21.

O., Cleveland—Store—Oct. 5, by Walker & Weeks, archts., 1900 Euclid Ave., 6 story, 143 x 152 ft., brick and rein.-con. addition, Huron Rd., for Halle Bros. Co., Euclid Ave. $350,000. Noted Aug. 17.

O., Logan—High School—Oct. 20, by R. Bright, clk. Bd. Educ., 2 story and basement, 106 x 136 ft., brick and concrete. $150,000. F. L. Packard, New Hayden Bldg., Columbus, archt.

O., Oakwood (Dayton P. O.)—School—Oct. 6, by Clerk Bd. Educ., 3 story and basement, 136 x 176 ft., brick and rein.-con. $200,000. Schenk & Williams, Mutual Home Bldg., Dayton, archts. Noted Jan. 12.

Mich., Detroit — Seminary — Oct. 10, by Donaldson & Meier, archts., 1314 Penobscot Bldg., seminary buildings as follows: Unit A, 4 and 5 story, 223 x 267 ft. with 2 courts, 60 x 180 ft., 55 ft. high, with 116 ft. tower; Unit B, 3 story, 150 x 162 ft., 50 ft. high; Unit C, 3 story, 135 x 170 ft., 50 ft. high; Unit D, 2 story, 117 x 118 ft., 50 ft. high; Unit E, 4 story, 60 x 137 ft. 68 ft. high; Unit F, 2 story, 64 x 147 ft. power plant, 40 ft. high with stack, 3 boilers, feed pumps, incinerator, coal bunkers, etc., all foregoing rein.-con., brick and steel, Chicago Blvd., for Sacred Heart Seminary, M. J. Gallagher, 1219 Washington Blvd., pastor.

Mich., Mt. Pleasant—Dormitory—Oct. 7, by T. E. Johnson, secy. State Bd. Educ., Lansing, 3 story, concrete, brick and steel, plain foundation. $150,000. S. D. Butterworth, 909 Prudden Bldg., Lansing, archt.

Mich., Port Huron — High School — Oct. 16, by Secretary Bd. Educ., 2 story and bsement, 100 x 150 ft. rein.-con., brick and steel, plain foundation, Erie Ave. $200,000. Van Leyen, Schilling, Keough & Reynolds, 3440 Cass Ave., Detroit, archts.

Ill., Chicago—Bank and Office—Holabird & Roche, archts., 104 South Michigan Ave., receiving bids 14 story, rein.-con., brick and steel addition, Clark and Monroe Sts., for Chicago Trust Co. c/o architects. $1,000,000. Former bids rejected. Noted Sept. 7.

Ill., Chicago — Church and Community House — Spitzer & Popkin, archts., 115 South Dearborn St., receiving bids 3 story, rein.-con., brick and steel, Ashland and Morse Aves., for owner c/o D. Labowitch, 166 North State St. $500,000.

Minn., Minneapolis—School—Oct. 9, by McPhail School of Music and Dramatic Art, Nicollet Ave., 4 story and basement, 55 ft. high, 50 x 157 ft., rein.-con., brick and tile, La Salle Ave. and 12th St. $225,000. Magney & Tusler, 126 South 9th St., archts. Noted Aug. 4, 1921, and July 13, 1922 under "Miscellaneous."

Minn., St. Paul—High School—Oct. 2 (change of date), by H. W. Austin, city purch. agt., 3 story and basement, 150 x 250 ft. with 1 story, 48 x 90 ft. wing, rein.-con., brick and tile, Isabel and Congress Sts. $300,000. F. X. Tewes, city archt. Noted Sept. 14.

Ariz., Phoenix—Depot—Oct. 19 at office R. B. Ball, ch. engr. Coast Div. of Atchison, Topeka & Santa Fe R.R., Kerckhoff Bldg., Los Angeles, Calif., for union depot, 480 ft. long, here. $850,000. Noted Dec. 29.

Ont., Galt—School—Oct. 2, by Cameron & Ralston, archts., Bartlett Bldg., Windsor, 2 story and basement, 120 x 225 ft. concrete, brick and stone, for Bd. Educ. $300,000.

BIDS RECEIVED

N. Y., Albany—Municipal—Bd. Contr. & Supply, City Hall, opened bids Sept. 18, for municipal building, Eagle and Beaver Sts., from H. Goodman, 705 Bway., $239,068; M. Kantrowitz, 20½ Market St., $246,800; Panzieri & Hogan, 90 State St., $250,000. Noted Sept. 14.

N. Y., Brooklyn—Schools—C. B. J. Snyder, supt. School Buildings, Concord St., opened bids Sept. 22, P.S. 193, northerly side of Ave. L, etc., from T. A. Clarke Co., 122 Livingston St., $567,000, C. Meads Co., 217 West 14th St., New York, $602,200, G. Dekempe $605,000; P. S. 192, southerly side of 18th Ave., etc., from G. F. Driscol Co., 115 Schermerhorn St., $572,990, G. Dekempe, $615,000, T. Dwyer, Bway. and 216th St. New York, $624,000. Noted Sept. 14.

O., Cleveland—High School—Bd. Educ., East 6th St. and Rockwell Ave., opened bids Sept. 18, general contract 3 story and basement, 300 x 311 ft., brick, steel and concrete, East 152nd St. and St. Clair Ave., from Drummond-Miller Co., 4500 Euclid Ave., $1,689,900, Craig-Curtiss Co., Cook Bldg., $1,719,987. A. Dall, Euclid Heights Blvd., Cleveland Heights. $1,806,000; heating and ventilating apparatus, from Feldman Bros., 10305 Barrett Ave., $234,800. Noted Aug. 31.

CONTRACTS AWARDED

Me., Ft. Fairfield—High School—School Bd., 2 story, and basement, 90 x 165 ft., brick and steel, plain foundation, Hill St., to F. A. Rumery Co., 21 Portland St., Portland. Archts. est. $150,000. Noted March 9.

Me., Waterville—Hospital—Sisters Hospital, College Ave., 4 story, L-shaped, brick, steel and concrete, plain foundation, College Ave., to D. H. Walker, 529 Dutton St., Lowell, Mass. Archts. est. $500,000. Noted July 13.

N. H., Nashua—Bank and Office—Second Natl. Bank, 185 Main St., 4 story, brick, steel and stone, plain foundation, Main St., to C. W. Keith, 2 Faxon St. Archts. est. $200,000. Noted Sept. 14.

Mass., Boston—Office—Edison Electric Illuminating Co., 70 State St., 8 story, rein.-con., brick and terra cotta, plain foundation, 33-39 Boylston St., to G. B. H. Macomber Co., 44 Bromfield St. Archts. est. $350,000. Noted Dec. 30.

Mass., Boston—Office—Chamber of Commerce, 177 Milk St., 12 story, 113 x 184 ft., rein.-con., brick, steel and stone, plain foundation, Federal and Franklin Sts., to Evatt Constr. Co., 161 Devonshire St. Archts. est. $3,000,000. Noted Aug. 24.

Mass., Dorchester (Boston P. O.)—Dormitory — St. Marys Infant Asylum, Everett Ave., 4 story, 60 x 85 ft. brick, stone and steel, plain foundation, Cushing Ave., to C. Logue Building Co., 18 Tremont St., Boston. Archts. est. $150,000.

Mass., Somerville — High School — Bd. Educ., 3 story, rein.-con. and brick, plain foundation, Winter Hill, to F. G. Coburn, 294 Washington St., Boston. Archts. est. $800,000. Noted Aug. 10.

R. I., Woonsocket — College — Sacred Heart College, 2 and 3 story, brick, concrete and steel, plain foundation, Bernon Heights, to Bouvier-Brien Constr. Co., 189 Sayles St. Archts. est. $500,000.

N. Y., Brooklyn—Apartment—Rosenvale Realty Co., c/o Magnuson & Kleinert, archts. and engrs., 52 Vanderbilt Ave., 6 story, 100 x 100 ft., brick, steel and stone, plain foundation, Ave. J. and East 10th St., by day labor. $150,000. L. Rosenberg, pres.

N. Y., New York—Apartment—H. and J. Realty Corp., c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., 5 story, 95 x 185 ft., brick, steel and stone, plain foundation, Boston Rd. and 167th St., by day labor. $175,000.

N. Y., New York—Museum—Park Bd., Municipal Bldg., new wing to be known as southeast wing and court building known as Hall of Ocean Life, also passage to connect the 2 buildings, for Amer. Museum of Natural History, general contract to J. Stewart & Co., 30 Church St., $1,069,000; plumbing work to P. F. Kenny Sons, 33 Old Bway., $23,961; steam heating and fume removal apparatus, etc., to Federal Heating Co., 300 Madison Ave., $66,431; ventilating and humidifying apparatus, to Baker Smith Co., Inc., 576 Greenwich St., $19,600. Noted Sept. 14.

Pa., Carbondale—School—Bd. Educ., 3 story, 19 room, brick, Salem Ave., general contract to Lackawanna Constr. Co., Real Estate Exch. Bldg., Scranton, $189,275. Noted Sept. 7.

Pa., Dormont — Church — O. M. Topp, archt., Jenkins Arcade, Pittsburgh, 1 story, balcony and basement, stone and tile, Potomac and Espy Sts., to C. S. Smith, 1924 Murdoch St., Pittsburgh, for Presbyterian Church, c/o C. K. Jones, 2032 Glenmore Ave. Archts. est. $175,000. Noted Aug. 31.

Pa., Greensburg — Home — Bd. Comrs. Westmoreland Co., c/o W. A. Arter, co. controller, altering county home, to Burrell & Snyder, Coulter Bldg. Archts. est. $190,000. Noted July 13.

Pa., Greensburg—Store and Office—Inland Realty Co., 5 story and basement, 30 x 95 ft. brick addition to Huff Bldg.,

ROAD WORK—MISSOURI

Bids were opened by State Highway Comn., Jefferson City, July 18, for constructing 3.973 mi. road from King City to Stanbury, Gentry Co., (A) E. L. Meek & Co., Kansas City; (B) J. O. Patterson & Co., 311 Ridge Bldg., Kansas City. The unit bids were as follows:

	A	B
5,000 cu.yd. earth excavation	$0.60	$0.50
8,875 cu.yd. sledged stone base	1.00	1.50
8,875 cu.yd. sledged stone base, ¼ mi. haul	1.75	1.75
145,368 cu.yd. sledged stone base additional ¼ mi. haul	.07	.07
7,658 cu.yd. waterbound macadam	1.50	2.00
7,658 cu.yd. waterbound macadam, ¼ mi. haul	2.00	1.50
125,435 cu.yd. waterbound macadam, additional ¼ mi. haul	.07	.07
1,678.5 cu.yd. crushed stone furnished at quarry	1.50	2.00
1,678.5 cu.yd. crushed stone ¼ mi. haul	2.00	1.50
27,493 cu.yd. crushed stone additional ¼ mi. haul	.07	.07
37,838 gal. bituminous binder	.16	.18
1,500 lin.ft. 4-in. vitrified tile underdrain	.54	.40
Extended totals	$87,829	$92,313

Buildings (Continued)

Main St. to Burrell & Snyder, Coulter Bldg. Archts. est. $150,000. Noted July 13.

O., Warren—Office and Bank—Union Savings & Trust Co., 3 story, 50 x 100 ft., brick and terra cotta, East Market St., to C. Shutrump & Son, Warren, and 407 Home Saving & Loan Bldg., Youngstown. Archts. est. $150,000.

Mich., Detroit—Office—J. J. Barlum, 5737 2nd Blvd., (second unit) 8 story and basement, 60 x 100 ft., rein.-con., brick and terra cotta, plain foundation, Bway. Ave., to O. Misch Co., 1370 Bway. Ave. Archts. est. $200,000.

Mich., Detroit—Office—Bonnah & Chaffee, archts., 528 Farwell Bldg., 10 story, about 100 ft. high, 50 x 100 ft. rein.-con., brick, steel and terra cotta, plain foundation, Cadillac Sq., to O. Misch Co., 1370 Bway. Ave., for J. J. Barlum, 5737 2nd Blvd. Archts. est. $250,000. Noted Aug. 3.

Mich., Detroit—Office—J. B. Book, 1225 Book Bldg., general contract, 21 story and basement, 222 ft. high, 61 x 100 ft., rein.-con., brick and steel, Washington Blvd., to O. Misch Co., 1370 Bway. Ave., $525,000. Noted July 27 and Aug. 24.

Mich., Detroit—Office—G. Epstean and J. Berman, 311 Moffatt Bldg., 14 story and basement, 168 x 177 ft. rein.-con., brick and steel, caisson foundation, Shelby St. and Michigan Ave., to O. Misch Co., 1370 Bway. Ave. Archts. est. $2,500,000. Noted May 25.

Mich., Detroit—School—Bd. Educ., 2 story and basement, 91 x 92 ft. addition to Neinas School, McMillan and Military Aves., to Culbertson & Kelly, 872 West Milwaukee Ave., $150,000; 1 story and basement, 55 x 70 ft. play room, to Corrick Bros., 507 Owen Bldg., $23,478. Both rein.-con., brick and steel. Noted Sept. 7.

Ill., Chicago—Apartment—J. Hendelsman, 1445 South Sangamon St., 3 story, 108 x 116 ft., rein.-con., brick and steel, 4900-08 Drake Ave., to Weinstein & Ruzinsky, 1607 South Central Park Ave. Archts. est. $150,000. Noted May 11.

Ill., Chicago—Church—University Church of Disciples, c/o H. Shaw, archt., 39 South State St., 3 story, 60 x 100 ft., rein.-con., brick and steel, 57th St. and University Ave., to C. B. Johnson & Son, 111 West Washington St. Archts. est. $200,000. Noted Aug. 31.

Ill., Chicago—Hospital—Ravenswood Hospital Assn., c/o F. D. Chase, Inc., archts., 645 North Michigan Ave., 4 story, 100 x 150 ft., rein.-con., brick and steel, 1917-31 Wilson Ave., to H. B. Barnard, 140 South Dearborn St. Archts. est. $300,000.

Ia., Des Moines—Apartment—R. Bolton, 1st and Locust Sts., 4 story and basement, rein.-con., brick and stone, 37th St. and Grand Ave., to Fleisher Constr. Co., New Commercial Bldg., $160,000.

Ia., Des Moines—Apartment-Hotel—Commodore Holding Co., 101 Commercial Security Bldg., 5 story and basement, 65 x 120 x 170 ft., rein.-con., brick and tile, to Fleisher Constr. Co., 101 Commercial Security Bldg. Archts. est. building complete $500,000.

Minn., Minneapolis—Apartment—L. H. Fawkes, 1629 Harmon Pl., 6 story and basement, 40 x 87 x 134 ft., rein.con., brick and tile, 314 8th St. S., general contract to Engstrom-Olson Co., 216 Walker Bldg. Cost complete $200,000.

Kan., Atchison—Academy—Mt. Scholastica Academy, 8th and Eccher Sts., 4 story, rein.-con. and brick, plain foundation, to Immel Constr. Co., 200 North Main St., Fond du Lac, Wis., $650,000. Noted Aug. 31.

Colo., Denver—Hotel—O. H. Shoup and others, State House, 8 story, 75 x 200 ft. with 4 wings each 45 x 175 ft., rein.-con. and terra cotta, steel frame, plain foundation, Speer Blvd., Ellsworth and Bayaud Aves., Downing and Ogden Sts., to Fleisher Constr. Co., 606 Builders Exch., Minneapolis, Minn. Engrs. est. $5,000,000.

Calif., Fresno—Office and Store—W. Patterson, 3 story and basement, brick and concrete addition, Tulare and J Sts., to R. F. Felchlin, Bank of Italy Bldg., $150,000.

Calif., Oakland—School—Bd. Educ., Theodore Roosevelt High School, 2 and 3 story, rein.-con. and tile, plumbing to H. G. Newman, 522 16th St, $39,496; heating and ventilating to W. H. Picard, 5656 College Ave., $43,107; electric work to NePage McKenney, 518 18th St., $73,900; lathing and plastering to G. Dixon, 541 Apgar St., $49,943. Bids on general contract were rejected; new bids will be asked. Noted Aug. 24.

Calif., San Luis Obispo—Hotel and Store—J. L. Anderson, c/o C. A. Meusdorffer, archt., Humboldt Bank Bldg., San Francisco, general contract 5 story and basement, rein.-con., Montgomery and Morro Sts., to R. Trost, 26th and Howard Sts., San Francisco, $142,785; plumbing, heating and oil burner, to Scott Co., 243 Minna St., San Francisco, $29,418. Noted Aug. 24.

Federal Government Work

PROPOSED WORK

Va., Virginia Beach—Septic Tank, etc.—Spec. 4709—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans septic tank and drains, here.

N. C., Cape Hatteras (Hatteras P. O.)—Extension etc.—Spec. 4706—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans extension to barracks and painting, here.

Ga., Ft. Benning—Quarters—Constructing Quartermaster plans 10 sets N.C.O. quarters and 36 officers' quarters.

Tenn., Memphis—Boilers, etc.—U. S. Engineer, Memphis, plans to purchase boilers and machinery for hydraulic grader.

Mich., Battle Creek—Hospital—War Dept., c/o Constructing Quartermaster, Munitions Bldg., Wash., D. C., having plans prepared for U. S. Veterans' Hospital, (400 beds), aat Camp Custer, here.

Ia., Knoxville—Hospital—War Dept., c/o Constructing Quartermaster, Munitions Bldg., Wash., D. C., having plans prepared for U. S. Veterans' Hospital, (400 beds), here.

Wash., American Lake—Hospital—War Dept., c/o Constructing Quartermaster, Munitions Bldg., Wash., D. C., having plans prepared for U. S. Veterans' Hospital, (250 beds), at Camp Lewis, here.

Wash., Puget Sound—Dredging—Spec. 4708—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans dredging, here.

Wash., Puget Sound—Pier Extension—Spec. 4707—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans extending Pier 4, here.

BIDS DESIRED

R. I., Providence—Dredging—Oct. 23 at office U. S. Engineer, Providence, dredging in New Haven Harbor, conn.; adv. this issue.

N. Y., Brooklyn—Oil Storage House—Oct. 9 at office Constructing Quartermaster, 39 Whitehall St., New York City, additions to oil storage house at Army Supply Base, here; adv. this issue.

N. Y., Chelsea—Mechanical Equipment—Oct. 16 at Treas. Dept., Wash., D. C., mechanical equipment for U. S. Veterans Hospital, here. J. A. Wetmore, acting superv. archt.

N. Y., Chelsea—Hospital—Oct. 16 by Treas. Dept., Wash., D. C., construction, (except mechanical equipment) of infirmary group for U. S. Veterans Hospital, here. J. A. Wetmore, acting superv. archt.; adv. this issue. Noted Sept. 14.

Pa., Phila.—Dredge Tenders—Oct. 20 at office U. S. Engineer, for two 40 ft. motor dredge tenders.

D. C., Wash.—Pump, etc.—Oct. 13 by A. L. Flint, general purch. officer, Panama Canal, Wash., D. C., for oil-handling pump, electric motor, cable wire, electrical supplies, steel conduit, flexible nonmetallic conduit, automatic arc controls, valves, ash lumber and Douglas fir timber, etc.

Ill., Chicago—Pier Removal, etc.—Oct 24 at office U. S. Engineer, 537 South Dearborn St., pier removal, dredging, etc., in Calumet Harbor; adv. this issue.

Ill., Rock Island—Steel Hull—U. S. Engineer, Rock Island, receiving bids steel towboat hull.

Ia., Boone—Remodeling—Oct. 5 by Treas. Dept., Wash., D. C., remodeling lobby of U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

Mo., St. Louis—Earthwork—Oct. 11 at office Secretary Mississippi River Comn., 1311 International Life Bldg., for earthwork in Bay Island Drainage and Levee Dist. 1, Illinois; adv. this issue.

BIDS RECEIVED

R. I., Providence—Repairing Jetty—U. S. Engineer Office, repairing east jetty at entrance to Nantucket Harbor, Mass., 10,300 long ton, from T. A. Scott Co., Inc., 292 Pequot Ave., New London, Conn., $7.48 per long ton; W. E. Burke, 28 School St., Boston, Mass., $8.35. Noted Aug. 24.

Ore., Salem—Dormitory—Comr. Indian Affairs, Wash., D. C., brick dormitory at Salem Indian School, here, from Hughes & Pugh, Salem, $52,354; F. A. Erixon, Masonic Temple, $53,672; Johnson Constr. Co., Inc., 64 Bway., Fargo, N. D., $98,600.

CONTRACTS AWARDED

Pa., Phila.—Dredging—U. S. Engineer, 815 Witherspoon Bldg., dredging in Delaware River, on Bellevue, Cherry and Liston ranges, to Amer. Dredging Co., Mariner and Merchant Bldg., $616,786. Noted Aug. 10.

Pa., Pittsburgh—Steel Hull—U. S. Engineer, for 1 steel derrick boat hull, to Midland Barge Co., Midland, $12,100. Noted June 22.

D. C., Wash.—Air Compressor—Public Printer, Government Printing Office, air compressor, Ingersoll-Rand type, to W. G. Cornell Co., 19 Patterson St., $25,690. Noted Sept. 7.

D. C., Wash.—Steam Mains—Public Printer, Government Printing Office, steam mains in Capitol power plant, to B. F. Shaw Co., 2nd and Lombard Sts., Wilmington, Del., $73,650.

La., New Orleans—Stone—U. S. Engineer, 329 Custom House, furnishing stone for Southwest Pass, Head of Pass and South Pass, Mississippi River, to O. F. Barrett, 2303 Grandview Ave., Cincinnati, O., $216,480. Noted Aug. 10.

Wis., Park Falls—Flambeau Paper Co. 70 ft. rein.-con. and steel dam, 18 ft. head, 2 tainter gates, to F. Wells, c/o owner. Engrs. est. $50,000. Noted May 18.

Tex., Ft. Worth—Extension to Workroom—Treas. Dept., Wash., D. C., extension to workroom in U. S. Post Office, here, to J. T. Taylor, 3005 Burkburnett Bldg., $9,390. Noted Aug. 3.

Ore., Portland—Catamarans—U. S. Engineer, 2nd Dist., for 80 steel pontoon catamarans for dredges Multnomah and Wahkiakum, to Williamette Iron and Steel Wks., Portland (street address not available) $49,600. Noted July 20.

Miscellaneous

PROPOSED WORK

Eliminating Grade Crossings, etc.—Reading, Pa.—Philadelphia & Reading R.R., Reading Terminal, Phila., plans eliminating grade crossings, new road beds, bridges, etc. $4,500,000. S. T. Wagner, ch. engr.

Transmission Line—Birmingham, Ala.—Alabama Power Co. plans 90 mi., 110,000 volt transmission line from Lafayette to Opelika and also 4,400 volt line in Birmingham industrial district. $1,000,000.

Trucks—Vicksburg, Miss.—Warren Co. Dept. Hys. plans to purchase several motor driven trucks with dump bodies for hauling gravel. H. R. Rhodes, highway engr.

Ornamental Street Lighting System—Sturgeon Bay, Wis.—Plans ornamental street lighting system on 15 blocks in business district, 12 ft. concrete posts, one 400-watt light each. $25,000. Engineer not selected.

Docks, etc.—Oakland, Calif.—See "Excavation, Drainage and Irrigation."

BIDS DESIRED

Snow Plow—Pittsfield, Mass.—Comrs. Berkshire Co., taking bids 3 tractor snow plows to be operated and stored by towns of Great Barrington, Pittsfield, and North Adams. $20,000. F. Howard, comr.

Grandstand—Buffalo, N. Y.—Buffalo Baseball Club, 101 East Ferry St., taking bids 1 story, brick, steel and concrete grandstand, 15,000 seating capacity. $250,000. Osborn Eng. Co., 2848 Prospect Ave., Cleveland, O., archts., and engrs. Noted July 13 under "Baseball Park."

Air Compressor, etc.—New York, N. Y.—Oct. 5, by Bd. Purch., Municipal Bldg., air compressor, pile hammer and coal hoisting equipment to Dept. Plant & Structures.

Cranes—Phila., Pa.—M. Smith, purch. agt. Pennsylvania R.R., Broad St. Sta.,

Miscellaneous (Continued)

taking bids two 250 ton, six 15 ton, one 50 ton, two 25 ton and two 60 ton cranes.

Brick—Wash., D. C.—Oct. 18 by Dist. Comrs., 509 Dist. Bldg., 325,000 salt glazed brick for Langley and MacFarland Junior High Schools.

Dumping Units and Oil—Ft. Lauderdale, Fla.—Oct. 3, by Comrs. Brown co., 3 hydraulic dumping units, also 40,000 gal. asphalt road oil or flux. H. C. Davis, Ft. Lauderdale, engr.

Levee—New Orleans, La.—Oct. 4, by Bd. Comrs. Tensas Basin Levee Dist., at office Bd. State Engrs., 213 Court Bldg., enlarging levee in Chilcot Co., Ark., right bank of Mississippi River, Eunice to Gaines Landing, incl. 300,000 cu.yd. excav. R. S. Swetman, Rayville, secy.

Tractors—Cleveland, O.—City, c/o R. H. Murdock, 124 City Hall, taking bids for 1 or more tractors.

Coal Hopper Equipment, etc.—Northville, Mich.—Oct. 9, by Detroit Municipal Tuberculosis Sanatorium, 1415 St. Antoine St., Detroit, furnishing and installing material and equipment for coal hopper, bins, elevator, and conveying system. Stratton & Snyder, Union Trust Bldg., Detroit, archts.

Crushed Rock, etc.—Fresno, Calif.—Oct. 6, by Supervs. Fresno Co., furnishing 5,500 ton crushed rock or gravel graded from 2½ in. down to fine sand. C. P. Jensen, Cory Bldg., co. surv.

BIDS RECEIVED

Heating and Ventilating Apparatus, etc. —Brooklyn, N. Y.—C. B. J. Snyder, supt. School Buildings, Concord St., opened bids Sept. 22, installing heating, ventilating and temperature-regulating apparatus, etc., in P. S. 67, easterly side of St. Edwards St., etc., from T. F. Hall, 405 Lexington Ave., New York, $71,083; D. J. Rice, 42nd St. and Lexington Ave., New York, $71,167; Raisler Heating Co., 129 Amsterdam Ave., New York, $71,345. Noted Sept. 14.

Heating and Ventilating Apparatus, etc. —Elmhurst (Flushing P. O.), N. Y.—C. B. J. Snyder, supt. School Buildings, Concord St., Brooklyn, opened bids Sept. 22, installing heating, ventilating and temperature-regulating apparatus in P. S. 102, southerly side of Van Horn St., etc., here. from D. J. Rice, 42nd St. and Lexington Ave., New York, $41,487; J. C. Williams, 233 Bway., New York, $41,755; E. Rutzler Co., 404 East 49th St., New York, $41,914. Noted Sept. 14.

Mechanical Equipment—Wilmington, Del. —Bd. Harbor Comrs. received bids track scale, locomotive cranes, portal cranes, 4 dock winches, 6 tractors, 3 load carrying trucks, 60 trailers, and 50 hand trucks. Address Bd. Harbor Comrs. Noted Aug. 24.

Curb Stone—Montreal, Que.—R. Bauset, city clk., opened bids (1) 10,000 ft. straight curb stone, (2) 1,000 ft. curved stone, from Villeray Cut Stone Co., 848 Du Rosaire St., (1) $1.10 per ft., (2) $1.20; E. Des Ormeaux, Montreal, (street address not available) (1) $1.10 (2) $1.35; Jobin-Genois, Riviere a Pierre, (1) $1.50 (2) $1.80.

CONTRACTS AWARDED

Park Improvements—Buffalo, N. Y.—Dept. Parks, for park improvements at Hennepin Grounds, consisting of 2 brick shelter houses, pergola, wading pool, frame shelter house, bath house and dressing room, to J. A. Zoll, 398 Bird Ave., $34,300.

Boardwalk—Long Branch, N. J. — City Comrs., City Hall, renewing and widening 4,300 lin.ft. boardwalk from point near Morris Ave. to Sea View Ave., to Wooley & Howland, Long Branch (street address not available), $76,000. Noted Sept. 7.

Baseball Stand—Detroit, Mich.—Detroit Baseball Co., Michigan and Trumbull Aves., rein.-con. and stucco addition to baseball stand, to W. J. Fritsch, 2074 12th St., $100,000.

Bulkhead—Chicago, Ill.—South Park Comrs., 57th St. and Cottage Grove Ave., 7,200 lin.ft. bulkhead, to Great Lakes Dredge & Dock Co., 104 South Michigan Ave. Noted Sept. 7.

Stadium—Urbana, Ill.—University of Illinois, rein.-con., brick and steel stadium, to English Bros., 419 Lincoln Bldg., Champaign. Archts. est. $2,500,000. Noted Aug. 10

Culverts—Minneapolis, Minn.—Will build 1,225 lin.ft. 9.5 x 20 ft. concrete culvert over Bassetts Creek. $94,000. Work will be done by day labor under supervision of City Eng. Dept. N. W. Elsberg, city engr.

Electrolier System—Dinuba, Calif.—Electrolier system incl. 58,000 ft. 1½ Greenfield duct conduit, 58,000 ft. No. 8 Duplex lead covered cable, etc., to Osborn Electric Co., Turlock, $63,924. Noted Sept. 21.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: Oct. 6.

Substructure for Water Supply Works

Memphis, Tenn.

Sealed proposals, addressed to the Board of Commissioners of the Memphis Artesian Water Department, and endorsed with the bidder's name and designation of the work bid upon will be received at the office of the Memphis Artesian Water Department at Memphis, Tenn., until 12 o'clock noon, of the 6th day of October, 1922, and then publicly opened and read, for the construction at Memphis, Tenn., of a reinforced concrete reservoir and reinforced concrete substructures of a pumping station, iron removal plant and aerator and for the furnishing and installing of cast iron pipe, valves, drains and appurtenant structures, the work being designated as Contract 6.

The quantities of the principal items are roughly as follows:

Excavation	80,000	cu.yds.
Concrete	15,000	cu.yds.
Reinforcing steel	700	tons.
Cast iron pipe and specials	220	tons.
Valves and sluice gates, sizes 4 inch to 48 inch..	75	
Venturi meters, sizes 30 inches and 42 inches....	5	
Filter rate controllers.....	8	

Bids must be made upon the entire work, which will be awarded as a single contract.

Copies of the bidding blanks, bonds, contracts and specifications may be obtained from any of the following offices:

Memphis Artesian Water Department, Memphis, Tennessee.

Fuller & McClintock, 421 Produce Exchange Bldg., Kansas City, Mo.

Fuller & McClintock, 170 Broadway, New York City.

Fuller & McClintock, 319 Summit Cherry Bldg., Toledo, Ohio.

A charge of $20.00 will be made for each set of specifications which charge will be refunded provided the specifications are returned within 30 days after bids are received.

The Water Commission reserves the right to reject any or all bids, to waive any informalities in the bids received, and to accept any bid or bids which they deem most favorable to the interests of the City of Memphis.

By order of the Board of Commissioners of the Memphis Artesian Water Department.

Bids: Oct. 11.

Repairs to Reservoir

Binghamton, N. Y.

Sealed proposals for Construction—Repairs to Reservoir, at the Binghamton State Hospital, Binghamton, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 P.M. (Standard Time) Wednesday, October 11th, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3972. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Binghamton State Hospital, Binghamton, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.
Dated: September 13, 1922.

OFFICIAL PROPOSALS

Bids: Oct. 10.

Concrete Structures: Filter Equipment and Brick Filter House

Greensboro, N. C.

Proposals will be received by the City Council of Greensboro, North Carolina, until 12 o'clock M. Tuesday, October 10th, 1922, for building a Filtration plant and appurtenances.

The work includes the construction and equipment of a six million gallon filter plant, the construction of a coagulation basin with dividing wall, capacity 1,148,000 gallons, and the construction of a mixing chamber. The principal quantities involved are:

8,000 cubic yards of earth excavation.
1,900 cubic yards of concrete.
225,00 pounds of reinforcing steel.
The equipment of six one-million gallon filter units.
80,000 brick laid in filter house walls.
Steel wash water tank of 70,000 gallons capacity.
1,000 GPM motor-operated pump.
Piping, valves, and miscellaneous items.

Plans will be on file and may be seen at the office of the City Manager, Greensboro, N. C., or at the office of The Ludlow Engineers, Winston-Salem, N. C., after September 15th. After that date copies of the Specifications, Bid Blank, and Contract may be obtained from the Engineers or City Manager. For the convenience of prospective bidders, the Engineers will furnish copies of the plans upon application accompanied by a check for ten ($10.00) dollars to cover the cost, or separate prints at one ($1.00) dollar each.

Each bid must be accompanied by a certified check in the sum of $5,000, or 5% of the amount of partial bids.

Proposals will be opened publicly with the usual rights reserved.

P. C. PAINTER,
City Manager.

J. L. LUDLOW,
Consulting Engineer.

Bids: Oct. 2.

Water Main Extensions

Saranac Lake, N. Y

Sealed proposals will be received by the Clerk of the Sewer and Water Board of the Village of Saranac Lake, N. Y., until 8:00 o'clock P.M. on Monday, October 2nd, 1922, for the construction of the following extensions to the existing water distribution system of said Village.

2,700 feet of 10 inch, Class No. 100 Universal Water Mains.
4,500 feet of 6 inch, Class No. 130 Universal Water Mains.
2 10 in. Gate Valves and Wayboxes.
12 6 in. Gate Valves and Wayboxes.
22 Double Nozzle Fire Hydrants.

The above quantities are approximate only, for a basis for a uniform comparison of bids.

Bids must be made on proposal blanks furnished by the Sewer and Water Board and must be accompanied by a Certified Check to the amount of $500.00 drawn payable to S. A. Miller, Clerk of the Board.

Proposals must be sealed and delivered to the Clerk and indorsed "Proposals for construction of water mains."

Plans may be seen and proposal blanks, form of contract and specifications secured upon application to the Clerk.

The Sewer and Water Board reserves the right to reject any and all bids.

By order of the Sewer and Water Board.

S. A. MILLER, Clerk,
Saranac Lake, N. Y.
JOHN L. COLLINS, Engineer,
30 Church St., N. Y.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Oct. 31.

Hospital Construction

New York, N. Y

Sealed proposals for Construction, Heating, Sanitary and Electric Work, for Central Heating and Lighting Plant, Kitchen and Dining Room Building and Buildings for Chronic Patients (North and South), and Construction of Tunnels at the Creedmoor Division, Brooklyn State Hospital, Creedmoor, Borough of Queens, Long Island, N. Y., will be received by the State Hospital Commission, Room 1046, 25 Broadway, New York City, N. Y., until 12 o'clock noon (Standard Time), on Tuesday, October 31st, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contracts within thirty (30) days after official notice of award of contracts and in accordance with the terms of Specifications Nos. 3979, 3980, 3981, 3982, 3983, 3984, 3985, 3986, 3987, 3988, 3989, 3990 and 3995. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Brooklyn State Hospital, Brooklyn, N. Y., at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon the deposit of a certified check in the sum of **$25.00** made payable to the State of New York for each set of plans and specifications, which check will be returned if plans and specifications are returned in good condition to the State Architect, L. F. Pilcher, Capitol, Albany N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.
Dated: September 21, 1922.

Bids: Oct. 6.

Garbage Incinerator

Charleston, W. Va.

Sealed proposals will be received by the undersigned until 2 P.M. on the 6th day of October, 1922, for the construction of a plant for the incineration of all garbage collected by the City of Charleston, West Virginia.

The work to be done includes the construction of a refuse incinerator plant complete, tested, accepted, and ready for operation, including the building, flues, chimney, and all appurtenances, and of a capacity of fifty (50) tons for twenty-four hours.

All proposals must be made upon the forms provided therefor and accompanied by a certified check in the sum equal to two and one-half (2½%) per cent of the amount bid.

The Council of the City of Charleston, West Virginia, reserves the right to reject any or all bids.

Specifications and blank proposals may be obtained at the office of the City Manager, City Building, Charleston, West Virginia.

LON H. BARRINGER,
City Manager.

OFFICIAL PROPOSALS

Bids: Oct. 3.

Street Paving

Long Branch, N. J.

Notice is hereby given that sealed proposals will be received by the Board of Commissioners of the City of Long Branch, N. J., for the paving of Atlantic Avenue from Ocean Avenue to Liberty Street with approximately sixteen thousand (16,000) square yards of asphalt upon a concrete foundation with concrete gutters three feet wide, together with re-setting necessary curb and other work incidental thereto, including those portions of driveways of intersecting streets or alleys which are included with the property line of said avenue above mentioned, and will be opened and read at a regular meeting of the Board of Commissioners at City Hall, Long Branch, N. J., on Tuesday evening, October 3, 1922, at 8 o'clock or as soon thereafter as same can be presented.

Drawings and specifications prepared by J. W. Seaman, City Engineer, are now on file in the office of the City Clerk, and may be obtained by prospective bidders during business hours, upon a deposit of **$10.00**, which will be refunded upon the return of the plans and specifications in good condition, at the time the bids are received.

All bids must be made on the standard proposal form in the manner designated therein and required by the specifications and must be enclosed in sealed envelopes bearing the name and address of the bidder and marked, "Bid for paving Atlantic Avenue," and addressed to Frank C. Quinn, City Clerk, and must be accompanied by a surety company certificate stating that said surety company will provide the bidder with the required bond on the proposed work.

No bid will be considered unless accompanied by a certified check for not less than ten per cent of the amount bid on the work, drawn to the order of Frank L. Howland, City Treasurer, or cash in equal amount.

The standard proposal forms and data may be obtained on application to the Engineer at his office, 192 Broadway, Long Branch, N. J.

The Board of Commissioners reserves the right to reject any or all bids, if deemed to the best interests of the City so to do.

Dated, Long Branch, N. J., September 20, 1922.

FRANK C. QUINN,
City Clerk.

Bids: Oct. 10.

Steam Turbine and Accessories

New Orleans, La.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans up to 12 o'clock, noon, Tuesday, October 10th, 1922, for furnishing one 6,000 kw. STEAM turbine and accessories.

Specifications and blank forms of proposals may be obtained at Room 303, No. 526 Carondelet Street, New Orleans.

The right is reserved to reject any or all bids.

A. G. MOFFAT,
Secretary.
GEO. G. EARL,
General Superintendent.
Aug. 10, 1922.

OFFICIAL PROPOSALS

Bids: Oct. 2.

Pavement, Curbing and Catch Basins

Noroton, Conn.

Sealed proposals for furnishing all labor and materials for the construction of proposed Drives, Curbing and Catch Basins and necessary drains to be constructed on the grounds of Fitch's Home for Soldiers and Soldiers' Hospital of Connecticut at Noroton Heights, Conn., will be received at the office of Col. Henry J. Seeley at the Soldiers' Home in Noroton until October 2, 1922, at 12:00 a.m. (D.S.T.).

The bids will be opened at the Governor's Office in the State Capitol at Hartford, on October 3rd, 1922, at 11:00 a.m. (D.S.T.).

The bids shall be in accordance with the plans and specifications for the work on file in the office of Col. Henry J. Seeley at the Soldiers' Home, where they may be obtained by bidders upon payment of **$5.00**, the same to be refunded when plans are returned in good condition.

The principal items of work consist of:

4,614 sq.yd. Penetration Pavement.
4,660 lin.ft. Concrete Curbing.
18 Catch Basins.

Each proposal shall contain the full name of every firm or corporation interested in the same and the address of the person or firm, or President or Secretary of the corporation bidding, and shall be accompanied by a certified check upon a national bank or trust company drawn to the order of The Soldiers' Hospital Board of Connecticut, in the sum of $650, which shall become the property of the State Hospital Board as liquidated damages in case the successful bidder fails to enter into a contract within five (5) days after the award of this contract as herein provided.

The checks of unsuccessful bidders will be returned upon demand and of the successful bidder upon completion of the work in a satisfactory manner, no bond being required.

All bids to be placed in a sealed envelope marked "Bids for Road and Curbing."

The Soldiers' Hospital Board reserves the right to reject any or all bids.

By order of
THE SOLDIERS' HOSPITAL BOARD
OF CONNECTICUT,
JOHN H. THACHER,
Chairman of Executive Committee.

Bids: Oct. 16.

Junior High School Building

Altoona, Pa.

Proposals will be received by the School District of Altoona, Penna., until 8 p.m., October 16th, for the erection and completion of a Junior High School 224 x 232 ft., three stories and basement, fireproof, also proposals for Heating and Ventilation, Plumbing and Electric Work.

Further information will be supplied on application to the Architect.

JULIAN MILLARD,
Registered Architect,
Altoona, Penn.
WM. B. ITTNER,
Consulting Architect.
W. N. DECKER,
Secretary,
Altoona School District.

OFFICIAL PROPOSALS

Bids: Oct. 4.

Public Sewerage System

Hartsdale, N. Y.

Sealed proposals for furnishing all labor and materials necessary for the construction and completion of a Public Sewer System in the Hartsdale Sewer District, Town of Greenburgh, Westchester County, New York, addressed to the Board of Sewer Commissioners of said Sewer District will be received at the Office of said Sewer Commissioners, Wilson Street, Hartsdale, New York, until 3.00 o'clock p.m. on the 4th day of October, 1922, at which time and place all proposals then received will be opened and publicly read. The bids shall be in accordance with the plans and specifications for the proposed work, on file in the said Office of said Board of Sewer Commissioners, Wilson Street, Hartsdale, New York, from whom copies may be obtained. A deposit of Fifteen ($15.00) Dollars will be required for each set of plans and specifications furnished, which sum will be refunded to all persons submitting bids if said plans and specifications are returned in good condition within 30 days after bids have been received and acted upon by said Sewer Commissioners.

Such proposals shall be made on the blank form of proposals furnished by the Sewer Commissioners attached to the specifications. Any proposal containing bids not asked for or which does not contain prices in words and figures for all items given in the form of proposal, or which is otherwise not in conformity with this notice, may be rejected.

Each proposal shall contain the full name of every person, firm or corporation interested in the same, and the address of the person, firm or corporation bidding, and shall be accompanied by certified check drawn upon a State or National Bank or Trust Company to the order of the Hartsdale Sewer District in the sum of Twenty-five hundred ($2,500) Dollars.

The bidder to whom the contract may be awarded shall attend at the Office of said Sewer Commissioners with the Sureties offered by him within six (6) days after the date of notification by the Sewer Commissioners, their Agent or Attorney of the acceptance of his proposal and there sign the contract for the work in triplicate. In case of failure so to do, the bidder will be considered as having abandoned the same, and the certified check accompanying his proposal shall be forfeitured to the Sewer District.

The checks of all unsuccessful bidders will be returned upon demand after the award of the contract, and also the check of the successful bidder upon the execution of the contract and the furnishing of the required bond. Before the execution of the said contract, the successful bidder thereon shall furnish a Surety Company bond in the sum of Fifty (50%) per cent of the aggregate price named in the contract conditioned upon the faithful performance of such contract; such Bond shall be satisfactory and acceptable to the Board of Sewer Commissioners of said Sewer District both as to form, manner of execution and sufficiency of the Surety or Sureeties.

The Engineer's Estimates of the work to be performed and materials furnished, in accordance with the plans and specifications, is as follows: 12,409 feet of eight inch vitrified pipe; 5,134 feet of ten inch vitrified pipe; 7,340 feet of twelve inch vitrified pipe, 2,463 feet of fifteen inch vitrified pipe; 1,521 feet of sixteen inch class A cast iron pipe; 114 manholes and four flush-tanks.

The Sewer Commissioners hereby reserve the right to reject any or all bids and to accept such bid as, in the opinion of the Sewer Commissioners, seems best intended to subserve the interest of said Sewer District.

Dated Hartsdale, New York, this 21st day of September, 1922.

By Order of the Hartsdale Sewer Commissioners.

HOWARD E. TOWNSEND,
Chairman.
ROY W. BRIGGS, Secretary.

Bids: Oct. 10.

Fire Hose

Fort Meyers, Fla.

City of Fort Meyers, Fla., will receive bids for supplying 1,000 feet 2½ inch Eureka Multiple woven fire hose, 50 foot sections. Bids opened 7:30 p.m. Oct. 10th, 1922.

C. P. STALEY,
City Manager.

OFFICIAL PROPOSALS

Bids: Oct. 3.

Construction of Inlet

Ft. Lauderdale, Fla.

Notice is hereby given that the Board of County Commissioners, Broward County, Florida, will receive bids until 11:00 o'clock a.m., on Tuesday, October 3rd, 1922, for the construction of an inlet from New River Sound to the Atlantic Ocean, near Ft. Lauderdale, as per plans and specifications on file in the Clerk's Office, Courthouse Bldg., Ft. Lauderdale, Florida. Such work shall be let in two contracts, being as follows:—

(a) The dredging of 81,000 cubic yards more or less of earth; and the dredging of 5,000 cubic yards more or less of rock;

(b) The furnishing and placing of 6200 cubic yards more or less of riprap and jetty hearting and of 2500 tons more or less of jetty capping, all in riprap and jetty construction.

Separate bids will be received and separate contracts let for each of the two classes of work mentioned. Copy of plans and specifications may be secured from the Clerk upon payment of $1.00 to cover cost of printing same.

Each bid shall be accompanied by a certified check in the amount of 3% of the bid, guaranteeing that bidder will make contract and bond within ten days of notice of award.

Bond on each contract will be required in the sum of 50% of the amount bid.

Address all bids to the Board of County Commissioners in care of Frank A. Bryan, Clerk, Ft. Lauderdale. Fla.

The Board reserves the right to reject any and all bids.

By order of the Board. August 22nd, 1922.

H. G. WHEELER,
Chairman.

Attest: FRANK A. BRYAN,
Clerk.
Dated August 22, 1922.

Bids: Oct. 10.

Reinforced Concrete Pavement, Curb and Storm Water Sewer

Sag Harbor, N. Y.

Sealed proposals will be received and opened publicly by the Trustees of the village of Sag Harbor at the Municipal Building, Sag Harbor, New York, at 12 noon on Oct. 10, 1922, for the construction of approximately 1.14 miles of reinforced concrete pavement; 2,640 lin.ft. concrete curb; storm water sewers as follows: 540 lin.ft. 12-in. sewer, 1,830 lin.ft. 15-in. sewer, and 1,270 lin.ft. 24-in. sewer.

Plans, specifications and proposals may be seen at the office of the village clerk and at the office of the engineer. Copies thereof may be obtained of the engineer upon the payment of $15.00 per set to cover cost of reproduction and mailing, one-half of which will be refunded upon the return of said copies in good order.

Special attention of the bidder is called to sheet in proposal forms entitled "Information for Bidders."

All bids are to be accompanied by certified check equal to 5 per cent of the total amount of bid.

The right is reserved to reject any and all bids.

MORLEY B. LEWIS,
Village President.

H. F. BISHOP,
Construction Engineer,
Westhampton Beach, N. Y.

Bids: Oct. 9.

Reinforced Concrete Bridge

White Plains, N. Y.

Sealed bids or proposals for the construction of a reinforced concrete arch bridge over the Croton River at the site of the present Van Cortlandt Bridge on the Albany Post Road between the Towns of Cortlandt and Ossining, Westchester County, New York, will be received at the office of the Clerk of the Board of Supervisors, Court House, White Plains, N. Y., until 10:00 a.m., October 9th, 1922.

Proposed bridge to consist of six arches, 48 to 74 foot spans, 40 feet wide.

Specifications, proposal sheets and all information relative to same may be procured at the office of the County Engineer, Court House, White Plains, N. Y., upon making a deposit of ten dollars ($10.00).

BOARD OF SUPERVISORS,
FRED L. MERRITT, Clerk.
September 11, 1922.

OFFICIAL PROPOSALS

Bids: Oct. 23.

Drainage Work

Hershey, Neb.

Sealed proposals or bids will be received by Drainage District No. 1 of Lincoln County, Nebraska, at the office of the Drain Commissioner, Hershey, Nebraska, up to one o'clock P.M., on the 23rd day of October, 1922, for constructing approximately 22.8 miles of open drain ditches and 6 miles of tile drains.

There are four schedules as follows:

SCHEDULE NO. 1

15,552 feet 14 ft. bottom ditch 103,000 cu.yds.

33,500 feet 8 ft. bottom ditch 315,000 cu.yds.

Constructing 8 steel and concrete highway bridges, 16 farm bridges and 5 irrigation canal flumes.

SCHEDULE NO. 2

44,827 feet 6 ft. bottom ditch 296,000 cu.yds.

35,862 feet 4 ft. bottom ditch 169,000 cu.yds.

Constructing 6 steel and concrete highway bridges, 2 wooden pile highway bridges, 19 farm bridges and 2 irrigation canal flumes.

SCHEDULE NO. 3

Furnishing F.O.B. cars at Hershey or O'Fallons, Nebraska, 31,900 feet extra quality vitrified drain tile from 8 inch to 24 inch diameter.

SCHEDULE NO. 4

Hauling tile, excavating, laying and backfilling complete in place 31,900 feet of tile drain varying in size from 8 inch to 24 inch, average depth from 7 to 8 feet.

Instructions for bidders, proposal blanks, plans and specifications, form of contract, provisions for the giving of bond by the contractor, and other instructions may be obtained by mail from the Drain Commissioner, at the office of the Board of Supervisors at Hershey, Nebraska, upon deposit of $10.00 to pay the costs of the same.

By order of the Board of Supervisors.
Dated this 19th day of September, 1922.

W. H. JENKINS,
President.
W. A. KELLY,
Drain Commissioner.

Attest:
J. W. ABBOTT,
Secretary.

Bids: Oct. 7.

Bridge Repairs

Trenton, N. J.

Sealed proposals will be received by the Joint Commission for the Elimination of Toll Bridges over the Delaware River, between New Jersey and Pennsylvania, until noon Saturday, October 7th, 1922, at the State House, Trenton, New Jersey, for the repairs to the bridge over the Delaware River between Milford, Pike County, Pennsylvania and Montague Township, Sussex County, New Jersey.

Proposals must be submitted on the form furnished by the Commission and accompanied by a certified check for the amount of $800, made payable to the Treasurer of the Joint Commission, as a guaranty of good faith.

Plans, specifications and estimates of the quantities are on file at the office of Louis Focht, Engineer, at 125 West State Street, Trenton, New Jersey; this being the address to which the bids are to be sent.

All bids are to be submitted in a sealed envelope marked, "Proposal for repairs to the bridge at Milford, Pike County, Pa."

The right is reserved to reject any or all bids and to waive any informality in the bids received.

LOUIS FOCHT,
Engineer to the Joint Commission.

Bids: Oct. 9.

Street Improvement

Laurel, Miss.

Sealed proposals will be received by the Mayor and Board of Commissioners of the City of Laurel, Mississippi, until two o'clock P.P., on the 9th day of October, 1922, at the office of the City Clerk of said City, for constructing approximately:

19,865 sq.yds. brick pavement with concrete foundation.
16,160 sq.yds. gravel surfacing.
20,243 lin.ft. combined curb and gutter.
4,000 sq.yds. concrete sidewalk.
with all appurtenances thereto.

Plans and profiles may be seen and specifications and proposal forms may be obtained at the office of the City Clerk of the City of Laurel, Mississippi.

J. H. PACE,
Street Commissioner.

OFFICIAL PROPOSALS

Bids: Oct. 16.

Sewer Work

Hackensack, N. J.

The Hackensack Improvement Commission, the governing body of the City of Hackensack, Bergen County, New Jersey, requests proposals for the following work, to wit:

Contract No. 4—For the construction of about 4,600 linear feet of twelve (12), eight (8) inch vitrified pipe sewers, about 3,400 linear feet of twelve (12), eighteen (18), twenty (20), twenty-two (22), twenty-four (24) and twenty-seven (27) inch vitrified pipe sewers, 1360 linear feet of circular concrete sewers and 2,500 linear feet of egg shaped concrete sewers, together with manholes, catchbasins, and other works appurtenant thereto.

The foregoing work is more particularly described and set forth in the plans and specifications on file with Lemuel Lozier, Engineer of the Commission and with the Clerk of the Commission.

The plans and specifications, information for bidders, forms of proposals and contracts, forms of bonds required and other information can be seen at the office of Lemuel Lozier, Engineer of the Commission, Room 3, Bank Building, Main and Mercer Streets, Hackensack, New Jersey; copies of such plans and specifications may be obtained by bidders on making a deposit of $100.00, which deposit will be refunded upon the return of the plans and specifications in good condition.

The contract will be let to the lowest responsible bidder, subject to the right of the Commission to reject any and all bids.

All bids must be made on the form of proposal to be obtained from the Engineer of the Commission, and must give the prices both in writing and in figures, and must give such other information and be signed in the manner indicated on the form of proposal. Each bid submitted for Contract No. 4 must be accompanied by a certified check for $5,000.00, payable to the Hackensack Improvement Commission.

Checks of the unsuccessful bidders will be returned immediately upon the award of the contract. The check of the successful bidder will be returned to the bidder upon the execution of the contract and the furnishing of the bond required, within ten days after the date of the award thereof, or within such extended time as may be determined by the Commission. In case of failure to execute the required contract, and furnish the required bond within such time, such check shall be forfeited to the Hackensack Improvement Commission as liquidated damages.

The proposals herein required for Contract 4 shall be presented to the Hackensack Improvement Commission, at the Municipal Building, 346 State Street, Hackensack, Bergen County, New Jersey, on Monday, the sixteenth (16) day of October, 1922, at 8 p.m. Standard Time.

No bids will be received prior to said hour and none thereafter.

The proposals shall be submitted in sealed envelopes or packages.

The proposals shall be endorsed as follows: "Proposal for sewers Contract N. 4."

The Hackensack Improvement Commission.
By SPENCER D. BALDWIN, Mayor.
WILLIAM SCHAFF, Clerk.

Bids: Oct. 2.

Sewer Extensions

Saranac Lake, N. Y.

Sealed proposals will be received by the Clerk of the Sewer and Water Board of the Village of Saranac Lake, N. Y., until 8:00 P.M. on Monday, Oct. 2nd, 1922, for the construction of sewers in the said Village, as follows:

900 feet of 8 inch sewer.
5,500 feet of 6 inch sewer.
32 Manholes.

The above quantities are approximate, only for a basis of a uniform comparison of bids.

Bids must be made on proposal forms furnished by the Sewer and Water Board and must be accompanied by a certified check to the amount of $500.00 drawn payable to S. A. Miller, Clerk of the Board.

Proposals must be sealed and delivered to the Clerk, indorsed "Proposal for the construction of Sewers."

Plans may be seen, and Proposal blanks, form of Contract and Specifications may be secured at the office of the Clerk.

The Sewer and Water Board reserves the right to reject any and all bids.

By order of the Sewer and Water Board.

S. A. MILLER, Clerk,
Saranac Lake, N. Y.
JOHN L. COLLINS, Engineer,
30 Church St., N. Y.

OFFICIAL PROPOSALS

Bids: Oct. 19.

Wanaque Aqueduct—
Great Notch Tunnel
Contract 3—(Unit Price)

Newark, N. J.

Sealed proposals will be received from 12 o'clock noon to 12:15 o'clock P.M. (Eastern Standard Time) on Thursday, October 19, 1922, by the North Jersey District Water Supply Commission of the State of New Jersey, in its office, Room 412, 20 Clinton Street, Newark, New Jersey, and publicly opened and read at the last named hour, for the performing of all necessary work required in the carrying out of the contract for the construction of Great Notch tunnel and approaches.

The work will include the excavation and concrete lining of a 7-foot tunnel 9,100 feet in length and the construction of about 5,000 feet of 7-foot concrete aqueduct in open cut and various appurtenant structures.

A pamphlet containing the information for bidders, form for proposal, form of contract, specifications and drawings may be examined at the office of the Commission and may be obtained at said office upon deposit of $10.00, which deposit will be repaid upon the return of the pamphlet within 30 days.

All bids shall be made on the blank form supplied by the Commission, which provides for a detailed statement as to the bidder's experience and resources as well as the prices for which he will execute the respective items of work.

Proposals must be accompanied by the consent in writing of a surety company qualified to do business in New Jersey, binding itself that if the contract be awarded to the person making the proposal, the said surety company will become surety for the faithful performance of the said contract in an amount equal to 50 per cent of the contract price.

All bids must be accompanied by a certified check for fifty thousand dollars as a guarantee for the good faith of the bidder. Checks of unsuccessful bidders will be returned within 15 days, that of the successful bidder upon the execution of contract and bond.

The Commission reserves the right to reject all proposals or any proposal which may be informal, or the acceptance of which would be, in the judgment of the Commission for the reasons as suggested in "Information for Bidders," or for any other reason, detrimental to the interests of the municipalities for which the work is to be done.

By order of the North Jersey District Water Supply Commission of the State of New Jersey.

LAURENT J. TONNELE,
Chairman.
Attest: EDMOND TYLER,
Secretary.
ARTHUR H. PRATT,
Chief Engineer.
MORRIS R. SHERRERD,
Consulting Engineer.

Bids: Oct. 17.

Highway Work

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at the State Capitol until 10 a.m., October 17, 1922, when bids will be publicly opened and scheduled and contract awarded as soon thereafter as possible for the reconstruction of 30 miles of Reinforced Concrete, 18 miles of either Bituminous on a Concrete Foundation or Reinforced Concrete and 1 mile of Bituminous Macadam Pavement; also for the erection of a Reinforced Concrete Bridge. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 119 Federal Street, N. S., Pittsburgh, Pa. GEORGE H. BILES, Assistant State Highway Commissioner.

A Big Thought in a Small Space
Dependable Service.
SWART
Contract Bonds
Compensation Insurance
92 William St., New York

OFFICIAL PROPOSALS

Bids: Oct. 19.

Wanaque Aqueduct—
Great Notch Tunnel
Contract 4—(Lump Sum)

Newark, N. J.

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The work will include the excavation and concrete lining of a 7-foot tunnel 9,100 feet in length and the construction of about 5,000 feet of 7-foot concrete aqueduct in open cut and various appurtenant structures.

A pamphlet containing the information for bidders, form for proposal, form of contract, specifications and drawings may be examined at the office of the Commission and may be obtained at said office upon deposit of $10.00, which deposit will be repaid upon the return of the pamphlet within 30 days.

All bids shall be made on the blank form supplied by the Commission, which provides for a detailed statement as to the bidder's experience and resources as well as the price for which he will execute the work.

Proposals must be accompanied by the consent in writing of a surety company qualified to do business in New Jersey, binding itself that if the contract be awarded to the person making the proposal, the said surety company will become surety for the faithful performance of the said contract in an amount equal to 50 per cent of the contract price.

All bids must be accompanied by a certified check for fifty thousand dollars as a guarantee for the good faith of the bidder. Checks of unsuccessful bidders will be returned within 15 days, that of the successful bidder upon the execution of contract and bond.

The Commission reserves the right to reject all proposals or any proposal which may be informal, or the acceptance of which would be, in the judgment of the Commission for the reason as suggested in "Information for Bidders," or for any other reason, detrimental to the interests of the municipalities for which the work is to be done.

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ARTHUR H. PRATT,
Chief Engineer.
MORRIS R. SHERRERD,
Consulting Engineer.

Bids: Oct. 9.

Bridge Work

Lansing, Mich.

Sealed Bids will be received by the City Clerk of Lansing, Michigan, up to 4:00 p.m., Monday, October 9, 1922, for the construction of a reinforced concrete combined river and grade separation bridge. Estimated cost, not including property damages, $175,000.

Plans and specifications may be obtained from the City Engineer by making a deposit of $50.00.

W. BINTZ.

U. S. GOVERNMENT

PROPOSAL FOR SPURDIKES.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9.00 a.m., October 3, 1922, and then opened, for construction of spurdikes at Southwest Pass, Mississippi River. Further information on application.

PROSPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a. m. Oct. 11, 1922, for constructing about 545,000 cubic yards of earthwork by the hydraulic method in the Bay Island Drainage and Levee District No. 1, Ill. Further information on application.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, PROVIDENCE, R. I. Sealed proposals will be received here until 12 o'clock noon, Oct. 23, 1922, and then opened, for dredging in New Haven Harbor, Conn. Further information on application.

U. S. ENGINEER OFFICE, NASHVILLE, TENN.—Sealed proposals will be received here until 11 a.m., Oct. 23, 1922, and then opened, for 3 steel dump scows. Further information on application.

SEALED PROPOSALS, indorsed "Proposals for Buildings, Tupper Lake, N. Y., Specifications No. 4710," will be received at the Bureau of Yarks and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., October 11, 1922, and then and there publicly opened, for buildings at the U. S. Veterans' Bureau Hospital, Tupper Lake, N. Y. The work will include plain and reinforced concrete; artificial stone; hollow tile and brick work; wood framing, sash, doors and finish; plaster and metal lath; slate, promenade tile and tin roofing; sheet metal work; interior marble and tile work; steel sash; steel covered doors; miscellaneous metal work; composition flooring; linoleum; fire escapes; hardware; painting and glazing; electrically and hand-operated dumbwaiters; plumbing; heating; electric light and power; telephones; call bells. Drawings and Specification No. 4710 may be obtained on application to the Bureau of Yards and Docks. Deposit of a check or postal money order for $100, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the drawings and specification. L. E. GREGORY, Chief of Bureau, September 14, 1922.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y. Sealed proposals will be received here until 12 m., October 5, 1922, and then opened, for dredging and rock removal in East River, N. Y. Further information on application.

U. S. ENGINEER OFFICE, MOBILE, ALA.—Sealed proposals will be received here until 11 o'clock a.m., Oct. 10, 1922, and then opened, for the construction of one 100-ft. Diesel-Electric towboat. Further information on application.

U. S. ENGR. OFFICE, WILMINGTON, DEL.—Sealed proposals will be received here until 11 A.M., October 6, 1922, and then opened, for dredging Tuckerton Creek, N. J. Further information on application.

OFFICE OF THE CONSTRUCTING QUARTERMASTER, ABERDEEN PROVING GROUND, MD. Sealed proposals will be received in this office until 10:00 A.M., October 18, 1922, and then opened, for the construction of twenty sets of officers' quarters, at Edgewood Arsenal, Md. Plans and specifications may be obtained at this office upon the deposit of $10.00, which will be refunded upon the return of same in good condition, or they may be seen at the Quartermaster's Office, Edgewood Arsenal, Md. The right is reserved to accept any or to reject all bids for this project.

SEALED PROPOSALS for constructing additions to Oil Storage House at Army Supply Base, Brooklyn, N. Y., will be received and publicly opened at 11 A.M., Oct. 9, 1922, at Constructing Quartermaster's Office, 39 Whitehall St., N. Y. City, N. Y. Information at above address.

U. S. GOVERNMENT

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., Sept. 18, 1922. Sealed prosposals will be opened in this office at 3 p.m. Oct. 16, 1922, for construction (except mechanical equipment) of an Infirmary Group (four brick and concrete buildings two and three stories, with a total ground area of 44,600 square feet) for the United States Veterans' Hospital, at Chelsea, N. Y. Drawings and specifications may be obtained at this office in the discretion of the Supervising Architect. Proposals will be considered only from individuals, firms, or corporations possessing satisfactory financial and technical ability, equipment, and organization to insure speedy completion of the contract, and who have established a record for expedition on contracts of similar character and magnitude. Before drawings and specifications are forwarded to prospective bidders, applicants must cite at least one specific instance where a record for speed has been established on a job of equivalent magnitude, giving date of award of contract, amount of contract, specified time for completion and date of actual completion. The fact that any concern obtains a set of the plans and specifications from any source whatever and submits a bid shall not constitute a waiver of the foregoing stipulations.

JAS. A. WETMORE,
Acting Supervising Architect.

PROPOSAL FOR PIER REMOVAL, ETC.—U. S. Engineer Office, Room 1201, 537 South Dearborn Street, Chicago, Illinois. Sealed proposals for pier removal, dredging, etc., in Calumet Harbor, Illinois, will be received here until 10 a.m., October 24, 1922, and then opened. Further information on application.

POSITIONS VACANT

EMPLOYMENT

POSITIONS WANTED

POSITIONS VACANT

CAPABLE coffer-dam foreman wanted for hydro-electric work in South America; must speak Spanish. P-995, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

CHLORINE gas expert desired by manufacturer contemplating making chlorine control apparatus. Reply, giving experience and other convincing data. P-27, Eng. News-Record.

CONTRACTING firm having large amount of road and bridge contracts has opening for an experienced superintendent to take charge of part of their work and able to invest from $10,000 to $20,000; to receive salary or salary and commission, also good guaranteed return on money invested with good security for investment P-45, Eng. News-Record, **Real Estate Trust** Bldg., Phila., Pa.

DESIGNER and estimator on reinforced concrete, docks, bulkheads, etc., wanted by contracting company; prefer graduate engineer between ages 25 and 30. P-6, Eng. News-Record.

DRAFTSMEN, several, experienced, structural, for steel construction pertaining to apartment and loft buildings. Hinkle Iron Co., 534 West 56th Street, New York City.

DRAFTSMEN, experienced, wanted for structural steel buildings; apply by mail only, giving age, nationality, education, experience and salary expected. Post & McCord, 101 Park Ave., New York.

FIRST class draftsman wanted with experience detailing, checking and designing structural steel as used in mill buildings. Must be single. State education, experience and salary expected. Location Northern Minnesota. P-987, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

DRAFTSMEN, experienced in steel mill construction, oil refinery, and power plant construction, wanted for work at our Port Arthur, Texas, refinery. Apply Gulf Refining Company, 16th Floor, Frick Building Annex Pittsburgh.

POSITIONS VACANT

ORNAMENTAL iron draftsman, familiar with the designing and detailing of all kinds of ornamental and miscellaneous iron work for buildings. Apply by letter, stating experience, references and salary desired, to James McKinney & Son, 925 Broadway, Albany, N. Y.

RECENT graduate in either civil or architectural engineering to detail and design reinforced concrete; permanent; location Chicago. P-28, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

SEVERAL bridge designers and draftsmen wanted by a State Highway Department in the Middle West. Should have at least two years concrete and steel designing, and preferably several years of general engineering experience. Give complete statement of experience and earliest date available. Submit sample of work, if possible. Initial salary about $175.00 per month. P-970, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

RESOURCEFUL master mechanic needed for hydro-electric construction work in South America; must speak Spanish. P-996, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

WANTED

A CONSTRUCTION ENGINEER

30 to 35 years of age, with a thorough knowledge of building construction and possessing to an unusual degree initiative, energy and selling ability. Can make a most valuable connection if he can qualify.

P-43, Engineering News-Record,
1570 Old Colony Bldg., Chicago, Ill.

POSITIONS VACANT

EXPERIENCED structural detailers and template makers, single men preferred. Application should give telegraphic address, experience, salary expected. Address Box 654, Havana, Cuba.

STRUCTURAL steel detailers for buildings and bridges and general structural work. Must be able to produce results. State in application, age, nationality, education, experience, salary expected, date available. Pittsburgh District. P-916, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

STRUCTURAL steel detailers for bridges and buildings wanted. Permanent positions to capable men. Only men with past experience in frabricating plants and those with intentions of staying, need apply. P-931, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

STRUCTURAL engineers wanted who have had experience in supervising reinforced concrete and structural steel buildings to act as superintendent for Detroit architect. State experience, references and salary desired. P-41, Eng. News-Record, Leader-News Bldg., Cleveland, O.

STRUCTURAL steel draftsmen, beginners and men for advanced positions wanted. Worden Allen Company, **P. O. Box** 1595, Milwaukee, Wisconsin.

SUPERINTENDENT watershed. One who can take entire charge of the operation and maintenance of a watershed and familiar with forestry work. State experience, references, nationality and salary wanted. Work in New Jersey. P-971, Eng. News-Record.

WANTED **detailers** and checkers of structural steel for buildings. Apply Richmond Structural Steel Co., Richmond, Va.

ELECTRICAL ENGINEERING GRADUATES

with two to five years experience on Central and Sub-station designing, switchboard diagraming and drafting. Salary according to experience and ability. State age and attach photograph. Write.

P-8, Engineering News-Record
Leader-News Bldg., Cleveland, Ohio.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Oct. 10	Greensboro, N. C. Adv. Sept. 14 to Oct. 5.	Sept. 14
Oct. 10	Covington, La.	Sept. 28
Oct. 10	Tampa, Fla.	Oct. 5
Oct. 10	Ecorse, Mich.	Oct. 5
Oct. 11	Binghamton, N. Y.	Sept. 21
Oct. 11	Ft. Atkinson, Wis.	Oct. 5
Oct. 19	Newark, N. J. Adv. Sept. 28 and Oct. 5	Sept. 7
Oct. 24	Albuquerque, N. M. Adv. Oct. 5.	Oct. 5
Nov. 1	Bay Saint Louis, Miss.	Oct. 5
Nov. 14	Newport, Ky. Adv. Oct. 5.	Oct. 5

SEWERS

Bids Close		See Eng. News-Record
Oct. 10	Syracuse, N. Y.	Sept. 7
Oct. 10	Waseca, Minn.	Sept. 21
Oct. 10	Altoona, Pa.	Oct. 5
Oct. 11	Salt Lake City, Utah	Sept. 28
Oct. 11	Brooklyn, N. Y.	Oct. 5
Oct. 12	Cleveland, O.	Oct. 5
Oct. 16	State College, Pa.	Sept. 21
Oct. 16	Hackensack, N. J. Adv. Sept. 28 and Oct. 5.	Sept. 28
Oct. 16	Ellsworth, Wis. Adv. Oct. 5.	Oct. 5
Oct. 17	Salt Lake City, Utah	Sept. 28
Oct. 17	Laredo, Tex. Adv. Oct. 5.	Oct. 5
Oct. 20	Wash., D. C. Adv. Oct. 5.	Oct. 5
Oct. 24	Albuquerque, N. M. Adv. Oct. 5.	Oct. 5
Oct. 30	Dover, N. J. Adv. Oct. 5.	Oct. 5

BRIDGES

Bids Close		See Eng. News-Record
Oct. 7	New Jersey Adv. Sept. 28 and Oct. 5.	Sept. 28
Oct. 9	White Plains, N. Y.	Sept. 21
Oct. 9	Colorado	Oct. 5
Oct. 10	Virginia	Sept. 28
Oct. 11	Laredo, Tex.	Oct. 5
Oct. 12	Leoni (R. D. Grass Lake), Mich.	Oct. 5
Oct. 14	Tennessee	Oct. 5
Oct. 16	Sacramento, Cal.	Sept. 14
Oct. 17	Rock Mart, Ga.	Oct. 5
Oct. 17	Crystal Falls, Mich.	Oct. 5
Oct. 19	Chesterfield, S. C.	Sept. 21
Oct. 30	Houston, Tex.	Oct. 5
Oct. 31	Sydney, Australia	Jan. 12
Jan. 23	Spokane, Wash.	Sept. 21
Sept. 1, 1923,	Sydney, New South Wales, Australia	Aug. 3

EXCAVATION, DRAINAGE IRRIGATION

Bids Close		See Eng. News-Record
Oct. 10	Red Oak, Ia.	Sept. 28
Oct. 10	Juneau, Wis.	Oct. 5
Oct. 23	Hershey, Neb.	Sept. 28
Oct. 27	Minneapolis, Minn.	Sept. 21

STREETS AND ROADS

Bids Close		See Eng. News-Record
Oct. 9	California	Sept. 21
Oct. 9	Laurel, Miss. Adv. Sept. 28 and Oct. 5.	Sept. 28
Oct. 9	West Park (Cleveland P. O.), O.	Sept. 28
Oct. 9	Orange, Tex.	Sept. 28
Oct. 9	Hammond, Ind.	Oct. 5
Oct. 9	Colorado	Oct. 5
Oct. 10	Georgetown, Tex.	Sept. 28
Oct. 10	Virginia	Sept. 28
Oct. 10	Manchester, Tenn.	Oct. 5
Oct. 10	Michigan	Sept. 28
Oct. 10	Ft. Myers, Fla.	Sept. 21
Oct. 10	New York, N. Y.	Oct. 5
Oct. 10	Bradley Beach, N. J. Adv. Oct. 5.	Oct. 5
Oct. 10	Sag Harbor, N. Y. Adv. Sept. 28 and Oct. 5.	Oct. 5
Oct. 10	Denver, Colo.	Oct. 5
Oct. 10	Phila., Pa.	Oct. 5
Oct. 11	Pittsburgh, Pa.	Sept. 28
Oct. 11	Santa Rosa, Calif.	Sept. 28
Oct. 11	Ridgeland, S. C.	Sept. 28
Oct. 11	San Benito, Tex.	Oct. 5
Oct. 11	Long Island City, N. Y.	Oct. 5
Oct. 12	Missouri	Oct. 5
Oct. 12	Princeton, Ind.	Oct. 5
Oct. 13	Iola, Kan.	Sept. 14
Oct. 13	Missouri	Oct. 5
Oct. 13	Lawrence, N. Y. Adv. Oct. 5	Oct. 5
Oct. 13	Fresno, Calif.	Oct. 5
Oct. 13	Ohio	Oct. 5
Oct. 13	Palo Pinto, Tex.	Oct. 5
Oct. 14	Tennessee	Sept. 28
Oct. 14	West Union, W. Va.	Oct. 5
Oct. 14	North Olmsted, O.	Oct. 5
Oct. 14	Vernon, Tex.	Oct. 5
Oct. 16	Coalmont, Tenn.	Sept. 28
Oct. 16	Dade City, Fla.	Sept. 28
Oct. 16	California	Sept. 28
Oct. 16	Syracuse, N. Y. Adv. Oct. 5	Oct. 5
Oct. 16	Perth Amboy, N. J. Adv. Oct. 5.	Oct. 5
Oct. 16	Houston, Tex.	Oct. 5
Oct. 17	Pennsylvania Adv. Sept. 28 and Oct. 5.	Sept. 28
Oct. 17	Ballinger, Tex.	Oct. 5
Oct. 17	Johnson City, Tex.	Oct. 5
Oct. 17	Louisiana	Oct. 5
Oct. 18	Wauchula, Fla. Adv. Oct. 5.	Oct. 5
Oct. 19	Charleston, S. C.	Sept. 28
Oct. 19	Crookston, Minn.	Oct. 5
Oct. 24	St. Louis, Mo.	Sept. 28
Oct. 24	St. Louis, Mo.	Oct. 5
Oct. 24	New York Adv. Oct 5.	Oct. 5
Oct. 31	New York, N. Y. Adv. Oct. 5.	Oct. 5
Jan. 7	Duluth, Minn.	Sept. 28

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Oct. 10	New York, N. Y.	Oct. 5
Oct. 16	Cleveland, O.	Sept. 28

BUILDINGS

Bids Close		See Eng. News-Record
Oct. 9	Johnstown, Pa.	Sept. 28
Oct. 9	Knoxville, Tenn.	Sept. 28
Oct. 9	Minneapolis, Minn.	Sept. 28
Oct. 9	New York, N. Y.	Oct. 5
Oct. 10	Detroit, Mich.	Sept. 28
Oct. 10	Selma, Calif.	Sept. 21
Oct. 10	Baltimore, Md.	Sept. 21
Oct. 10	Atlanta, Ga.	Oct. 5
Oct. 10	Detroit, Mich.	Oct. 5
Oct. 10	Butte, Mont.	Oct. 5
Oct. 11	Indianapolis, Ind.	Oct. 5
Oct. 12	Winona, Minn.	Oct. 5
Oct. 12	Wash., D. C.	Oct. 5
Oct. 14	Exeter, Calif.	Oct. 5
Oct. 16	Altoona, Pa. Adv. Sept. 21 to Oct. 5.	Sept. 21
Oct. 16	Port Huron, Mich.	Sept. 28
Oct. 16	Patchogue, N. Y.	Sept. 28
Oct. 16	Columbia, Mo.	Oct. 5
Oct. 17	Racine, Wis.	Sept. 21
Oct. 17	Holdredge, Neb.	Oct. 5
Oct. 17	Superior, Wis.	Oct. 5
Oct. 19	Athens, O.	Sept. 28
Oct. 19	Phoenix, Ariz.	Sept. 28
Oct. 20	Logan, O.	Sept. 28
Oct. 26	Evansville, Ind	Oct. 5
Oct. 31	Creedmoor (Jamaica P. O.), N. Y. Adv. Sept. 28 and Oct. 5.	Sept. 28
Nov. 1	Plant City, Fla.	Oct. 5
Nov. 1	Duluth, Minn.	Oct. 5
Nov. 15	Ocean City, N. J.	Oct. 5

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Oct. 9	Oil Storage House—Brooklyn, N. Y.	Sept. 28
Oct. 10	Towboat—Mobile, Ala. Adv. Sept. 7 to Oct. 5.	Sept. 14
Oct. 11	Hospital — Tupper Lake, N. Y. Adv. Sept. 28 and Oct. 5.	Sept. 21
Oct. 11	Remodeling — Mare Island, Calif.	Sept. 21
Oct. 11	Quarters, etc. — San Diego, Calif.	Sept. 21
Oct. 11	Earthwork, St. Louis, Mo. Adv. Sept. 28 and Oct. 5.	Sept. 28
Oct. 11	Sewers—Dover, N. J. Adv. Oct. 5.	Oct. 5
Oct. 13	Pump, etc.—Wash., D. C.	Sept. 28
Oct. 16	Earthwork—Yuma, Ariz.	Sept. 14
Oct. 16	Hospital—Chelsea, N. Y. Adv. Sept. 28 and Oct. 5.	Sept. 28
Oct. 16	Mechanical Equipment — Chelsea, N. Y.	Sept. 28
Oct. 17	Extension to Workroom — Fall River, Mass.	Oct. 5
Oct. 18	Quarters—Edgewood, Md.	Sept. 21
Oct. 18	Foundations, etc. — Phila., Pa.	Oct. 5
Oct. 18	Septic Tank, etc.—Virginia Beach, Va.	Oct. 5
Oct. 18	Roof—Portsmouth, N. H.	Oct. 5
Oct. 20	Dredge Tenders — Phila., Pa.	Sept. 28
Oct. 21	Dredging — San Diego, Calif.	Oct. 5
Oct. 23	Dredging — Providence, R. I. Adv. Sept. 28 and Oct. 5.	Sept. 28
Oct. 23	Dump Scows — Nashville, Tenn. Adv. Sept. 21 to Oct. 5.	Sept. 21
Oct. 24	Pier Removal, etc. — Chicago, Ill. Adv. Sept. 28 and Oct. 5.	Sept. 28
Oct. 25	Dredging — Puget Sound, Wash.	Oct. 5
Oct. 27	Extension to Workroom, etc. —Rochester, Minn. Adv. Oct. 5.	Oct. 5
Oct. 30	Superstructure — Buffalo, N. Y. Adv. Oct. 5	Oct. 5
Oct. 30	Dredging—Providence, R. I. Adv. Oct. 5.	Oct. 5
Oct. 30	Alterations, etc.—Richmond, Va.	Oct. 5
Oct. 31	Dredging—Honolulu, H. T.	Aug. 31

MISCELLANEOUS

Bids Close		See Eng. News-Record
Oct. 9	Coal Hopper Equipment, etc. —Northville, Mich.	Sept. 28
Oct. 9	Broken Trap Rock Stone, etc. —New York, N. Y.	Oct. 5
Oct. 10	Steam Turbine, etc.—New Orleans, La. Adv. Aug 17 to Oct. 5.	Aug. 17
Oct. 10	Wood Paving Blocks — New York, N. Y.	Oct. 5
Oct. 11	Rock Fill—San Francisco, Calif.	Oct. 5
Oct. 11	Signal System—Minneapolis, Minn.	Oct. 5
Oct. 11	Wharf and Bulkhead—Boston, Mass.	Oct. 5
Oct. 12	Road Roller—Dallas, Tex.	Oct 5
Oct. 13	Seawalls—Gloucester, Mass.	Oct. 5
Oct. 13	Spillway and River Protection —Herkimer, N. Y.	Oct. 5
Oct. 16	Tractors—San Jose, Calif.	Oct. 5
Oct. 18	Brick—Wash., D. C.	Sept. 28
Oct. 20	Bulkhead, etc. — Lawrence Harbor (Cliffwood P. O.), N. J. Adv. Oct. 5.	Oct. 5
Oct. 31	Steam Pumps — Atlanta, Ga. Adv. Oct. 5	Oct. 5
Nov. 4	Transformers, etc. — Melbourne, Australia	Aug. 17
Dec. 18	Coal Handling Plant — Melbourne, Victoria, Australia Adv. Sept. 21 to Oct. 5.	Sept. 21

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Dundee—Defeated $125,000 bond issue for water system. Noted Sept. 21.

N. Y., New York—Bd. Purch., Municipal Bldg., rejected bids opened bids Sept. 19, furnishing, delivering, unloading, stacking and storing high pressure c.i. pipe and special castings, to Dept. Water Supply, Gas & Electricity. Will readvertise. Noted Sept. 14.

W. Va., Wheeling—Rejected bids opened Aug. 18, 17,000 ft. 30 in. steel force mains, 3,000 ft. 36 in. steel reservoir mains, five 1,000,000 gal. steel storage tanks, constructing intake line, 48 in., intake pier and

Waterworks (Continued)

traveling screens. J. N. Chester Engineers, Union Bank Bldg., Pittsburgh, Pa., engrs. Noted Aug. 17.

Ind., Upland—Upland Water Co. plans new waterworks plans. $45,000. Receiving bids on electrical pumping machinery and other equipment. Engineer not announced.

Ia., Albia—Plans filtration system. $25,000. C. C. Atchison, clk. Engineer not announced.

Ia., Webster City—Plans election in about six weeks to vote on $25,000 bonds for water tower. G. J. Long, city engr.

Mo., Bunceton—Plans pumping plant and distribution system. $35,000.

Mo. Pilot Grove—Plans election to vote on $40,000 bonds for complete water distribution system, pumps, etc. Engineer not selected.

Mo., St. Charles—Plans election to vote on $25,000 bonds for pumps and other waterworks machinery, $16,000 for meters, $18,000 c.i. mains, $3,500 meter connections, etc., $1,500 cleaning mains and $2,000 flow meters. P. W. Loonam, city engr.

Tex., Alvarado—Voted $30,000 bond issue for waterworks improvements also 19,000 for street improvements. Address Mayor.

Tex., Corsicana — Attorney-Generals Dept., Austin, approved $50,000 bond issue for extensive waterworks improvements. J. W. Harrison, city engr.

Ont., Grimsbye—Having plans prepared laying mains in 4 streets. $28,000. Prices wanted on 6 in. pipe. W. T. Randall, city engr.

BIDS DESIRED

Fla., Tampa—Oct. 10, by Temple Terraces, Inc., 801 Citrus Exch. Bldg., one 250 gal. per minute main supply pump, to operate with 5 to 15 ft. suction, with a discharge of 3,200 lin.ft. of 6 in. pipe, etc., alternate bid on 500 gal. per minute pump with direct connected motor; one 500 gal. per minute booster fire pump, to operate on a 6 in. discharge pipe at 70 lb. pressure, alternative bid for installation of automatic control device for starting and stopping specified pump by means of pressure system, etc. V. W. Helm, secy.-treas.

Fla., Tampa—Temple Terraces, Inc., 801 Citrus Exch. Bldg., receiving bids 8,200 ft. 6 in. c.i. pipe, 6,600 4 in. and 600 ft. 3 in. c.i. or galvanized pipe, 8,200 ft. 2 in., 7,400 ft. 1½ in., 5,000 ft. 1 in. and 1,000 ft. ¾ in. galvanized pipe. V W. Helm, secy.-treas.

Miss., Bay Saint Louis—Nov. 1, by Mayor and City Council, waterworks system. $90,000. Swanson-McGraw Inc., United Fruit Bldg., New Orleans, consult. engrs.

Ky., Newport—Nov. 14, by Bd. Comrs., steam and electric driven deep well pumping machines. G. Hornung, Wool-Sack Bldg., engr.; adv. this issue.

Mich., Ecorse—Oct. 10, by E. J. Dufour, clk., watermains and appurtenances, 2,200 ft. of 6 in. c.i. pipe, 2,485 lb. special castings, sixteen 6 in. gate valves, fifteen 6 in. hydrants, etc. M. L. Brown & Son, 403 Capitol Theatre Bldg., Detroit, engr. Noted Aug. 3.

Wis., Ft. Atkinson—Oct. 11, furnishing and laying 1,600 ft. 6 in. water pipe, 4,600 lb. special casings, 3,600 ft. 6 in. pipe, one brick pumping station, one 300 gal. motor driven centrifugal pump, one 1,000 gal. motor and engine driven pump, one remote contral starter for 1,000 g.p.m. pump, one belt driven air compressor with accessories. Separate bid on each item. $25,000. W. G. Kirchoffer, Dean Bldg., Madison, engr.

N. M., Albuquerque—Oct. 24 at office I. V. Malone, clk., for rein.-con. reservoir. F. Kimball, city engr.; adv. this issue. Noted May 4.

BIDS RECEIVED

O., Cleveland—Cuyahoga Co. opened bids Aug. 23, constructing Impvt. 16 of Co. Water Dist. 1, 18,460 ft. 6-10 in. c.i. pipe, from T. P. Egan, Caxton Bldg., $75,853; Joseph Co., 877 Orange Ave., $85,949; Langahan Constr. Co., Marshall Bldg., $88,302. Noted Aug. 17.

O., Columbus—Franklin Co. opened bids Sept. 23, 18,740 ft. 6-12 in. c.i. mains in Sewer Dist. Clinton 2, from Pitt Constr. Co., Inc., Fulton Bldg., Pittsburgh, $33,699; H. E. Miller Constr. Co., 147 South Sandusky St., $34,405; Grant-Boulton Co. 8 East Town St., $36,981. Noted Sept. 14.

CONTRACTS AWARDED

Minn., East Grand Forks—For 1 raw water and 1 clear water motor-driven centrifugal pumps, to R. B. Whitacre & Co., 205 South Robert St., St. Paul, $5,290. Noted Sept. 7.

Sewers

PROPOSED WORK

N. Y., Brooklyn—Oct. 11, by E. Riegelmann, boro pres., Boro Hall, sewers in Gravesend Ave. between Kings Highway and Ave. T, Ave. T between Gravesend Ave. and West 5th St., West 5th St. between Ave. T and Ave. U.

Pa., Scranton — Making plans sanitary sewerage system in Sect. L. 17th Sewer Dist., 12th Ward. $52,763. W. P. Huester, clk.

Pa., Williamsport—See "Streets and Roads."

O., Cleveland—S. H. Kleinman Realty Co. soon takes bids storm and sanitary sewers in Elmwood Park allotment. $40,000. Lander Eng. Co., Blackstone Bldg., engrs.

O., Euclid—Plans sewage disposal plant. $250,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Ill., Astoria—Making plans 4 mi. sanitary sewerage system, incl disposal plant, 60,000 gal. settling tank, centrifugal pump, 18,480 ft. of 8 in. and 2,640 ft. 6 in. vitr. clay pipe, 17,000 cu.yd. excav., etc. $40,000. W. A. Fuller Co., 1917 Railway Exch., St. Louis, Mo., engrs.

Minn., Amboy—Having plans prepared sanitary sewerage system and disposal plant. $25,000. W. Mead, clk. Druar & Milinowski, 500 Globe Bldg., St. Paul, engrs.

Wash., Kelso—Long-Bell Lumber Co., 14th and Kenman St., Kansas City, Mo., plan storm and sanitary sewerage system, 2 mi. of 48 in. c.i. pipe. Private plans.

BIDS DESIRED

N. Y., Sag Harbor — See "Streets and Roads."

N. J., Dover—Oct. 23, by Bd. Aldermen and Bd. Sewerage, Municipal Bldg., North Sussex St., sewers and appurtenances. C. Potts, 30 Church St., New York City, consult. engr.; adv. this issue.

Pa., Altoona—Oct. 10, by S. B. Taylor, city comr., 14,000 lin.ft. terra cotta and rein.-con. pipe, etc. H. J. Baum, City Hall, city engr.

D. C., Wash.—Oct. 20, by Dist. Comrs., 509 Dist Bldg., for 890 ft. sewer; adv. this issue.

O., Cleveland—0ct 12, sewers in Bessemer Ave. from East 79th to 88th Sts., Dugway Brook (east branch) and Lake Shore Blvd. from pumping plant to discharge sewer. To exceed $25,000. R. Hoffman, City Hall, engr.

Wis., Ellsworth—Oct. 16, by Village Bd. sewerage system and appurtenances. Druar & Milinowski, 500 Globe Bldg., St. Paul, Minn., consult. engrs.; adv. this issue.

Tex., Laredo—Oct. 17, by L. Villegas, mayor, storm sewers and appurtenances. S. F. Crecelius, Puig Bldg., civil engr.; adv. this issue.

N. M., Albuquerque—Oct. 24, at office I. V. Malone, clk., sewage disposal plant. F. Kimball, city engr.; adv .this issue. Noted May 4.

BIDS RECEIVED

N. Y., New York—H. Bruckner, pres. Bronx Boro, opened bids Sept. 26, sewer in Webster Ave., from Spadaro Contg. Co., 827 East 217th St., New York City, $518,984, Fordham Contg. Co., $589,943, J. F. Cogan Co., 233 Bway., $703,124; paving roadway of West 190th St., sheet asphalt, from C. D. Beckwith, 2875 Bway., $7,979, Asphalt Constr. Co., 208 Bway., $8,098, P. J. Kearns Contg. Co., 2306 Creston Ave., $8,950. Noted Sept. 21 under "Streets and Roads."

O., Columbus—Franklin Co. vitr. sewer in Sewer Dist. Clinton 2, Contr. 13, from Gangl Constr. Co., 737 2nd Natl. Bldg., Akron, $55,929, H. E. Miller Constr. Co., 147 South Sandusky St., $62,899, Grant-Boulton Co., 8 East Town St., $69,463; Sewer Dist. Clinton 2, Contr. 12, from C. F. Smith & Son, 54 Davies St., Dayton, $12,163, D. A. Sant, Cincinnati (street address not available), $12,286, W. E. Neilson, 1616 Summit St. $12,350; vitr. or concrete sewer in Sewer Dist. Marion 1, from W. Neilson, 1616 Summit St., $18,7[illegible], D. A. Sant, Cincinnati (street address not available), $20,406, I. O. Jones, 707 Grove St., $22,813. Noted Sept. 14.

Mich., Detroit—Constructing Bedford Rd. Sewer, (1) Sect. 1, in Bedford Rd. from Fox Creek to 254 ft. south of Waveney, 3,129 ft. 8 ft. 9 in. and 2,371 ft. 8 ft. 6 in. cylinder, 1,642 ft. 15 in., 1,384 ft. 12 in. and 150 ft 24 in. crock, etc, (2) Sect. 2 in Bedford Rd. from 254 ft. south of Waveney to Harper Ave., 2,300 ft. 8½ ft., 2,000 ft. 7½ ft. and 1,169 ft. 5 ft. 9 in. cylinder, etc., from T. A. Gillespie Co., 50 Church St., New York City, (1) $164,990, (2) $160,000; A. Tobin, 449 West Columbia St., (1) $172,985, (2) $128,360; Walbridge Aldinger Co., 2356 Penobscot Bldg., (1) $178,161, (2) $160,206. Noted Sept. 28.

Mich., Ferndale—Opened bids sewers in Albany, Stafford, Allen, Planavon, Lewiston, Payton, Stafford and Bermuda Aves., vitr. crock, 2 ring brick, from T. D. Nolan, 22 Highland Ave., Highland Park, $58,997, Hammen & Co., 4612 Woodward Ave., Detroit, $71,343, Oakwood Constr. Co. 165 Fort Blvd., Detroit, $73,935. Noted Sept. 21.

Ill., Chicago—Bd. Local Impvts., 207 City Hall, received low bid sewers in various streets, from White Paving Co., 17 North La Salle St., $2,350,000. Noted Sept. 21.

Wis., Milwaukee—Metropolitan Sewerage Com. of Milwaukee Co. intercepting sewer from Port Washington Rd. to 32nd and Hampton Rd. in North Milwaukee, 10,590 lin.ft. 60 and 66 in. concrete sewer, 1,326 lin.ft. 24 in. terra cotta pipe sewer, from Midwest Constr. Co., 253 Walker St., $367,318, G. E. Zimmerman and H. Hohensee, 3402 Grand Ave., $385,840; G. E. Kahn, 1[illegible]4 Grand Ave., $394,439. Engrs. est. $400,000.

Calif., San Anselmo—Constructing sewage disposal plant, incl. sewage treatment tanks, pump house, chlorinator house, sludge beds and outfall sewer line, from Rocca & Calletti, 609 C St., San Rafael, $34,980; G. H. Chick, Napa, $42,450; H. C. Vensano, 58 Sutter St. San Francisco, $51,200.

CONTRACTS AWARDED

N. H., Manchester—E. R. Conant, surv. Dept. Highways, reinforced monolithic culvert outfall sewer, with all connections, to T. Stuart & Son Co., 222 Pearl St., Newton, Mass., $189,000. Noted Sept. 7.

O., Marion—E. A. Schultz, dir. Pub. Serv., sewage plant, to A. Bentley & Son Co., 201-31 Belmont Ave., Toledo, $435,000; sewerage system, to Kohlbarger & Hoyles, Marion, $76,316. Noted Sept. 21.

O., West Park (Cleveland P. O.)—W. Dahm, dir. Pub. Serv., 5,200 ft. 8-24 in. vitr. sewers in Munn Rd., to Randall & Cooper, Lorain, $24,661. Noted Sept. 28.

Kan., Wichita — Excavating and laying sewer pipe in Dist. 15, College Hill, 31,125 ft. 8-72 in. segmental block, to A. A. Dobson, 809 1st Natl. Bldg., Lincoln, Neb., $190,158. Noted Aug. 31.

Tex., Ft. Worth—Sewage disposal plant, Imhoff tanks, filters, etc., to McKinzie Constr. Co., 302 West Mulberry St., San Antonio. $525,090. Noted Sept. 7. Engrs. est. $600,000.

Colo., Denver — For Washington Park Storm Sewer Dist. 1, 69-78 in. and segment block, 27-66 in. brick, and 10-24 in. concrete pipe, to J. E. Young, 1267 South Race St., $334,107. Engrs. est. $481,810.

Waste Disposal

PROPOSED WORK

O., Euclid—Plans 1 story, brick, steel and concrete incinerator plant. $150,000. F. A Pease Eng Co., Marshall Bldg., Cleveland, engrs.

BIDS DESIRED

Mo., St. Louis—See "Miscellaneous."

Bridges

PROPOSED WORK

Alabama—State Hy. Dept., Montgomery, soon receives bids rein.-con. girder type bridges on Montgomery-Birmingham Highway, Shelby Co. $100,000. W. S. Keller, state highway engr.

Wis., Milwaukee—Had plans prepared and soon takes bids widening rein. [illegible] viaduct, on Folsom Pl., from 36 ft. to 90 ft. on north side. $150,000. M. C. Cutler, City Hall, engr.

Bridges **(Continued)**

Idaho—Bureau Highways, Boise, soon receives bids four 90 ft. steel bridges, between Wallace and Kellogg, Shoshone Co. D. P. Olson, dir. highways.

Calif., Bend—Tehama Co., Red Bluff, having preliminary surveys made steel bridge over Sacramento River, three 133 ft. and two 95 ft. spans, two 280 ft. concrete trestle approaches. W. F. Luning, co. surv.

BIDS DESIRED

N. Y., Jamestown—Erie R.R., 50 Church St., New York, taking bids 4 track steel girder bridge with concrete encasement, Main St., the outside tracks to be supported on concrete piers and slabs, the space between these tracks to be filled with earth to support 2 tracks between, incl. sidewalks, 3 stores west of Main St. under bridge and 2 minor concrete trestles both east and west of bridge, etc. To exceed $900,000. C. H. Splitsone, ch. engr. Noted June 1.

Ga., Rock Mart—Oct. 17, by State Hy. Dept., Atlanta, rein.-con. bridge on Cedartown-Dallas Highway, Sect. B, Federal Aid Project 218, Polk Co., 103 cu.yd. dry excav., 218.8 cu.yd. concrete, 27,282 lb. reinforcing, 53 cu.yd. chert surfacing. State to furnish all cement f.o.b. Rock Mart. W. R. Neel, state highway engr.

Mich., Crystal Falls—Oct. 17, by State Hy. Dept., Lansing, building Bridge 360,205, with 2 rein.-con. arches, 240 ft. long, 24 ft. roadway, two 6 ft. walks. F. F. Rogers, state highway comr. Noted Sept. 28.

Mich., Leoni (R. D. Grass Lake)—Oct. 12, by State Highway Dept., Lansing, Bridge 3,807,001, 118 ft., two plate girder spans, for grade separation structure over Michigan Central R.R. tracks, here. Bids are for furnishing and fabricating. Erection will be done by Michigan Central R.R., Passenger Terminal Station, Detroit. D. F. Deimling, ch. engr.

Tex., Houston—Oct. 30, at office of City Secretary, constructing Cleveland Park Bridge, 330 ft. rein.-con. O. F. Holcombe, mayor.

Tex., Laredo—Oct. 11, by W. E. Simpson, engr., 414 Natl. Bank of Commerce, San Antonio, addition to present bridge on Mexican end, 50 ft. girder span with abutment 43 ft. high, for Laredo Bridge Co. $40,000.

Colorado—Oct. 9, by State Hy. Dept., Denver, 83 ft. concrete girder bridge, 18 ft., gravel approaches, over St. Charles River about 10 mi. south of Pueblo on Rye Rd. to Walsenburg, Federal Aid Project 173, Pueblo Co., $20,786; 100 ft. steel truss bridge over Blue River beginning about 11 mi. north of Dillon and extending toward Kremmuling, Federal Aid Project 190, Summit Co., $39,045; 18 ft. concrete bridge 1 mi. west of Bergen Park in Jefferson Co., on State Highway 21, State Project 655, Jefferson Co., $2,912. L. D. Blauvelt, State Office Bldg., Denver, engr.

Colorado—See "Streets and Roads."

BIDS RECEIVED

Alabama—State Hy. Dept., Montgomery, rein.-con. bridges, girder type, on Huntsville-Guntersville Rd., Madison Co., from Stanley & Singer, Lafayette, $54,618; W. C. McCoy, Lafayette, $55,077; Mitchell Bros., Onconta, $58,194. Noted Aug. 31.

Ia., Fairfield—Jefferson Co., 73 box culverts and extensions, 40 ft. concrete deck girder, 40 ft. and 24 ft. I-beam bridges, 2,621 cu.yd. rein.-con., 174,235 lb. bars, 36,000 lb. structural steel, etc., from Lamoreaux Bros., 805 Brandeis Theatre Bldg., Omaha, Neb., $59,000; Ottumwa Supply & Constr. Co., Ottumwa, $60,286.

CONTRACTS AWARDED

Mass., Lowell—Bd. Pub. Serv., City Hall, rebuilding Lundberg St Bridge over Boston & Maine R.R., 120 ft., 45 ft. wide, to McClintic-Marshall Co., Pottstown, Pa., $45,764. Noted Sept. 28.

Del., Wilmington—New Castle Co. repairing Fennimores Bridge over Appoquinimink Creek, one 122 ft. span, to Delaware Constr. Co., Wilmington, (street address not available), $21,873. Noted Sept. 28.

S. C., Bennettsville—Bd. Comrs. Marlboro Co., 4 bridges to General Road & Drainage Constr. Co., Liberty Bank Bldg., Columbia, $23,520; 6 culverts to A. W. Obenshain, Bennettsville, $12,105. Noted Aug. 1.

Alabama—State Hy. Dept., Montgomery, 518 lin.ft. concrete bridges on Camden Greenville Rd., Wilcox Co., to Fontaine, Lamb & McLemore, Hattisburg, Miss., $42,143. Noted Sept. 7.

Ia., Le Mars—Plymouth Co. to C. L. Schoube & Co., 808 19th St., Des Moines, 1 high truss and two I beam spans, $16,660, (concrete figures $22.48 per cu.yd.; to W. F. Hentjes, Le Mars, 45 box culverts and extensions, $14,248 (concrete $15.28 per cu. yd.).

Kan., Wichita—City and Wichita Terminal R.R. Co., Exch. Bldg., repairing Kellog St. viaduct, 2 large cement guns will be used to spread concrete over surface, present pavement to be removed and layer of heavy waterproofing will be laid between concrete and brick, solid concrete panel to be poured in place of present lattice work under side rails, to A. A. Dobson Co., 809 1st Natl. Bldg., Lincoln, Neb. Engrs. est. $40,000.

Utah—State Rd. Comn., Salt Lake City, constructing concrete bridge in Ogden Canyon, Weber Co., 778 cu.yd. concrete, 79,757 lb. reinforcing, 1,630 cu.yd. earth approach and fill, to Kroft & Bundy, Col. Hudson Bldg., Ogden, $29,036. Noted Jan. 5.

Wash., Walla Walla—See "Streets and Roads."

California—State Hy. Dept., Sacramento, rein.-con. bridge and railroad abutment over Susan River, Lassen Co., to Rocca & Calletti, San Rafael, $25,225. Noted Sept. 21.

Calif., Stockton—Supervs. San Joaquin Co., 9 rein.-con. bridges on Jack Tone Rd., to L. W. Larson, Route 1, Box 85, Turlock, $15,292; 2 rein.-con. bridges on McKinley Ave., and West Lane bridge, 280 ft. concrete girder, to Davison & Nicolsen, 180 Jessie St., San Francisco, $8,343 and $16,680 respectively. Noted Aug. 24.

Railways

PROPOSED WORK

Pennsylvania—Pennsylvania R.R., Broad St. Sta., Phila., plans electrifying 4 track system from Altoona to Johnstown, also constructing power house. $10,000,000. A. C. Shand, Broad St. Sta., Phila., ch. engr.

Excavation, Drainage, Irrigation

PROPOSED WORK

Miss., Yazoo City—Honey Island D. D., Holmes and Humphreys Counties, had preliminary plans prepared for levees to protect 100,000 acres of land from Yazoo River and hill streams. Morgan Eng. Co., Goodwyn Institute, Memphis, Tenn., and L. Fontaine, Yazoo City, engrs.

Ia., Nevada—Story Co. rejected bids constructing D. D. 3, in Story and Marshall Counties. Will revise plans and readvertise. W. A. Olson, Nevada, engr. Noted Sept. 14.

Kan., Kansas City—Fairfax D. D., c/o C. D. Grant, of Armour & Co., Packers State Line, plans drainage system from Jersey Creek north to city limits and from Quindaro water plants east to Missouri River, will include dike along Missouri River.

Mo., Kirksville—Brashear D.D. takes bids within 30-60 days draining 4,000 acres. $50,000. C. E. Jacoby, 527 Shukert Bldg., Kansas City, engrs.

Mo., Macon—Macon Co. Levee Dist. 1 preparing plans draining 4,000 acres. $80,000. C A Jacoby, 527 Shukert Bldg, Kansas City, engr.

Wash., Addy—Drainage Dist. 4, Stevens Co., opens bids about Nov. 22, deepening, widening and straightening 12 mi. Colville River from Blue Creek to Arden, 271,830 cu.yd floating dredgework. $47,162. J. T. McCoy, Massachusetts Institute of Technology, Boston, engr.

Calif., Blythe—Palo Verde Joint Levee Dist., had plans prepared for following work: Shoo-fly at Raabs Bend, 17,600 ft. long, 447,950 cu.yd. earth work, opening Ehrenburg Channel, 247,220 cu.yd. earthwork, Hauser Cut-off, 195,700 cu.yd. earthwork, Cased Cut-off, 87,355 cu.yd. earthwork; river equipment incl. patrol boat, snag boat, 1 tender, 2 scows for pile drivers, 1 pile driver, hoist, etc., $40,700. Total cost $380,000. Bond election will be held to finance project. H. C. Neuffer, ch. engr. C. N. Perry and F. C. Finkle, consult. engrs.

BIDS DESIRED

Wis., Juneau—Oct. 10, by Dodge Co. F D. B., c/o L. Keely, secy., Mayville, 7,800 ft. 10-14 in. tile drain, one concrete bulkhead, equal amount of open ditch work. $25,000. L. M. Schindler, 717 Clark St. Appleton, engr.

BIDS RECEIVED

Calif., Live Oak—Recl. Dist. 2056, 201,769 lin.ft. canals from 3 to 6 ft. wide, 5 ft. deep, constructed through soft earth with some hardpan, from Ross Constr. Co., Forum Bldg., Sacramento, $145,000. Noted Sept. 7.

Calif., Merced—Merced Irrigation Dist., constructing Fairfield Canal system, 7.4 mi. laterals and 8.4 mi. canals, (1) 81,56 cu.yd. excav. (2) $22,433 cu.yd. hardpan, etc., sta. from Byrne & Yost, Sacramento, (street address not available), (1) $0.225 (2) $0.34, total $25,980; S. D. Miller, Manteca, (1) $0.19 (2) $0.40 total $24,771; Hard Bros., Ripon, (1) $0.255 (2) $0.255, total $27,120. Noted Sept. 14.

CONTRACTS AWARDED

Conn., Norwalk—C. L. Barton, mayor, dredging about 250,000 cu.yd. in Norwalk Harbor, to P. Sanford Ross, Inc., 277 Washington St., Jersey City, N. J., $0.205 per cu.yd. Noted Aug. 10.

La., New Orleans—To W. E. Gerin, 1312 Joseph St., constructing Bonnet Carre Point levee, 38,000 cu.yds. at $0.28 per cu. yd., Waterford levee 40,000 cu.yds. $0.30; to St. Charles Constr. Co., Paradis, Pennick and Ford levee, 45,000 cu.yd. at $0.2592.

O., Wooster—C. F. Schopf, secy. Joint Bd. Comrs. Wayne and Holmes Counties, Court House, draining and dredging Killbuck Creek, to Northern Constr. Co., Elkhart, Ind., $191,985. Noted Aug. 17.

Ia., Garner—Hancock Co., for D. D. 120-7 to E. L. Hatten, Britt, 68,000 cu.yd. excav. $0.17 per cu.yd.; Cement Products Co., Mason City, 57,874 lin.ft. 6-36 in. tile $16,124; C. Hampe, Britt, tile labor $11,900. Noted Aug. 24.

Minn., St. James—Watonwan Co., Judicial Ditch 35, Sect. A, 141,000 lin.ft. 8-40 in. tile, 9,100 lin.ft. open ditch, 1 concrete double headwall, 144 lin.ft. 10-20 in. corrugated iron culvert pipe, 55 catch basins, to Plymouth Clay Products Co., Ft. Dodge, Ia. (for material) $81,700, R. C. Richardson, Anoka (for labor) $55,243; Sect. B, 17,800 lin.ft. 8-20 in. tile, 5 catchbasins, surface inlet grates, 1 standard concrete headwall, to O M. Anderson, Windom, (labor and material) $7,997. Noted Sept. 7.

Mo., Ravenwood—F. H. Casteel, secy. Jackson Twp. D.D, at Platte Valley Bank, to M. A. De Long & Co., Des Moines, Ia., (street address not available), for main ditch, 456,000 cu.yd. at $0.0925 per cu.yd., 8 laterals, 61,700 yd. $0.0925, loose rock excav. $1.50, solid rock excav. $3. Engrs. est. $100,000. Noted Sept. 14.

Calif., Biggs—Drainage Dist. 200 of Butte Co., constructing drainage system, to G. Pollock Co., Forum Bldg., Sacramento, $57,436. Noted Aug. 17.

Streets and Roads

PROPOSED WORK

Massachusetts—State Hy. Dept., Boston, plans paving 5,700 ft. road, 18 ft., from Ware to Enfield, Hampden Co., 34,200 sq. yd. concrete. $75,000. State Bd. Pub. Wks., State House, Boston, engrs.

N. Y., Bath—Steuben Co. plans paving 4 mi. Hornell-Loon Lake Rd. $155,000, 5.25 mi. Hammondsport-Branchport Rd. $308,209, 4.5 mi Lawrenceville Rd. $231,500, asphalt, concrete or brick. Engineer not announced.

Pa., Erie—Making plans asphalt paving 28th St. between Holland and Parade Sts. $25,000. F. G. Lynch, city engr.

Pa., Wilkes-Barre—Plans asphalt pavements on Bowman St. $30,422. A. Finch, city engr.

Pa., Williamsport—Plans $1,000,000 bond issue for construction of pavements and streets, new sewers, and additions to permanent lighting system.

Fla., Moore Haven—Glades Co. to vote on $40,000 bonds, Oct. 10, constructing 11 mi. Elderberry Rd. along Indian Canal to High-

Streets and Roads (Continued)

land Co. line; $34,000 bonds for 9 mi. road from Lakeport north along Lake Okeechobee, both marl roads, from local material. T. E. Fredericks, Moore Haven, engr.

Alabama—State Hy. Dept., Montgomery, having plans prepared grading and gravel surfacing 10.032 mi. Evergreen-Belleville Rd., Conecuh Co., 24 ft. grading, 18 ft. surfacing, $140,000; grading and surfacing with gravel or chert 19.96 mi. Marion, Centerville, Woodstock Rd. between Centerville and Woodstock, Bible Co., 24 ft. grading, 18 ft. surfacing, $150,000. W. S. Keller, state highway engr.

Alabama—State Hy. Dept., Montgomery, soon receives bids grading and surfacing with 2 in. warrenite bitulithic, 2 in. asphaltic concrete or 3 in. sheet asphalt, on concrete base, 23.09 mi. Montgomery-Birmingham Highway, Shelby Co. $1,000,000. W. S. Keller, state highway engr.

Tennessee—State Hy. Dept., Nashville, takes bids about Oct. 10, grading, bridging and surfacing, with hand placed base course 10.02 mi. road in Cocke Co. from point near Newport to North Carolina State Line, 16 ft., Federal Aid Project 23. $350,000. D. Q. McComb, Nashville, ch. engr.

Tennessee — State Hy. Dept. Nashville, soon receives bids grading, surfacing, etc., 6 mi. road from Avondale to Gallatin, 18 ft. Sect. A, Federal Aid Project 63, hand placed base course, probably rock asphalt surface. $150,000. D. Q. McComb, ch. engr.

Tenn., Knoxville — Knox Co. making plans grading and hard surfacing 14 mi. road from city limits to Grainger Co. line, 30 ft. $400,000. J. C. Thomas, Knoxville, engr.

Tenn., Knoxville—Knox Co. plans grading and hard surfacing 8 mi. road from city limits to Anderson Co. line, 30 ft. $225,000. J. C. Thomas, Knoxville, engr.

O., Cuyahoga Falls—Plans election to vote on $75,000 bonds improving and paving streets.

Ind., Noblesville—Comrs. Hamilton Co. rejected bids opened Sept. 16, gravel surfacing 3 mi. Henry Brehm Rd., 18 ft. $26,000. Noted Sept. 14.

Ill., Rockford—Winnebago Co. making plans grading and concrete paving 8 mi. road, 18 ft. A. R. Carter, co. supt. highways.

Ia., Des Moines—Soon receives bids curbing and paving South West 9th St., sheet asphalt, asphaltic concrete, bitulithic, No. 1 vitr. brick or portland cement. O. E. McGlothen, clk.

Ia., Marion—Linn Co. plans paving 1 mi. Lincoln Highway through Lisbon, rein.-con., asphaltic concrete, vibrolithic or brick. $30,000. H. R. Green, Cedar Rapids Savings Bank Bldg., Cedar Rapids, engr.

Ia., Williamsburg — Soon receives bids paving 30 blocks, cement, asphaltic concrete, vibrolithic and brick block. Currie Eng. Co., Webster City, engrs.

Minn., Benson—Plans paving 9 blocks, various types to be considered. $30,000. O. H. Strand, clk. Engineer not announced.

Minn., Minneapolis—Hennepin Co. plans concrete paving 5.5 mi. 6th Ave. N., from city limits to Schiebs corner, $160,000; 4 mi. 19th Ave. N., beyond city limits, $125,000. Both 20 ft. E. E. Terrell, surv.

Minn., Red Lake Falls—Red Lake Co. plans relocating 6.5 mi. Minnesota Trunk Highway 32, between Red Lake Falls and St. Hillaire, 24 ft., work includes grading and culverts. $90,000. H. E. Palmer, co. engr.

Minn., St. Paul—Plans paving Lincoln Ave. from Milton St. to Chicago, Milwaukee & St. Paul R.R. tracks, Goodrich and Fairmount Aves. from Milton St. to Lexington Ave., Milton, Chatsworth and Oxford Sts. from Summit to Osceola Aves., total length 26 blocks. $100,000. O. Claussen, city engr.

Tex., Alvarado—See "Waterworks."

Tex., Beaumont—Jefferson Co. making plans grading and concreting surfacing 7.4 mi. State Highway 40, 16 ft., 25,000 cu.yd. earth excav., 70,464 sq.yd. concrete pavement, 347 cu.yd. concrete in drainage structures. $250,000. A. C. Love, co. engr.

Tex., Corsicana—Navarro Co. making plans grading 7.71 mi. State Highway 31, through Rd. Dist. 14, 16 ft., incl., crushing 16,007 cu.yd. stone, hauling and placing same, hauling 213,000 cu.yd. additional ½ mi. $80,000. McClinton & Purnell, engrs.

Tex., Freeport—Attorney Generals Dept., Austin, approved $25,500 bond issue for street improvements. Address Mayor.

Tex., Palo Pinto—Palo Pinto Co. making plans grading and crushed rock surfacing 6 mi. Bankhead Highway from Metcalf Gap to ½ mi. east of Eagle Creek, 18 ft., 850 cu.yd. concrete, 21,120 cu.yd. crushed stone surfacing, 75,000 lb. reinforcing. $191,570. G. W. Courter, co. engr.

Tex., Paris—Lamar Co. making plans surfacing with 6 in. concrete pavement 2.88 mi. State Highway 5 west of here, 16 ft., 27,111 sq.yd. concrete, 69,404 lb. wire mesh reinforcing, $76,835; 1.65 mi. State Highway 5 east of here, 16 ft., 15,488 sq.yd. concrete, $41,058. W. M. Fooshee, co. engr.

Tex., Pearsall—Frio Co. making plans grading and gravel surfacing 17.2 mi. Meridian Highway from here north to Medina Co. line, 18 ft., 102,736 cu.yd. roadway and 3,700 cu.yd. rock excav., 180,558 sq.yd. 1½ in. bituminous macadam topping, 1,480 cu.yd. concrete, 76,470 lb. reinforcing, $283,279; 17.81 mi. Meridian Highway between here and La Salle Co. line, 18 ft., 96,060 cu.yd. roadway, 1,188 cu.yd. concrete, 183,494 sq.yd. 1½ in. bituminous macadam topping, 5,000 sq.yd. concrete pavement, 74,192 lb. reinforcing, $316,415. J. D. Metcalfe, co. engr.

Tex., Pittsburg—Camp Co. making plans grading and surfacing with macadam base and bituminous topping 12.06 mi. Jefferson Highway, State Highway 11, 18 ft., 81,000 cu.yd. roadway and borrow excav., 69,273 sq.yd. bituminous macadam, 1,200 cu.yd. concrete, 15,877 cu.yd. crushed rock, 80,000 lb. reinforcing. $135,525. C. C. Chappell, co. engr.

Tex., Sinton—San Patricio Co. making plans surfacing with bituminous topping 17.94 mi. San Antonio-Corpus Christi Rd. from Nueces Co. line to Rd. Dist. 5, 16 ft., 168,346 sq.yd. 1⅜ in. bituminous macadam, 2,706 cu.yd. limestone screens. A. C. Pancoast, Beeville, co. engr.

Wash., Seattle—Rejected bids opened Sept. 15 paving Taylor Ave., et al., also changing street car tracks. Engrs. est. $37,295. Noted Sept. 28.

California—State Hy. Comn., Sacramento, plans grading and gravel surfacing 11.9 mi. highway from Willows to 3 mi. south of Glenn, Glenn Co. $95,000. A. B. Fletcher, state highway engr.

California—State Hy. Comn., Sacramento, plans grading 4.3 mi. highway 3½ mi. southeast from Hueneme Rd. and Big Sycamore Creek, Ventura Co. A. B. Fletcher, state highway engr.

Calif., Bakersfield—Had plans prepared improving Oak St., 172,800 sq.ft. grading, 129,600 sq.ft. 1½ in. warrenite bitulithic on 4 in. asphaltic concrete, 14,400 lin.ft. headers. W. D. Clark, city engr. Noted Sept. 14.

Calif., Oakland—Had plans prepared improving portion of 101st Ave., 67,591 sq.ft. grading, 425 lin.ft. concrete curb, 2,261 sq.ft. concrete gutter, 61,071 sq.ft. oil macadam pavement, 2,130 sq.ft. cement walks; portion of Stanley Ave., 60,770 sq.ft. grading, 1,649 lin.ft. concrete curb, 3,366 sq.ft. concrete gutter, 47,685 sq.ft. oil macadam. W. W. Harmon, city engr.

Calif., Red Bluff—Tehama Co. having preliminary surveys made constructing 4 mi. road from Bend Colony via Paynes Creek to connect with Susanville-Red Bluff Highway. $70,000. W. F. Luning, co. surv.

Calif., Rio Vista—Rejected bids improving various streets in Dists. 1, 2 and 3. To exceed $25,000. Will readvertise. C. E. Sloan Santa Fe Bldg., San Francisco, engr. Noted Sept. 14.

Calif., Sacramento—Making plans improving 1st St. between 33rd and Santa Ynez Sts., 35th St. between H and J Sts., and alley between I, J, 35th and Santa Ynez Sts., 2,278 ft. concrete curb and guttetr, 452 lin.ft. 10 in., 745 lin.ft. 8 in. and 1,005 lin.ft. 6 in. vitr. pipe sewer, 1,127 cu.yd. excav., 4,766 sq.ft. hydraulic and 39,153 sq.ft. asphaltic concrete pavement, 9,900 sq.ft. concrete sidewalk, etc. A. Givan, city engr.

Ont., Niagara Falls—Plans 1½ in. asphalt pavements on Delaware Ave., 27 ft., $10,973, Victoria Ave., 25 ft., $25,325. T. S. Scott, city engr.

BIDS DESIRED

New York—Oct. 24, by H. S. Sisson, comr. State Hy. Dept., Albany, improving highways in Hamilton, Orange, Saratoga and Suffolk Counties; reconstructing highways in Broome, Chemung, Clinton, Otsego, Steuben, Suffolk and Westchester Counties. J. C. Finch, secy.; adv. this issue.

N. Y., Lawrence—Oct. 13, repaving, etc., portion of Central Ave., asphalt blocks, sheet asphalt or warrenite. Tribus & Massa, 15 Park Row, New York, engrs.; adv. this issue.

N. Y., Long Island City—Oct. 11, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading sidewalk space and laying sidewalks where necessary on northerly side of Atlantic Ave. from 89th St. to point approximately 100 ft. easterly thereof, easterly side of 86th St. between points 100 ft. and 200 ft. more or less, northerly from Atlantic Ave., 4th Ward; grading portion of Beach Channel Dr. and inshore and outshore areas, etc.

N. Y., New York—Oct. 10, by J. Miller, pres. Manhattan Boro, Municipal Bldg., widening and repaving 24th St. from Bway to 6th Ave., wood block; grading, curbing, flagging, etc., West 157th St. between St. Nicholas and Edgecomb Aves.; curbing, recurbing, flagging, etc., West 163rd and Isham Sts., permanent sheet asphalt; sidewalks at ends of park strips on Park Ave. between 56th and 59th Sts.

N. Y., New York—Oct. 31, by C. L. Cadle, supt. Pub. Wks., Albany, paving portion of terminal site at Hallets Cove, here. Terminal Contr. 91; adv. this issue.

N. Y., Sag Harbor—Oct. 10, by Village Trustees, Municipal Bldg., curbing, rein.-con. paving and storm water sewer. H. F. Bishop, Westhampton Beach, construction engr.; adv. this issue.

N. Y., Syracuse—Oct. 16, y Bd. Contr. & Supply, paving and resurfacing, etc., various streets. F. E. Barry, secy.; adv. this issue.

N. J., Bradley Beach—Oct. 10, by Bd. Boro Comrs., Boro Hall, grading, graveling, paving, etc., Ocean Ave. N. Rogers, boro engr.; adv. this issue.

N. J., Perth Amboy—Oct. 16, by Bd. Aldermen constructing extension to Route 4, Sect. 19, Amboy Ave., sheet asphalt, on reinforced portland cement concrete. M. F. Larson, city engr.; adv. this issue.

Pa., Phila.—Oct. 10, grading, curbing, etc., various streets, $75,000; asphalt paving various streets, $250,000; paving and reshaping Lancaster Ave., asphalt and granite block, $55,000. F. C. Dunlap, City Hall, engr.

W. Va., West Union—Oct. 14, by Doddridge Co., grading 1 mi. Rock Run Rd., 18 ft. $25,000. H. Hutson, clk.

Louisiana—Oct. 17, by State Hy. Comn., Baton Rouge, grading and gravel surfacing Federal Aid Project 125, Tallulah-Delta Highway, Madison Parish, Sect. A 11.35 mi., Sect. B 7.1 mi.; paving with warrenite bitulithic, 2 in. Kentucky rock asphalt, ½ in. cold, or Uvalde rock asphalt, 1½ in. cold, on broken stone base, 2 mi. Federal Aid Project 114, Monroe-Ruston Highway, Sect. A, Ouachita Parish; grading and gravel surfacing 16.17 mi. Federal Aid Project 114, Monroe-Ruston Highway, Sect. B, Ouachita Parish. J. M. Fourmy, state highway engr.

Tenn., Manchester—Oct. 10, by Coffee Co. Hy. Comn., grading and surfacing 7.42 mi. various roads, 27,000 yd. excav., 69,000 yd. base and surface macadam. $70,000. N. H. Meriwether, co. engr.

Ohio—Oct. 13, by Dept. Highways and Pub. Wks., Columbus, widening old road and resurfacing 4.27 mi. Sect. "A" Elyria-Lorain Rd., Lorain Co., sheet asphalt $137,801, bituminous concrete and sheet asphalt, $107,690.

O., North Olmsted—Oct. 14, grading and laying sidewalks on Lorain and Clague Rds., 9,400 cu.yd. grading, 159,592 sq.ft. 2½ in. stone flagging, 6,336 sq.ft. 4 in. stone flagging or 125,000 sq.ft. 4 in. concrete sidewalks. $60,000. Lander Eng. Co., Blackstone Bldg., Cleveland, engrs.

Ind., Hammond—Oct. 9, by Comrs. Lake Co., gravel surfacing 39,000 ft. C. Oliver Holmes Rd., 16 ft. $74,500. R. Seely, Hammond, engr.

Ind., Princeton — Oct. 12, by Auditor Gibson Co., crushed stone surfacing 16,161 ft. Kolb Rd., $34,500; 13,200 ft. Townsley Rd., $26,000; 13,200 ft. Englehart Rd., $25,500, 2.5 mi. Lemme Rd., $26,000. 36,187 ft. Graper Rd., $57,000; grading and

PAVING—SACRAMENTO, CALIF.

Bids were opened Aug. 31, by City Council, for paving, curbing, guttering and laying sewers in (1) Riverside Blvd., from (A) Clark & Henery Constr. Co., Ochsner Bldg., (awarded contract); (B) A. Teichert & Sons, Ochsner Bldg.; (C) McGillivray Constr. Co., Capitol Natl. Bank Bldg.; (2) in Casita sub-division, (A) McGillivray Constr. Co., (awarded contract); (B) A. Teichert & Sons; (C) Clark & Henery Constr. Co. The unit bids were as follows:

(1)	A	B	C
15,662 ft. concrete curb and gutter	$1.82	$1.84	$1.80
220 ft. concrete curb	.49	.50	.50
963 ft. curb wall	2.25	2.60	2.00
60 C. I. gutter drains	8.25	9.00	8.50
23 concrete manholes, complete	72.00	77.00	85.00
1,960 ft. 6 in. vitrified pipe sewer	1.25	1.25	1.20
1,575 ft. 8 in. vitrified pipe sewer	1.55	1.50	1.50
680 ft. 10 in. vitrified pipe sewer	2.15	2.27	2.50
385 ft. 12 in. vitrified pipe sewer	2.35	2.40	3.00
315 ft. 14 in. vitrified pipe sewer	3.00	2.95	3.84
315 ft. 18 in. vitrified pipe sewer	3.75	3.80	4.80
405 ft. 20 in. vitrified pipe sewer	3.85	4.00	4.84
666 ft. 22 in. vitrified pipe sewer	4.55	4.80	5.25
318,476 ft. 2½ in. asphaltic concrete	2.19	.224	.22
8,830 ft. 6 in. asphaltic concrete	.235	.245	.239

(2)	A	B	C
6,717 ft. concrete curb and gutter	$1.80	$1.84	$1.82
895 ft. 6 in. vitrified pipe	1.14	2.16	1.12
3,743 ft. 8 in. vitrified pipe	1.23	1.25	1.25
470 ft. 10 in. vitrified pipe	1.50	1.60	1.55
43 lin. ft. curb alone	.50	.55	.49
16 manholes	62.00	64.50	63.00
145 Y's on 8 in. pipe	1.60	1.67	.57
22 Y's on 10 in. pipe	1.30	1.78	1.85
2 Y's on 6 in. pipe	1.30	1.34	1.25
28 gutter drains	8.30	9.00	8.25
300 ft. curb-gutter (removed)	03	.01	.02
13,569 sq.yds. grading	25	30	.28
330 ft. paving (removed)	.02	.035	.04
664 ft. sidewalks (removed)	01	.005	.005
40,784 ft. sidewalk constructed	21	.22	.209
55,812 ft. 5½ in. asphaltic concrete pavement	.217	.22	.283
66,297 ft. 5 in. asphaltic concrete pavement	.202	.21	.201

Streets and Roads (Continued)

graveling 20,086 ft. Barrett Rd., $35,000; paving 5,858 Montgomery Rd., 10,414 sq. yd. concrete, $25,500. All 16 ft. wide. H. C. Morrison, Princeton, engr.

Minn., Crookston—Oct. 19, by H. J. Welte, aud. Polk Co., 14 mi. State Project 6-06, Federal Aid Project 293, between Crookston and Euclid, 190,270 cu.yd. excav., portable and monolithic culverts, 3 bridges, $50,000; 18.6 mi. State Project 8-06, Federal Aid Project 278, between Erskine and Lengby, 296,000 cu.yd. excav., portable and monolithic culverts, one 20 ft. concrete span and one 23 ft. concrete deck girder span bridge, $80,000; 9 mi. State Project 30-01, Federal Aid Project 271, between Winger and Erskine, 94,000 cu.yd. excav., portable and monolithic culverts, $22,000. All 24 ft. wide. State Hy. Dept., 1246 University Ave., St. Paul, engrs.

Missouri—Oct. 12, by State Hy. Dept. at div. office Kenneth, 6.586 mi. road from Kenneth to Paragould, 24 ft., Federal Aid Project 199, Dunklin Co. B. H. Piepmeier, Jefferson City, state highway engr. Noted Sept. 28.

Missouri—Oct. 13, by State Hy. Dept. at div. office Caruthersville, 3.08 mi. road from Hayti northwardly, 24 ft., Federal Aid Project 173-A, Pemiscot Co. B. H. Piepmeier, Jefferson City, state highway engr. Noted Sept. 28.

Mo., St. Louis—Oct. 24, by Bd. Pub. Serv., 208 City Hall, improving 5,400 ft. Watson Rd. from Southwest to Pernod Sts., consisting of heavy earth removal and constructing two 16 ft. concrete roadways with park spaces in center, 53,000 cu.yd. earth excav. and 25,500 sq.yd. concrete. $122,000. W. W. Horner, 300 City Hall, engr.

Tex., Ballinger—Oct. 17, by City Comn. paving various streets, 33,282 sq.yd. vitr. brick or 2 in. hot Uvalde rock asphalt, 2 in. bitulithic, 2 in. bituminous concrete on 5 in. concrete or 7 in. rein.-con. pavement, 6,152 lin.ft. curb and gutter, 1,366 lin.ft. concrete curbing 3,471 lin.ft. gutter, 5,069 cu.yd. earth excav., 9,596 cu.yd. crushed stone base for brick pavement, etc. $100,000. J. E. Pirie, city engr.

Tex., Houston—Oct. 16, at office of City Secretary paving Polk Ave. from Hutchins to Dumble Sts., Milam St. from Preston to Polk Aves., Hawthorne Ave. from Audubon Pl. to Roseland St., LaBranch St. from Texas to Holman Aves., Hopkins St. from Pacific to Avondale Aves., Brazos St. from Calhoun to Webster Aves., Walker Ave. from Crawford to Hutchins Sts., Richmond Ave. from Graustark Ave. to Mandell St., Yoakum Blvd. from Richmond Ave. to Westheimer Rd., Chenevert St. from McGowen to Elgin Aves., Clark St. from Lorraine St. to Liberty Rd., Kenwood Ave. from Nontrose Blvd. to Mt. Vernon Ave. J. C. McVea, city engr.

Tex., Johnson City—Oct. 17, by W. C. Martiny, judge Blanco Co., grading and gravel and adobe surfacing 8.25 mi. State Highway 20-A, 18 ft., 11,497 cu.yd. roadway, 14,721 cu.yd. borrow, 392 cu.yd. concrete, 8,557 cu.yd. gravel, 6,718 cu.yd. adobe, 32,337 lb. reinforcing, $32,000; 5.99 mi. Austin-Fredericksburg Highway 20-A, 18 ft., 32,846 cu.yd. roadway excav., 24,450 cu.yd. borrow, 622.3 cu.yd. concrete, 99,855 lb. reinforcing, 3,557 cu.yd. adobe and 6.758.6 cu.yd. gravel surfacing, $59,000. M. W. Schofield, co. engr.

Tex., Palo Pinto—Oct. 13, by E. L. Pitts, judge Palo Pinto Co., grading and surfacing with crushed stone base and 1 in. bituminous topping 3.99 mi. Bankhead Highway (State Highway 1) 18 ft., 21,153 cu.yd. roadway, 42,145 cu.yd. borrow, 1,720 cu.yd. rock excav., 643 cu.yd. concrete, 14,060 cu.yd. crushed stone base, 56,537 lb. reinforcing. $123,774. G. W. Courter, co. engr.

Tex., San Benito—Oct. 11, at office of C. Greenslade, city clk., paving 36,000 sq.yd. various streets with 2 course cement concrete with steel reinforcement, warrenite bitulithic on 6 in. cement concrete, warrenite bitulithic on bituminous concrete, rock asphalt on 6 in. cement concrete, 8 in. gravel base with bituminous topping. Either of these types of pavement may be selected for any of streets or parts thereof except for approximately 9,300 sq.yd. on Sam Houston Blvd. on which gravel base with bituminous topping will not be laid. W. E. Anderson, San Benito, engr.

Tex., Verono—Oct. 14, by E. L. McHugh, judge Wilbarger Co., grading and rein.-con. paving 2.24 mi. State Highway 5 west from Oklaunion, 18 ft., 141.5 cu.yd. concrete and 13,739 lb. reinforcing steel in drainage structures, 24,176 sq.yd. concrete pavement, 72,938 lb. reinforcing, $88,625; 5.69 mi. State Highway 5 east and west of here, 18 ft., 65 cu.yd. concrete, 2,400 lin.ft. concrete curbing, 6,732 cu.yd. roadway, 4,204 cu.yd. borrow, 49,056 sq.yd. concrete pavement, 2,491 cu.yd. gravel, $176,755; 3.62 mi. State Highway 5 from 3 mi. east of Tolbert to Pease River, 18 ft. 189 cu.yd. concrete and $15,433 lb. reinforcing steel in drainage structures, 38,255 sq.yd. concrete pavement, 32,909 cu.yd. excav; 116,860 lb. reinforcing, $141,937. J. B. Nabors, co. engr.

Colorado—Oct. 9, by State Hy. Dept., Denver, gravel surfacing 5.375 mi. road beginning 1 mi. northwest of Holly and extending easterly over Sante Fe Trail to Colorado-Kansas State Line, 18 ft., Federal Aid 216-B, Prowers Co., 126 cu.yd. concrete, 9,000 cu.yd. earth excav., 21,300 cu.yd. borrow fill, 4,000 sta.yd. overhaul, 56,650 sq.yd. gravel surfacing, 3,500 lb. reinforcing, bridge over Wild Horse Creek, sta. 884, includes 466 cu.yd. concrete, 68,800 lb. structural and 15,800 lb. reinforcing steel, etc. $58,900. L. D. Blauvelt, State Office Bldg., Denver, engr.

Colo., Denver—Oct. 10, by Dept. Impvts. and Parks, paving 12 blocks Alley Paving Dist. 86, 16 ft., incl., 13,100 sq.yd. concrete. $27,409. A. K. Vickery, City Hall, engr.

Calif., Fresno — Oct. 13, by Supervs. Fresno Co., improving 2.14 mi. Mountain Rd. in canyon of San Joaquin River, 22,400 cu.yd. excav., 17 cu.yd. cement and 230 cu.yd. dry rubble masonry, 856 lin.ft. 8-24 in. corrugated metal pipe. C. P. Jensen, Cory Bldg., engr.

BIDS RECEIVED

New Jersey—State Hy. Dept., Trenton, opened bids Sept. 27, constructing Route 14, Sect. 7 Petersburg-Greenfield, Cape May Co., 56,606 cu.yd. borrow, 22,926 sq.yd. compacted gravel surface, from Ross & Whelan, Broad St. Bank, Trenton, 61.8% of engineers est. ($137,859), C. P. Kavanaugh, West 239th St., Bayonne, 72%, Empire Constr. Co., Empire Bldg., Phila., 72.7%; removing present wood block pavement on Passaic River Bridge, Route 1, Passaic Co., and replacing same with rein.-con. base and wood black pavement, etc., engrs. est $34,000, from J. W. Edwards, 1 Exch. Pl., Jersey City, $34,000, Linde & Griffith, 4th Ave., Newark, $36,121, L. J. Sieling, Broad St., Red Bank, $38,700. Noted Sept. 14.

Pa., Phila.—Opened bids Sept. 28 (1) grading Beechwood St. from 65th to Stenton Aves., Walnut Lane from 73rd Ave. to Cheltenhan Aves., (2) grading and paving Cayuga St. from I to L Sts., asphalt paving (3) Nedro Ave. from York Rd. to Ognotz Ave., Buist Ave. from 69th to 70th Sts., Beechwood St. from Snyder Ave. to Jackson St., (4) Broad St. from Haines St. to 70th Ave., (5) Lebanon Ave. from 66th to 68th Sts., (6) Hope St. from Indiana Ave. to Clearfield St., Ludlow St. from 62nd St. to Cobbs Creek Parkway, Matthews St. from Wister to Woodlawn Sts., Stocker St. from 17th to 18th Sts., 65th St. from Haverford to Media Aves., (7) Front St. from Erie to Hunting Park Aves., (8) Allengrove St. from Castor St. to Roosevelt Blvd., (9) Lebanon Ave. from Bryn Mawr Ave. to 53rd St., from Frank Mark Constr. Co., 2204 North 22nd St., (1) $26,562, (2) $64,793; T. L. Flannigan, 1204 East Montgomery Ave., (1) $27,597, (2) $67,173; T. Nolen & Sons, Phila., (street address not available), (1) $32,174; J. O'Rourke, 5108 Wyalusing St., (2) $67,953; Eastern Paving Co., Colonial Trust Bldg., (3) $33,277, (4) $25,953, (5) $25,914, (6) $26,706, (7) $55,536, (8) $25,363; Barber Asphalt Paving Co., Land Title Bldg., (3) $33,176, (4) $25,973, (5) $27,612, (6) $26,953, (7) $58,657, (8) $24,903; Union Paving Co., 22 East Locust St., (3) $32,678, (4) $25,043, (5) $27,563; Fish-Rutherford Co., Real Estate Trust Bldg., (9) $26,633; United Paving Co., Colonial Trust Bldg., (9) $25,178. Noted Sept. 21.

Maryland—State Roads Comn., Baltimore, opened bids Sept. 19, grading, curbing and surfacing 0.42 mi. Washington Blvd., 36 ft., 7,800 sq.yd. 1½ x 1½ sheet asphalt, 200 lin.ft. asphaltic concrete curbing, 1,550 cu.yd. earth excav., 5,000 sq.yd. 6 in. and 4,200 sq.yd. 3 in. concrete base, from Baltimore Asphalt Block and Tile Co., 1320 North Monroe St., Baltimore, $33,950; P. Flanigan & Sons, Hartford Rd. and Baltimore & Ohio R.R., Baltimore, $34,228; Amer. Paving and Contg. Co., Montebello Ave., Baltimore, $34,435.

Maryland—State Rds. Comn., Baltimore, opened bids Sept. 19, grading and surfacing 1.3 mi. road, 15 ft., from Rhodesdale to Vienna, Dorchester Co., Contr. D-28, 13,700 sq.yd. concrete, 3,200 cu.yd. earth excav., from Holt Constr. Co., Federalsburg, $34,934, Roberts Williams Constr. Co., Clara, $37,381, S. T. J. Smith & Co., East New Market, $37,703; 3.55 mi., 15 ft., Upper Harlboro toward Rosaryville, Prince George Co., Contr. P-39, 32,500 sq.yd. concrete, 2,000 lin.ft. plain concrete gutter, 34,000 cu. yd. earth excav., from G. B. Mullin & Co., 1296 Upshur St., N. W., Wash., D. C., $121,348, D. Schoentag, Saugerties, N. Y., $132,261, Christhilf & Ensey, Munsey Bldg., Baltimore, $134,065; 4.27 mi., 15 ft., from Benfield to Priest Bridge, in Benfield, Anne Arundel Co., Contr. AA-27, 37,800 sq.yd. concrete, 34,600 cu.yd. excav., from Christhilf & Ensey, Munsey Bldg., Baltimore, $134,786, D. Schoentag, Inc., Saugerties, N. Y., $136,132, P. F. Reddington, 2 East Lexington St., Baltimore, $138,525; 2.05 mi., 15 ft., from Westminster to Warfieldsburg, Carroll Co., Contr. Cl-31, 19,100 sq.yd. concrete, 22,500 cu.yd. borrow spoil, 19,600 cu. yd. earth excav., from Thomas, Bennett & Hunter, Westminster, $84,098, Continental Contg Co., Knickerbocker Bldg., Baltimore, $96,368; 1 mi. near Leonardtown to Compton, St. Marys Co., Contr. SM-21, 8,900

Streets and Roads (Continued)

sq.yd. gravel surfacing, 8,400 cu.yd. earth excav., from St. Marys Constr. Co., Mechanicsville, $16,037, H. S. Swann, La Platta, $17,001. Noted Sept. 7.

Alabama—State Hy. Dept., Montgomery, grading and gravel surfacing (1) 8.99 mi. Jasper Birmingham Rd. from Warrior River to Jefferson Co. line, Walker Co., grading and surfacing with 2½ in. bituminous macadam (2) 6.87 mi. Decatur-Moulton Rd., Lawrence Co., grading and surfacing with gravel and 2½ in. bituminous macadam (3) 7.648 mi. Huntsville-Guntersville Rd., Madison Co., from J. W. Gwin, Jefferson Co. Bank Bldg., Birmingham, (1) $168,851; Stanley & Singer, Lafayette, (1) $171,477, (2) $179,279 (3) $135,119: R. D. Chambers & Co., West Point, Ga., (1) $179,665; G. C. Goodrich & Co., Albany, (2) $179,286; McQuarry Bros., Albany, (2) $182,195; William Bros. Constr. Co. and M. W. London & Sons, Roanoke, Va., (3) $124,057; R. D. Goodrich, West Point, Ga., (3) $124,796. Noted Aug. 31.

Ohio—Dept. Highway and Pub. Wks., Columbus, opened bids Sept. 29, grading, bridging and paving with (a) bituminous macadam, (b) bituminous macadam tar, 1.985 mi. Sect. "K-2" Cincinnati-Chillicothe Rd., Clermont Co., from C. J. Nible, Westboro, (a) $44,801, A. C. Pickelheimer, Cincinnati (street address not available) (a) $46,664 (b) $47,968, Connel-Laub & Bracht, Dayton (street address not available) (a) $45,528; 1.22 mi. Sect. "S-1" Newark-New Lexington Rd., Perry Co., from W. F. Payne, Springfield (street address not available) (b) $33,590; concrete girder bridge on Sect. "L-2" Columbus-Portsmouth Rd., Pike Co., from Chillicothe Constr. Co., Chillicothe, $3,693, H. A. McDonald, Norwalk, $3,769. Noted Sept. 21.

O., Cincinnati—Hamilton Co. opened bids Sept. 22, paving and guttering Willey Rd. from East Miami River to Gosling Rds., 3,400 lin.ft. concrete gutter, 10,000 cu.yd. earth and 320 cu.yd. wet excav., 48,800 sq.yd. waterbound macadam, from J. Ruebel Constr. Co., 1872 Hanfield St., $30,436; H. Westerman, Blue Rock Rd., Mt. Healthy, $30,856; Neugent & Scull Co., Cleves, $34,767.

Michigan — State Hy. Dept., Lansing, grading and surfacing (1) 12.062 mi. Federal Aid Project 80, Sects. A and B, Mackinac Co., (2) 12.366 mi. Federal Aid Project 80, Sect. E, Mackinac Co., 33,827 cu.yd. excav., 130,470 cu.yd. gravel, 626.9 sta.yd. fine grading, from S. J. Groves & Sons Co., 120 Manhattan Bldg., Duluth, Minn., (1) $118,661; Regan-Baker Co., Kewadin, (1) $129,470, (2) $113,484; Pierson & Alsmede, Hersey, (1) $147,796; E. Brown, Charles, (2) $128,818. Noted Sept. 14.

Mich., Detroit—Opened bids paving with 3½ in. sheet asphalt on 8 in. concrete base, Berea or Amherst curbstone, (a) 6,000 sq.yd. Bezner Ave., (b) 6,100 sq.yd. Dickerson Ave., (c) 6,100 sq.yd. Gray Ave., (d) 6,400 sq.yd. Springle Ave., from Detroit Asphalt Paving Co., 20 McGraw Bldg., (a) $30,137, (b) $28,036, (c) $28,291, (d) $20,016; Cleveland Trinidad Paving Co., 402 Hammond Bldg., (a) $32,705, (b) $30,594, (c) $30,594, (d) $32,435. Noted July 20.

Mich., Detroit—Opened bids paving (1) 1,880 sq.yd. Burlingame Ave. from Nardin to Belleterre Sts., 3 in. sheet asphalt on 8 in. concrete, 26 ft., (2) 800 sq.yd. Lawton Ave. from Carter to Gladstone Aves., 3½ in. sheet asphalt on 8 in. concrete, 26 ft., (3) 6,900 sq.yd. Savannah Ave. from Woodward to John R Sts., 3½ in. sheet asphalt on 8 in. concrete, 26 ft., (4) 700 sq.yd. Terminal Ave. from Detroit Terminal R.R., to Edlie St., 3½ in. sheet asphalt on 8 in. concrete, 26 ft., from Detroit Asphalt Paving Co., 20 McGraw Bldg., (1) $9,465 (2) $3,771 (3) $32,597 (4) $3,647; Cleveland Trinidad Paving Co., 402 Hammond Bldg., (1) $10,262 (2) $4,112 (3) $34,775 (4) $4,088; G. R. Cooke, 1260 Penobscot Bldg., (3) $31,830.

Missouri—State Hy. Dept., at div. office Kahoka, opened bids Aug. 23, 8.506 mi. road from Wayland to Keokuk, 24 ft., Federal Aid Project 171, Clark Co., (1) 22,679 cu.yd. earth excav., (2) 11,566 cu.yd. borrow, (3) 60,071 sq.yd. gravel pavement, 12 ft. wide, etc., from Henderson & Washam, Jacksonville, (1) $0.38 per cu.yd., (2) $0.36 (3) $0.72, total $60,957; Capitol Constr. Co., 1207 Cherry St., Des Moines, Ia., (1) $0.35 (2) $0.35 (3) $0.75, $62,477.

Missouri—State Hy. Dept. at div. office West Plains, opened bids Sept. 8, (1) 6.527 mi. road from Springfield to Memphis, 24 ft., Federal Aid Project 51 A, Howell Co., (a) 30,289 cu.yd. earth excav, (b) 200 cu.yd. rock excav., (c) 14,081 cu.yd. borrow, etc., (2) 8.743 mi. road from Springfield to Memphis, 24 ft. Federal Aid Project 51 C, Howell Co., (a) 50,087 cu.yd. earth excav., (b) 13,307 cu.yd. borrow, etc., from Jones & Harlin, West Plains, (1a) $0.38 per cu.yd., (1b) $2.50 (1c) $0.38, etc., total $29,074, (2a) $0.40 (2b) $0.40, total $36,386; Coopers Constr. Serv. Co., St. Louis, (street address not available), (1a) $0.37 (1b) $2 (1c) $0.35, $29,877, (2a) $0.34 (2b) $0.34, $33,518; M. E. Gillioz, Monett, (1a) $0.42 (1b) $2 (1c) $0.40, $31,827, (2a) $0.40 (2b) $0.40, 37,289.

Colorado—State Hy. Dept., Denver, concrete paving (1) 1.003 mi. road extending eastward on Union Pacific Highway from Aurora city limits, Federal Aid Project 225, Adams and Arapahoe Counties, (2) 1.519 mi. road beginning at Broomfield and extending northerly toward Lafayette, Federal Aid Project 222-B, Boulder Co.; gravel surfacing (3) 5.296 mi. road on highway between Hesperus and Mancos, 18 ft., Federal Aid Project 213-B, La Plata and Montezuma Counties, (4) 3.609 mi. road beginning 5½ mi. west of Durango and extending west toward Hesperus, 18 ft., Federal Aid Project 71 B, La Plata Co.; grading (5) 7.474 mi. road beginning at point about 6 mi. west of Saguache and extending west toward Cochetopa, 16 ft., Federal Aid Project 119B, Saguache Co., (6) 10,731 mi. road beginning 2 mi. north of Platteville and extending northeast parallel to Union Pacific R.R. tracks through La Salle toward Greeley, 16 ft., Federal Aid Project 226 C, Weld Co., from Colorado Constr. Co., 802 Railroad Bldg., Denver, (1) $31,025; Colorado Bridge & Constr. Co., Gas & Electric Bldg., Denver, (1) $31,146, (2) $58,168; J. F. Roberts Constr. Co., Tramway Bldg., Denver, (1) $32,506 (2) $61,985; Miller, Douglas & Haines, 100 South York St., Denver, (2) $56,885; Shields & Kyle, Pagosa Springs, (3) $91,194 (4) $63,376; Peterson, Shirley & Gunter, 1st Natl. Bank Bldg., Denver, (3) $94,299 (4) $62,274; Girardet & Hotchkiss Eng. & Constr. Co., Delta, (5) $44,654; W. A. Colt & Son, Las Animas, (5) $47,058; Monarch Eng. Co., Colfax and Larimer St., Denver, (5) $68,646; C. R. Conover & Bro., 305 Bank Blk., Denver, (6) $32,997; Standard Eng. & Constr. Co., 518 E & C Bldg., Denver, (6) $36,474; White & Johnson Constr. Co., Chamber Commerce Bldg., Denver, (6) $38,048. Noted Sept. 14.

California—State Hy. Dept., Sacramento, grading and paving with 6 in. concrete 7.77 mi. highway between Long Beach and Huntington Beach, 20 ft., Los Angeles and Orange Counties, from H. H. Peterson, Loma Portal, $227,394; C. H. Hudson, Marsh-Strong Bldg., Los Angeles, $227,531; J. G. Beckjord, 4416½ South Figroa St., Los Angeles, $234,320. Noted Sept. 7.

Calif., Berkeley — Improving Telegraph Ave. from south city limits to Dwight Way, (1) 221,400 sq.ft. grading (2) 9,340 ft. concrete curb and gutter (3) 202,700 sq.ft. 2 in. asphaltic concrete on 5 in. asphaltic concrete, from Oakland Paving Co., 5000 Bway., Oakland, (1) $0.065 (2) $1.85 (3) $0.31; Hutchinson Co., 1706 Bway., Oakland, (1) $0.07 (2) $1.85 (3) $0.305; Warren Constr. Co., Bacon Bldg., Oakland, (1) $0.083 (2) $1.90 (3) $0.335. Noted Aug. 31. Aug. 31.

CONTRACTS AWARDED

New York—H. S. Sisson, comr. State Hy. Dept., Albany, paving 0.48 mi. State Project 30-C, Cattaraugus Co., rein.-con., to Amer. Pipe & Constr. Co., 112 North Broad St., Phila., $174,829; 2.75 mi. State Project 172, Oneida Co., plain concrete, to A. V. Leo Constr. Co., Thompson, Conn., $100,126; 7.73 mi. State Project 195 St. Lawrence Co., rein.-con., to H. Burgard Co., 1968 Fillmore Ave., Buffalo, $210,339; 4.23 mi. State Project 196, Fulton Co., rein.-con., to S. B. Van Wagenen Inc., Rondout, $132,782; 5.19 mi. State Project 210, Essex Co., bituminous macadam, to Lord, Coopy & Co., Morrisonville, $136,729; 3.04 mi. State Project 219, Dutchess Co., plain concrete, to Fowler & Banks, Inc., Mt. Kisco, $102,088; grading and draining 2.77 mi. State Project 188, Allegany Co., to P. H. Murray, Rochester (street address not available), $71,698; 8.35 mi. State Project 193, Allegany Co., to Sweeney & Boland, Rochester (street address not available), $246,057; graveling 1.01 mi. State Project 209, Steuben Co., to Dale Eng. Co., Mann Bldg., Utica, $22,939. Noted July 27 and Aug. 24.

New York—H. S. Sisson, comr. State Hy. Dept., Albany, improving 8.91 mi. Highway 8135, Franklin Co., to J. A. LaPorte, 8 St. Josephs Terrace, Albany, $247,832, engrs. est. $283,225: 0.99 mi. Highways 1651 and 5683, Livingston Co., to Rochester Foundation Co., Inc., Rochester (street address not available) $85,837, engrs. est. $93,022; 3.47 mi. Highway 1650, Onondaga Co., to Lane Constr. Corp., 37 Colony St., Meriden, Conn., $105,632, engrs. est. $117,040; 1.74 mi. Highway 5686, Otsego Co., to Morrell Vrooman, Inc., Gloversville, $67,625, engrs. est. $70,463; 1.48 mi. Highway 5682, Rockland Co., and 4.08 mi. Highway 8136, Rockland Co., to C. Vanderbilt Genl. Contg. Co., Inc., 24 Elizabeth St., West New Brighton, $54,727, engrs. est. $57,666 and $162,644, engrs. est. $167,573 respectively; repairing 0.54 mi. Repair Contr. 3028, Cortland Co., to Ludke Bros., 33 Hockeborn Ave., Auburn, $19,435, engrs. est. $19,613; 4.7 mi. Repair Contr. 3027, Monroe Co., to F. W. and J. J. Crouch, 84 Bronson Ave., Rochester, $131,452, engrs. est. $146,112; 2.23 mi. Repair Contr. 3023, Ontario Co., to H. C. Schroeder, 416 Mercantile Bldg., Rochester, $73,853, engrs. est. $74,723. Noted Sept. 28.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, repaving with asphalt Union and 15th Sts., etc., to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., $32,702 and $6,292 respectively; 16th Ave. and 95th St., to Cranford Co., 52 9th St., $14,375 and $8,951 respectively. Noted Sept. 21.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., repaving inside railroad franchise area on Jackson Ave., granite block, to Sicilian Asphalt Paving Co., 41 Park Row, New York, $96,351; grading and laying sidewalks on Liberty Ave., etc., to J. J. O'Brien, Jr., William St., Jamaica, $890; grading, curbing and laying sidewalks on 95th St., etc., to C. Kurth, 9519 126th St., Richmond Hill, $5,010. Noted Sept. 21.

N. J., Woodbury—Gloucester Co. paving 38,402 sq.yd. Swedesboro-Woodstown Rd., concrete, to E. R. Mixner, Goshen, $125,058. Noted Sept. 7.

N. J., Woodbury—Gloucester Co. paving 15,056 sq.yd. Delaware St., sheet asphalt, to Union Paving Co., 30th and Locust Sts., Phila., $52,140. Noted Sept. 7.

Pa., Pittsburgh—Repaving East St., asphalt on concrete, to J. H. McQuade & Sons, Bakewell Bldg., $29,579; repaving Boggs and Spring Garden Aves., to Dunn & Ryan Constr. Co., Keystone Bldg., $37,133; repaving Milwaukee St., and paving Portola Ave. and Wayland Way, to Booth & Flinn Ltd., Forbes St., $31,115 and $30,013 respectively.

W. Va., Wheeling—Bd. Comrs. Ohio Co., surfacing Stone Church Rd., Triadelphia Dist., brick on slag, to Q. Vercellotti, Elm Grove. Noted July 27.

S. C., Orangeburg—Orangeburg Co. constructing Orangeburg-Bamberg Rd., to General Road & Drainage Constr. Co., Liberty Bank Bldg., Columbia, $42,129. Noted Aug. 1.

S. C. Pickens—Pickens Co. constructing 1.9 mi. and 6.9 mi. Pickens-North Carolina Rd., to Elliott & Sons, Spartanburg, $32,020 and $84,413 respectively. Noted Aug. 1.

Ga., Americus—Surfacing 7 mi. Americus Ellaville Rd., 73,920 sq.yd. bituminous macadam, to Atlantic Refining Co., Atlanta, (street address not available), $0.1089 per gal., total $20,930. Noted Aug. 3.

Ga., Blairsville—Union Co. constructing 3.73 mi. road connecting with Cleveland-Blairsville Rd., Federal Aid Project 284, to C. M. Lyle, Menlo, $58,000. State to furnish cement.

Ga., Brunswick—Glynn Co. constructing 10.08 mi. Brunswick-Darien Rd., Federal Aid Project 261, to T. P. Wright, Peachtree Bldg., Atlanta, $75,000. State to furnish gravel and cement.

Ga., Dahlomega—Lumpkin Co. constructing 6.8 mi. road connecting with Cleveland-Blairsville Rd., Federal Aid Project 285, to T. W. Ellis, Ellis Bldg., Macon, $103,000. State to furnish cement.

Alabama—State Hy. Dept., Montgomery, grading and gravel surfacing 12.265 mi. Camden Greenville Rd. from Ephram Branch to Pineapple, Wilcox Co., to Lawler & Humphries, Ridgeland, S. C., $151,493. Noted Sept. 7.

O., Cleveland—Paving Linn Dr. and Amesbury Ave., to Rieley Bros., The Arcade, $6,548; West Superior Ave., to Cleveland Trinidad Paving Co., The Arcade, $17,554. Work involves 1,260 cu.yd. excav., 970 sq.ft. 2 course concrete, 2,500 sq.ft. brick and 4,600 sq.yd. asphalt. Noted Sept. 21.

O., St. Clairsville—Trustees Pultney and Richland Twps., paving 3 mi. Sand Hill Rd., waterbound macadam tc F. S. Amrine, Bridgeport, $43,500.

O., Shaker Heights (Cleveland P. O.)—Paving 2 sections of South Morland Blvd., East 161st and East 163rd Sts., asphalt to Cleveland Trinidad Paving Co., The Arcade, Cleveland, $297,982. Noted Sept. 28.

Streets and Roads (Continued)

O., West Park (Cleveland P. O.)—To Roehl Bros., West 25th St. and Lorain Ave., Cleveland, paving West Park Rd., West 120th St. from Lorain to Cloverdale Aves. and West 122nd St. from Linnet to Thrush Aves., brick, $84,584; to W. McHugh Co., c/o Pavers Exch., Society for Savings Bldg., Cleveland, West 123rd St., West 125th St. from Linnett to Thrust Aves., Lucille and Williams Aves., asphaltic concrete, $51,550, West 125th St. from Lorain to Linnet Aves., asphalt, $13,991, West 119th St. from Lorain to Linnet Aves., asphalt, $17,865; to Fischer & Williams, Lorain Rd., West 122nd and West 125th Sts., asphalt, $21,589; to Garland Bros., c/o Pavers Exch., Society for Savings Bldg., Cleveland, West 120th St. and Elisienna Ave., asphaltic concrete, $26,693; to Baldwin Bros., 4500 Euclid Ave., Cleveland, Nichols Ave. and West 139th St., rick, $61,693; to Highway Constr. Co., Elyria, West 135th, West 123rd, West 129th, West 126th, West 119th, West 125th and West 128th Sts., asphalt, $120,132. Noted Sept. 28.

Ind., Evansville — Vanderburg Co., paving 5 mi. Weinbach Ave. Rd., crushed stone, bituminous binder, to S. Hayes, 3446 Kenwood Ave., Indianapolis, $66,992. Engrs. est. $71,572.

Ind., Indianapolis — Paving 12,526 ft. Dearborn St. from Brookside to 30th Sts., 20 ft., 29,836 sq.yd. concrete on concrete, to Marion Constr. Co., 1600 South West St., $59,239. Engrs. est. $63,000.

Ind., Indianapolis—Paving 5,392 ft. River Ave., from Division to River Parkway, 24 ft., 14,376 sq.yd. concrete on concrete, 10,784 lin.ft. concrete curbing, to J. E. McNamara Constr. Co., 946 West New York St., $33,106. Engrs. est. $36,000.

Michigan — State Hy. Dept., Lansing, grading and surfacing 4.572 mi. State Trunk Line Rd. 39-3, Inoia Co., 1,750 cu.yd. excav., 41,909 sq.yd. gravel, 212.5 sta. fine grading, to A. E. Chase & Son, St. Johns, $29,911. Noted Sept. 28.

Ill., Lawrenceville—Paving 21 blocks to F. R. Harshman, Sullivan. $56,000.

Ia., Albia—Paving various streets to J. Horrabin & Co., 1422 Walnut St., Des Moines, 7,018 sq.yd. rein.-con. $3.19 per sq.yd., 2,570 sq.yd. concrete $2.77, 3,200 lin.ft. concrete curb and gutter $1.10, total $37,552. Noted Aug. 31.

Ia., Pella—Repairing present pavement and resurfacing with asphalt, 36,200 sq.yd., to E. Rasmussen, 3615 Wright St., Des Moines, $1.20 per sq.yd. Noted Sept. 7.

Minnesota—State Hy. Dept., St. Paul, 15.6 mi. State Project 6-07, Federal Aid Project 291, 177,000 cu.yd. excav., to Volden Bros., Marshall, $53,000, monolithic culverts to Christianson & Co., Marshall, $25,000; 9 mi. State Project 6-08, Federal Aid Project 270, 102,365 cu.yd. excav. to D. Ryan and others, Marshall, $35,000. Noted Aug. 31.

Minnesota—State Hy. Dept., St. Paul, State Project 2-99, Benson, Swift Co., 192,682 cu.yd. excav., to Kroner & Hog, 1727 LaSalle Ave., Minneapolis, $40,339. Noted Sept. 28.

Minn., Duluth—St. Louis Co., graveling 12.07 mi. State Rd. 6 between Kinmount and Ray, to E. E. Reemer, Hibbing, $47,795.

Minn., St. Paul—Paving and repaving Robert St. N., from Central to University Aves., University Ave. W. from Robert St. to Park Ave. ,and intersection of Robert St. and University Ave., 9,116 sq.yd. sandstone blocks, 3,039 sq.yd. sheet asphalt, to Fielding & Shepley, 216 University Ave., $68,951.

Kan., El Dorado—Butler Co., brick paving 5.192 mi. Federal Aid Project 49-B, brick, to Smith, Graham Constr. Co., Augusta, $239,873. Noted Aug. 10.

Kan., Wellington—Sumner Co. paving with 7 in. concrete 9.148 mi. Meridian Rd., Federal Aid Project 35, F, G and H, 18 ft., 96,775 sq.yd. concrete, to Hyde Constr. Co., Enid, Okla., $249,670, engrs. est. $280,157; 16.728 mi. Meridian Highway, Federal Aid Project 35, J, K, L and M, 18 ft., 177,349 sq.yd concrete, to Stewart & Ritchie, Wichita, (street address not available), $484,463, engrs. est. $509,624. Noted Sept. 7.

Wyoming—State Hy. Comn., Cheyenne, (1) surfacing 6.2 mi. Lincoln Highway Lookout-Rock River, Federal Aid Project 123, Albany Co., (2) 12.2 mi. Lincoln Highway-Rock River, west, Federal Aid Project 122, Albany Co., (3) grading and placing 18 ft. bituminous wearing surface on concrete on 7 mi. Casper-Salt Creek Rd., Federal Aid Project 19, Natrona Co., (4) grading, surfacing and building culverts on 5.6 mi. Yellowstone Highway, north of Cheyenne, Federal Aid Project 134, Laramie Co., (5a) grading and earth work, (b) culvert construction and 95 ft. steel, 54 ft. steel truss and 16 ft. I-beam spans on 8.8 mi. state highway from Crowheart west, Federal Aid Project 127, Fremont Co., to Bagley Bros., Wheatland, (1) $23,240, (2) $42,120, (4) $17,416; Levy Constr. Co., Symes Bldg., Denver, Colo, (3) $492,250; Caine & Peck, Riverton, (5a) $35,652; J. F. Turpin, Wheatland, (5b) $22,652. Noted Sept. 14.

MILES OF FEDERAL-AID ROADS COMPLETED IN EACH STATE, JULY 31, 1922

State	Mi.
Maine	71.4
New Hampshire	120.8
Vermont	42.7
Massachusetts	145.9
Rhode Island	32.0
Connecticut	24.3
Delaware	34.1
Maryland	171.1
Virginia	350.6
West Virginia	170.6
North Carolina	827.3
South Carolina	445.5
Georgia	819.4
New York	134.5
New Jersey	84.6
Pennsylvania	545.3
Florida	48.7
Kentucky	222.8
Tennessee	107.7
Alabama	350.9
Mississippi	365.6
Ohio	519.0
Indiana	121.3
Illinois	721.1
Michigan	278.1
Wisconsin	744.3
Minnesota	1,345.6
Iowa	677.5
Missouri	247.4
North Dakota	492.7
South Dakota	320.6
Nebraska	888.8
Kansas	261.1
Arkansas	634.6
Louisiana	424.0
Oklahoma	117.7
Texas	1,625.4
Montana	575.1
Idaho	409.5
Wyoming	453.1
Colorado	303.6
New Mexico	529.9
Arizona	201.5
Utah	92.8
Nevada	182.0
Washington	359.1
Oregon	462.5
California	305.5

MILES OF ROADS UNDER CONSTRUCTION OR COMPLETED UPON WHICH FINAL PAYMENT HAS NOT BEEN MADE

State	Mi.
Maine	121.0
New Hampshire	29.6
Vermont	34.0
Massachusetts	59.7
Rhode Island	6.6
Connecticut	49.4
New York	431.6
New Jersey	50.1
Pennsylvania	163.2
Delaware	19.0
Maryland	29.7
Virginia	201.5
West Virginia	156.0
North Carolina	126.4
South Carolina	423.5
Georgia	366.8
Florida	142.8
Kentucky	209.8
Tennessee	401.9
Alabama	395.9
Mississippi	410.8
Ohio	160.6
Indiana	168.7
Illinois	21.7
Michigan	373.0
Wisconsin	466.4
Minnesota	836.6
Iowa	1,043.5
Missouri	522.6
North Dakota	767.7
South Dakota	617.3
Nebraska	985.0
Kansas	451.6
Arkansas	355.6
Louisiana	254.8
Oklahoma	355.6
Texas	1,484.9
Montana	149.0
Idaho	57.6
Wyoming	259.7
Colorado	177.3
New Mexico	530.5
Arizona	242.4
Utah	198.3
Nevada	120.0
Washington	17.4
Oregon	29.6
California	435.8

Mont., Helena—Paving 1.5 mi. Paving Dist. 130, bitulithic, to S. Birch & Sons Constr. Co., 314 Ford Bldg., Great Falls, Mont., $62,386.

Missouri—State Hy. Dept. at div. office Albany, 3.686 mi. road from King City to Stanberry, 24 ft., Federal Aid Project 54, Gentry Co., penetration macadam, to E. L. Meek & Co., Kansas City (street addres not available), $82,691. Noted Sept. 21.

Tex., Mason—Mason Co. grading and gravel surfacing 14.25 mi. State Highway 9, Federal Aid Project 293, 18 ft., 1,500 cu.yd. concrete, 126,157 lb. reinforcing, 26,177 cu.yd. gravel surfacing, to F. P. Holt, Austin, (street address not available), $76,096 Engrs. est. $83,706. Noted Sept. 28.

Tex., Palo Pinto—Palo Pinto Co., grading, crushed stone surfacing and bridging 10.9 mi. State Highway 1, 18 ft., to Texas Rd. Co., 1303 Bush Bldg., Dallas, $207,483. Contract for bituminous topping to be let at later date. Engrs. est. $228,182 incl. 10% for engineering and contingencies. Noted Aug. 31.

Colo., Denver—Asphalt paving 2½ mi. Bway. Paving Dist. 6, 60 ft., incl., 62,400 sq.yd. asphalt on 5 in. concrete, to Western Paving Co., 601 First Natl. Bank Bldg., $153,705. Noted Sept. 7.

Utah, Salt Lake City—Salt Lake Co., light grading and hard surfacing 2.2 mi. 48th St. south from 9th St. east to Holladay Rd., bitulithic, to Moran Paving Co., Felt Bldg., $49,603. Noted Sept. 28.

Wash., Bellingham—Concrete paving to J. Lich & Sons, Bellingham, (street address not available), $88,528. Engrs. est. $90,528.

Wash., Seattle—Paving Alki Ave. et al., to R. G. Stevenson, 1327 North 34th St., $121,456, engrs. est. $120,216; paving 20th Ave. et al., to D. H. Traphagen, Walker Bldg., $54,560, engrs. est. $60,411. Noted Sept. 21 and 28.

Wash., Walla Walla—Grading and gravel surfacing 5.7 mil. Lowden-Gardena Rd., 9,099 cu.yd. crushed rock surfacing, 24,942 cu.yd. earth excav., 11,590 cu.yd. overhaul, also 40 ft. bridge, to Root & Joslyn, Spokane (street address not available). $40,100.

California—State Hy. Comn., Sacramento, grading 6.76 mi. highway from Cottonwood Creek to first crossing Kern River, Kern Co., to W. S. Mead, San Francisco, (street address not available), $281,157. Noted Aug. 17.

California—State Hy. Dept., Sacramento, grading 8.41 mi. highway from ¾ mi. south of northerly boundary to 1½ mi. west of Calistoga, Napa Co., to Ross Constr. Co., Los Angeles, (street address not available), $216,507.

Calif., Sacramento—Curbing, guttering, paving and laying sewers in Casita sub-division, to McGillivray Constr. Co., Capitol Natl. Bank Bldg.; Riverside Blvd. to Clark & Henery Constr. Co., Ochsner Bldg. Unit prices will appear in this issue. Noted Aug. 17.

Calif., San Jose—Supervs. Santa Clara Co., paving Naglee Ave. and King Rd., oil macadam, to J. F. Adams, 557 Home St., $13,638 and $19,875 respectively. Noted Aug. 31.

Calif., Santa Rosa—Sonoma Co. improving Guerneville-Jenner Unit, Sects. B and C, to W. L. Proctor, 1000 Spring St., $18,381. Noted Aug. 31.

Calif., Stockton — Improving Pershing, Orange and Argonaut Sts., etc., to Clark & Henery Constr. Co., 38 South Sutter St., $140,500. Noted Sept. 21.

Calif., Stockton—Supervs. San Joaquin Co., improving Hoag Rd. east of Belotta, to C. McLaughlin, Stockton, (street address not available), $8,443; Ashley Rd., Norton Lane Rd. and Central Ave., to C. O. Holden, 433 East Locust St., Lodi, $11,778, $15,433 and $2,484 respectively. Noted Aug. 24.

Industrial Works

PROPOSED WORK

Mass., Millbury—Felters Co., West St., plans 1 story dyehouse, brick and timber. Private plans.

R. I., Providence—Olneyville Realty Co., Inc., 18 Plainfield St., plans 1 story garage and service station, brick and steel, Plainfield St. $40,000. Architect not announced.

N. Y., Auburn—W. J. Henry and others, 128 South St., plan large tool factory, brick and steel, York St. $100,000. Architect not announced.

Industrial Works (Continued)

N. Y., Bemus Point—J. B. White having plans prepared by Johnson & Ford, archts., Fenton Bldg., Jamestown, 2 story, fireproof, garage and auto service building. To exceed **$40,000.**

N. Y., Buffalo—Cleveland Cold Drawn Steel Co., Cleveland, O., has been reorganized and name changed to Buffalo Cold Drawn Steel Co., Inc., and has purchased 3½ acre site, here, for plant, 36,000 ton annually. F. R. Kew, c/o owner, at Buffalo, dir. and production mgr.

N. Y., Buffalo—W. Manard Co., 17 Newell St., plans 2 story, 50 x 100 ft. abattoir, fireproof construction. **$40,000.** Architect not announced.

N. Y., Forks—Live Poultry Transit Co., Bway., Cheektowaga (Buffalo P. O.), plans rebuilding fertilizer and car repair plants, destroyed by fire, here. **$100,000.** Architect not announced

N. Y., Jamestown — Alliance Furniture Co., 615 Allen St., plans 4 story factory addition, brick, with 20,000 sq.ft. floor space. To exceed **$50,000.** Architect not announced.

N. Y., Jamestown—Clark Hardware Co., 13-15 East 3rd St., plans 3 story, 46 x 90 ft. warehouse, brick. To exceed **$40,000.** Architect not announced.

N. Y., Jamestown—Jamestown Lounge Co., 40 Winsor St., plans 6 story, 102 x 104 ft. brick fatcory addition. Architect not announced.

N. Y., New York—Metropolitan Storage Warehouse Corp., 39 West 66th St., soon takes bids 11 story, 75 x 105 ft., brick, steel and concrete warehouse, plain foundation, Amsterdam Ave. **$350,000.** Private plans.

N. Y., Niagara Falls—J. S. Thompson and P. A. Porter, Marine Bank Bldg., Buffalo, plan 1,000,000 h.p. hydroelectric plant at Foster Flats, lower Niagara, here. **$40,000,000.**

N. Y., Sheepshead Bay (Brooklyn P. O.) —Superior Ice Co., Inc., 50 East 42nd St., New York, having plans prepared by W. Mortensen, archt. and engr., 209 West 76th St., New York, brick, steel and rein.-con. plant, Ave. Z and East 17th St., here. **$250,000.**

N. J., Newark—Dept. Streets & Pub. Impvts., City Hall, having plans prepared 2 story, 70 x 150 ft., brick, steel and concrete garage adition, plain foundation, Franklin Ave. **$175,000.** Private plans.

Pa., Brackenridge—Atlantic Bottle Co., Brackenridge, and 90 West Bway., New York, plans to rebuild factory recently destroyed by fire. **$300,000.** Engineer not announced.

Pa., Phila.—T. Bardaro, 57 East Vine St., soon takes bids 2 story, 32 x 90 ft. and 18 x 24 ft., brick and steel garage, plain foundation, 5611 Vine St. **$50,000.** F. N. Greisler, 1035 Walnut St., archt.

Pa., Phila.—C. Wunder, archt., 1415 Locust St., soon takes bids 5 story and basement, 80 x 122 ft. paper factory, rein.-con., brick and steel, plain foundation, 5th and Willows Aves., for Paper Mfg. Co., c/o F. A. O'Neil, 526 Cherry St. **$200,000.**

Pa., Pottstown—R. A. Reiff, 62 Hanover St., soon takes bids 2 story, 60 x 190 ft. and 60 x 125 ft. knitting mill, brick and steel, plain foundation. **$75,000.** J. V. Pooley, 162nd 2nd Ave., Royersford, archt.

Pa., Titusville—Titusville Iron Wks., South Franklin St., plans brick addition, South Washington Ave. Cost between $100,000 and $150,000. Architect not announced.

Ga., Savannah—Western Paper Makers Chemical Co., River Rd., Kalamazoo, Mich., plans paper mill, here. **$500,000.** Architect not announced.

Tenn., Kingsport—Mead Fibre Co. having plans prepared by Management Eng. & Development Co., engrs., c/o owner, large machine paper mill. **$750,000.**

Tenn., Knoxville—Knoxville Power & Light Co., 626 South Gay St., has increased its capital stock from $2,000,000 to $10,000,000 and will use proceeds for additions and improvements to its lines and plants.

Tenn., Parkville (Benton P. O.)—Tennessee Power Co. plans $250,000 bond issue for extensions and improvements to lines and plant. Engineer not announced.

O., Cleveland—Grabler Mfg. Co., 1401 East 40th St., having plans prepared by H. E. Shimmin, archt., 2031 Euclid Ave., 2 story, 60 x 160 ft., brick factory addition. **$60,000.**

O., Cleveland—Van Gastel Cleaning Co., 2420 Cedar Ave., plans 1 and 2 story and basement, brick and steel plant. **$75,000.** H. Van Gastel, mgr. Architect not selected.

ROAD WORK—UTAH

Bids were opened Sept. 5, by State Rd. Comn., Salt Lake City, for constructing 9.04 mi. road from Levan to Chicken Creek Dam, Juab Co., (A) Paxton, Dorrity & Black Kanash, (awarded contract); (B) Nephi Constr. Co., Nephi; (C) Raleigh & Kearney Co. The unit bids were as follows:

	A	B	C
19,300 cu.yd. common excavation	$0.30	$0.35	$0.28
700 cu.yd. solid rock excavation	1.75	2.00	1.70
33,600 cu.yd. borrow excavation	.30	.35	.33
120,000 sq.yd. overhaul, class A	.025	.02	.03
18,900 cu.yd. gravel surfacing, loading	.30	.35	.26
34,100 yd. gravel surfacing, hauling	.40	.50	.48
9.04 mi. gravel surfacing, placing	650.00	595.00	900.00
800 cu.yd. structural excavation	1.00	.50	1.00
22,000 lb. reinforced steel	.02	.03	.02
215 cu.yd. concrete, class A	18.00	15.00	12.50
38 cu.yd. concrete, class B	18.00	15.00	11.00
4,460 lin.ft. guard rail	.25	.40	1.00
528 lin.ft. C. M.pipe, 18 in	.40	.80	.70
152 lin.ft. C. M. pipe, 24 in	.50	.80	.85
84 lin.ft. C. M. pipe, 30 in	.65	1.00	1.00
335 cu.yd. rip.rap	4.50	2.00	4.00
Extended totals	$54,039	$59,296	$59,382

ROAD WORK—ARIZONA

Following are lowest three bids opened Aug. 10, by State Highway Comn., Phoenix, for constructing Holbrook-St. Johns Highway, Federal Aid Project No. 42, (A) C. P. Richards, St. Joseph; (B) G. Winsor and L. Frost, St. Joseph; E. J. Whiting, J. H. Udall, A. Brown and G. Udall, St. Johns. The unit bids were as follows:

	A	B	C
3,335 cu.yd. excavation, roadway (unclassified)	$0.17	$0.25	$0.20
58,270 cu.yd. excavation, borrow, (unclassified)	.14	.15	.15
426 cu.yd. excavation, structures (unclassified)	.90	.50	.90
118 cu.yd. excavation, ditches and channel changes	.14	.20	.25
17,273 cu.yd. gravel surfacing (500 ft. free haul) in place	.42	.40	.40
2,107,306 sta.yd. surfacing, overhaul (122 stas)	.008	.008	.007
62 cu.yd. class "A" concrete	14.00	12.00	15.00
76 cu.yd. class "B" concrete	12.00	12.00	14.00
84 cu.yd. class "C" concrete	10.00	12.00	13.00
12 cu.yd. cement rubble masonry	6.00	5.00	10.00
310 cu.yd. gravel base (type B Fords)	1.50	1.25	2.00
155 cu.yd. selected gravel surfacing (type B Fords)	1.60	1.25	2.00
112 lin.ft. 24 in. C. M. pipe (haul and place)	.40	.75	.40
110 lin.ft. 30 in. C.M. pipe (haul and place)	.50	.75	.40
52 lin.ft. 36 in. C.M. pipe (haul and place)	.60	.75	.40
4,050 lb. reinforcing steel (haul, bend, place)	.025	.05	.02
Extended totals	$36,875	$37,292	$37,725

O., Columbus—Columbus Varnish Co., 264 Cozzens St., having sketches made by Jones & Abernathy, archts. and engrs., Dispatch Annex, 1 story, 100 x 300 ft., brick and steel factory. **$40,000.**

Ind., Clinton—Wabash Electric Co. plans extensions and improvements to lines and plant. **$50,000.**

Ind., Crawfordsville—City plans 1 story brick addition to light and power plant, incl. 200 ft. radial brick stack, etc. **$200,000.** H. C. Carroll, Terminal Bldg., Indianapolis, engr.

Ind., Evansville—General Cigar Co., 2 Upper 2nd St., having plans prepared by A. E. Neucks, archts., Peoples Bank Bldg., 4 story and basement, 75 x 150 ft. factory, brick and timber, Upper 2nd St. **$75,000.**

Ind., Indianapolis—Rockwood Mfg. Co., 1801 English Ave., having plans prepared by Motherhead & Fitton, archts., 540 North Meridian St., 1 story, 100 x 200 ft. and 1 story, 75 x 100 ft. machine shops, both brick and timber, English Ave. **$40,000.**

Ind., Richmond—Consumers Service Co. plans 1 story refinery, brick, will require 5 tanks of 100,000 gal. capacity. **$200,000.** Architect not selected.

Mich., Three Oaks—Warren Featherbone Co. had plans prepared by G. W. Allen, archt., Laporte, Ind., 2 story and basement, 68 x 140 ft. rein.-con. and brick factory, plain foundation. **$45,000.**

Wis., Clyman—Reeseville Canning Co., Reeseville, having plans prepared 3 story, brick and timber, factory and warehouse, plain foundation, here. Private plans.

Wis., Colby—Colby Buick Co., c/o H. J. Cornelius, plans 2 story and basement, 30 ft. high, 50 x 80 ft. garage, rein.-con. and brick, plain foundation. **$40,000.** Architect not selected.

Wis., Crandon — The Vulcan Last Co. plans 2 story, 60 x 120 ft., brick, rein.-con. and steel factory, to replace one recently destroyed by fire. Architect not selected.

Wis., Green Bay—Fairmont Creamery Co., 200 North Bway., having plans prepared by Foeller & Schober, archts., Nicolet Bldg., 1 story, 50 x 95 ft. dairy, incl. new boiler house, brick and rein.-con., plain foundation. **$50,000.**

Wis., Jefferson — Ft. Atkinson Canning Co. plans 2 story, 60 x 100 ft. warehouse and factory, brick and rein.-con., plain foundation. **$60,000.** J. Hagemann, pres. Architect not selected.

Wis., Milwaukee—Luick Ice Cream Co., 183 Ogden Ave., having preliminary plans prepared by Leenhouts & Guthrie, archts., 424 Jefferson St., 2 story and basement, 40 ft. high, 120 x 120 ft., rein.-con. and brick garage, plain foundation, Van Buren St. $75,000.

Wis., North Milwaukee—North Milwaukee Fdry. Co., Commerce Ave., plans 1 story, 50 x 150 ft., brick foundry, plain foundation, to replace one destroyed by fire. Private plans.

Wis., Racine—F. J. Greene Eng. Wks., 1028 Douglas Ave., had plans prepared by E. B. Funston Co., archts., Janes Bldg., 3 story, 45 ft. high, 53 x 100 ft., rein.-con. and brick factory, plain foundation, Douglas Ave. **$60,000.**

Minn., Bemidji—Minnesota Associated Lumber Co. plans lumber mill. $500,000. Architect not announced.

Minn., Minneapolis—T. R. McKenzie, 1050 Plymouth Bldg., had plans prepared by P. O. Moe, archt., 1037 Plymouth Bldg., 1 story and basement, 154 x 164 ft. garage and store building, rein.-con. and brick, 2628 Hennepin Ave. **$50,000.**

Mo., St. Louis—City soon takes bids 1 and 2 story, 50 x 225 ft., brick service plant for training school at Scott Farm. $150,000. W. E. Bowen, 305 City Hall, archt. and engr.

Calif., San Francisco—Crest View Apartments, Inc., c/o J. L. Stewart, archt., Claus Spreckels Bldg., having preliminary plans prepared 1 story and basement garage, rein.-con., Washington St. near Gough St.

Calif., San Francisco—Millbrae Dairy, 834 Octavia St., having plans prepared by J. Reid, Jr., archt., 1st Natl. Bank Bldg., 2 and 3 story dairy plant, steel and concrete, McAllister near Laguna St. $100,000.

Ont., Milton—Smith & Stone plan addition to factory. **$40,000.** Architect not announced.

Ont., Niagara Falls—Dominion Canners Ltd, c/o Chamber of Commerce, plans factory, to exceed **$50,000.** Architect not announced.

Ont., Paris—Penmans Ltd. having plans prepared extending factory. **$50,000.**

Ont., Sarnia—Mueller Mfg. Co. plans to extend plant. **$100,000.** H. Burleigh, mgr.

Ont., St. Thomas—Windsor Machine & Tool Co., 312 Pitt St., Windsor, plans plant here. **$100,000.**

BIDS DESIRED

N. Y., Buffalo—Klepfer Bros., 1029 Main St., taking bids 2 story, 235 x 570 ft. auto service and repair building, brick, Main St. To exceed $40,000. A. H. Hopkins, **447 Main St., archt.**

Industrial Works (Continued)

N. Y., Brooklyn — Rubel Coal & Ice Corp., Glenmore Ave., brick, steel and concrete plant, plain foundation, Atlantic Ave. $500,000. Work will be done by separate contracts under supervision of E. M. Adelsohn, archt. and engr., 1778 Pitkin Ave.

N. Y., New York—Oct. 10, by Dept. Water Supply, Gas & Electricity, Municipal Bldg., brick, steel and concrete garage, plain foundation, East 24th St. and Ave. A. $50,000. Private plans.

Pa., Altoona — See "Railways under Pennsylvania."

Pa., Oil City—E. M. Bowen receiving bids 3 story, 70 x 80 ft. service and repair shop, brick and steel. $45,000. W. H. Crosby, Masonic Bldg., archt. Noted Sept. 28.

Pa., Monongahela—Keystone Garage receiving bids 2 story and basement, 60 x 200 ft., brick, steel, stone and tile garage. $50,000. C. K. Downer, 248 Boylston St., Boston, archt. Noted Sept. 21.

Ind., Hammond—Hammond Dairy Co. taking bids 2 story, 55 x 70 x 153 ft. dairy, brick, 680 Oakley Ave. $100,000. A. C. Berry & Co., Ruff Bldg., archts.

Ill., Elgin—F. D. Chase, Inc., archts., 645 North Michigan Ave., Chicago, receiving bids 3 story factory, rein.-con., brick and steel, State and Schiller Sts., here, for Elgin Stove and Oven Co., 14 Chicago St. $100,000.

Ill., La Grange — Fugard & Knapp, archts., 212 East Superior St., Chicago, receiving bids 1 story, 70 x 160 ft., rein.-con., brick and steel garage, here, for Fleck & Buchholz, 19 West Railroad St., Downers Grove. $50,000.

Wis., Slinger—L. A. Burg taking bids 1 story, 60 x 90 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000. Private plans.

Calif., Petaluma—B. Jones, archt., Petaluma, receiving bids 110 x 210 ft. hollow tile packing plant, for Poultry Producers of Central California, 323 East Washington St., Petaluma, and 700 Front St., San Francisco. Noted Sept. 21.

CONTRACTS AWARDED

Mass., Malden—Wadsworth-Howland & Co., 139 Federal St., Boston, 5 story, 55 x 190 ft. warehouse, rein.-con. and brick, plain foundation, to W. Daniels Co., 161 Exchange St., Worcester. Archts. est. $150,000.

R. I., Providence—Colvin Fdry. Co., 185 Globe St., 1 story, 60 ft. high, 100 x 100 ft. foundry, brick and steel, plain foundation, Globe St., to C. I. Bigney Constr. Co., 357 Westminster St. Archts. est. $75,000.

Conn., Norwalk—E. M. Jennings Co., 27 Harrison St., Bridgeport, 1 story, 15 ft. high, 55 x 55 ft. garage and service station, brick, steel and concrete, plain foundation, West Ave., here, to A. R. Malkin & Co., 3 Mechanic St. Archts. est. $40,000.

N. Y., Batavia—P. W. Minor & Son, Inc., State St., 4 story, 43 x 140 ft. shoe factory, brick, to R. N. Reed, Batavia. Archts. est. $100,000. Noted Sept. 28.

N. Y., Brooklyn — United Last Co., 91 Worth St., New York, 3 story and basement, 80 x 131 ft. and 1 story, 16 x 30 ft. additions to plant, Classon Ave. and Clifton Pl., here, to Turner Constr. Co., 244 Madison Ave., New York, under supervision of W. Higginson, archt., 13 Park Row, New York.

N. Y., Geneva—Lisk Mfg. Co., Canandaigua, 160 x 280 ft. enamel ware plant, here, to Curan-Mason Inc., Rochester, (street address not available). Archts. est. $1,000,000. Noted Sept. 21.

N. Y., Long Island City—Perry Candy Co., 408 West Bway., New York, brick, steel and concrete factory, plain foundation, Wilbur Ave., here, to Ettinger Contg. Co., 44 Court St., Brooklyn. Archts. est. $75,000. Noted Sept. 21.

Pa., Jeannette—Amer. Window Glass Co., Farmers Bank Bldg., Pittsburgh, 1 story, brick and steel addition to plant, here, to Heyl & Patterson, Inc., 51 Water St., Pittsburgh. Archts. est. $1,500,000. Noted Sept. 14.

Pa., Phila.—Miller North Broad Storage Co., 2715 North Broad St., 7 story and basement, 71 x 104 ft., rein.-con. and brick storage plant, plain foundation, 52nd and Baltimore Aves., to J. N. Gill Constr. Co., Otis Bldg. Archts. est. $700,000.

Md., Williamsport—Potomac Public Service Co., Hagerstown, 30,000 k.w. steam generating plant, here, to Sanderson & Porter, 52 William St., New York City, $2,000,000.

W. Va., Coalwood—Consolidation Coal Co., Watson Bldg., Fairmont, general contract 1 story, 35 x 50 ft. boiler house, steel and tile, to Rust Eng. Co., 1901 5th Ave., Pittsburgh, Pa. Archts. est. $90,000.

O., Cleveland—Cleveland Electric Illuminating Co., Illuminating Bldg., Pub. Sq., 3 story, 35 x 168 ft., rein.-con., brick and steel switchhouse, also 337 ft. rein.-con. tunnel, 7 ft. 7 in. diameter, East 70th St., to S. W. Emerson Co., 1836 Euclid Ave. Archts. est. $200,000.

O., Cleveland—W. Koehl, archt., 906 Park Bldg., 2 story, 50 x 130 ft., brick, steel and concrete garage, West 30th St. and Lorain Ave., to C. E. Lewis, 11512 Gray Ave., for West Center Sales Co. Archts. est. $40,000. Noted July 20.

O., East Cleveland (Cleveland P. O.)—Windemere Transfer & Moving Co., 14136 Euclid Ave., 6 story, 50 x 120 ft., brick and concrete storage warehouse, Euclid and Doan Aves., (1st unit of 3 story), to A. A. Lane Constr. Co., 1869 East 55th St., Cleveland. Archts. est $150,000.

Wis., Milwaukee — Nash Motor Co., Clement Ave, 1 story, 22 x 950 ft., brick, steel and concrete factory, to H. K. Ferguson Co., 6523 Euclid Ave., Cleveland, O. Engrs. est. $350,000.

Wis., Racine—Jacobson Auto Co., 1820 West 6th St., 2 story, 60 x 120 ft., brick and concrete garage, plain foundation, to J. L. Sorensen, 1805 West 6th St. Engrs. est. $40,000.

Ia., Des Moines—E. W. Nothstine, 6 story and basement, 127 x 264 ft., rein.-con., brick, terra cotta and stone garage, 5th and Chestnut Sts., to W. F. Kucharo & Co., 622 Hubbell Bldg. Archts. est. $300,000.

Minn., Buhl—Hanna Ore Mining Co., 909 Fidelity Bldg., Duluth, 80 x 106 ft. machine shop, 38 x 124 ft. office and warehouse, 20 x 20 ft. oilhouse, all foregoing 2 story, and 24 x 52 ft. garage, brick, at Wabigon Mine, to Warden & Allen, 208 South LaSalle St., Chicago, $115,000.

Mont., Glendive—Northern Pacific Ry. Co., 5th and Jackson Sts., St. Paul, Minn., labor and material except cement (which owner furnishes) for 30 x 45 x 94 ft., power house and engine room, brick and concrete with overhead steel coal bunker, 2 story and basement, 22 ft. high, 50 x 153 ft., storehouse, brick and concrete, to Winston-Grant Co., 902 Exch. Bank Bldg., St. Paul, Minn.

Mo., Kansas City—White Co., 2001 Grand Ave., general contract 2 story and basement, 100 x 250 ft., garage and sales building, 29th and Walnut Sts., to Bliss Constr. Co., 510 Lathrop Bldg. Archts. est. $100,000

Calif., Sacramento — State Dept. Pub. Wks., 2 story, 160 x 160 ft. printing plant, to Davison & Nicolsen, 180 Jessie St., San Francisco, $94,800. Noted Sept. 21.

Buildings

PROPOSED WORK

Mass., Boston—Apartment—Yarchin & Fluck, c/o Silverman, Brown & Heenan, archts., 51 Cornhill, having plans prepared 5 story, 100 x 110 ft., brick and steel, Audubon Rd. $200,000-$225,000.

Mass., Roxbury (Boston P. O.)—Synagogue—Congregation Mishkan Tefila, c/o Krakyn, Browne & Rosenstein, archts., 7 State St., Boston, having plans prepared 2 story, 74 x 163 ft., limestone, Seaver St. and Elm Hill Ave. $500,000. A. A. Bloom, chn. bd. dirs.

Mass., Worcester—School—J. W. Donahue, archt., 476 Main St., Springfield, soon takes bids 3 story, 12 room, brick, for St. Casimirs Lithuanian Church. J. J. Jakaitis, pastor. $150,000. Noted July 6.

Conn., Hartford — Synagogue — Adoth Israel Congregation plans synagogue. $500,000. J. S. Holstein, 33 Irving St., pres. Architect not selected.

N. Y., Albany—Bank—President City Savings Bank, 100 State St., soon takes bids 10 story and tower, 227 ft. high, 48 x 186 ft., with two 24 x 40 ft. courts, rein.-con., brick and steel, State St. $2,500,000. M. T. Reynolds, 100 State St., archt. Noted April 20.

N. Y., Brooklyn—Clubhouse—Knights of Columbus, 244 West 51st St., New York, plans brick, steel and stone, plain foundation, Prospect Park West and Union St. $2,000,000. Architect not selected.

N. Y., Brooklyn—Hospital—Jewish Hospital, Prospect Pl., soon lets contract 5 story, 70 x 105 ft., brick, steel and stone addition, plain foundation, Prospect Pl. near Classon Ave. E. C. Blum, pres. Ballinger Co., 47 West 34th St., New York, archts. and engrs.

N. Y., Jamestown — Community — St. James Roman Catholic Church, plans 2 or 3 story, 100 x 190 ft., brick, Allen and Institute Sts. To exceed $150,000. J. Carra, pastor. Architect not announced.

N. Y., New York—Apartment—Jatisen Constr. Co., c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., having plans prepared 14 story, 160 x 122 ft., brick, steel and stone, plain foundation, 1050 Park Ave. $1,500,000.

N. Y., New York—Hospital—Dept. Pub. Welfare, Municipal Bldg., having plans prepared by C. B. Meyers, archt. and engr., 31 Union Sq., brick, steel and stone, plain foundation, Walton Ave. and 167th St. $2,500,000.

N. Y., New York—Office—Fain Knitting Mills, 902 Park Ave., Brooklyn, plans 12 story, brick, steel and stone, plain foundation, Bway. and 34th St., here. Architect not selected.

N. J., Camden—High School—Bd. Educ., City Hall, soon takes bids 2 story and basement, Park Blvd. and Euclid Ave. $450,000. C. Adams, 2036 Spruce St., Phila., archt.

N. J., Newark—School—Bd. Educ., City Hall, Broad St., having preliminary plans prepared by Guilbert & Bettelle, archts. and engrs., 2 Lombardy St., brick, steel and stone addition, plain foundation, Montieth St. $200,000.

Pa., Annville—High School—Bd. Educ. plans brick high school. $150,000. Architect not announced.

Pa., Lock Haven—Lodge—Local Masonic Lodge having plans prepared by Stearns & Woodnutt, archts., St. Girard Bldg., Phila., 3 story, 60 x 160 ft. brick and steel, Main and Grove Sts. $150,000.

Pa., Phila.—Lodge—I. O. R. M., 61 East Race St., soon takes bids 3 story and basement, rein.-con., brick and steel, 61st and Race Sts. $500,000. R. C. Loos, 2218 Chestnut St., archt.

Pa., Phila. — Office — I. Stern, Lincoln Bldg., soon takes bids 8 story, rein.-con., brick and steel, 15th and Spruce Sts. $500,000. L. B. Rothschild, 1225 Sansom St., archt.

Pa., Pittston—School—Bd. Educ. plans school in 4th Ward Park. $180,000. Architect not announced.

D. C., Wash. — Apartment — Kennedy Bros., 2400 16th St., having plans prepared by Sonneman & Justeman, archts., Davidson Bldg., 3 apartment houses. Total est. $1,000,000.

Va., Williamsburg — Dormitory—College of William and Mary had plans prepared by C. M. Robinson, archt. and engr., Times-Dispatch Bldg., Richmond, 4 story, 50 ft. high, 64 x 80 ft., brick and steel. $200,000.

Tenn., Memphis—Church—A. E. Jones, V. L. Simmons, J. C. Ayres and W. E. Milliken, bldg. com. of Methodist Church, having plans prepared by H. T. McGee, archt., Madison Ave. Bldg., brick and stone, Union and Cooper Sts. $150,000.

Tenn., Morristown—School—Bd. Educ. having plans prepared by C. T. Jones, archt., Market St., Chattanooga, 3 story and basement, 150 x 200 ft., 1st South St. $150,000.

O., Cleveland — Apartments — Garden Court Realty Co., c/o G. H. Grieble, archt., 517 Sloan Bldg., had plans prepared ten 3 story and basement, 45 x 60 ft., brick and timber, plain foundations, Euclid Ave. and East 77th St. $400,000.

O., Cleveland—Bank and Office—Brotherhood of Locomotive Engrs., c/o W. S. Stone, pres., Engineers Bldg., having plans prepared by Knox & Elliot, archts., Engineers Bldg., 21 story, 94 x 144 ft., brick, steel and concrete, West 3rd St. and St. Clair Ave. $5,000,000.

O., Columbus—School—Bd. Educ., Town and High Sts., having plans prepared by H. D. Smith, archt., 50 East Town St., 2 story, 125 x 145 ft., brick and concrete, Fairwood Ave. $190,000.

O., Lakewood (Cleveland P. O.)—Commercial and Apartment—M. Buckovitz, 3368 East 116th St., Cleveland, having plans prepared by M. Altschuld, archt., 5116 Woodland Ave., Cleveland, 3 story and basement, 100 x 100 ft., brick and timber, Madison and McKinley Aves., here. $150,000.

Ind., Bloomington—Chapel—Indiana University plans 2 story and basement, stone, 3rd St. $500,000. Architect not selected.

Ind., Gary—Theatre—V. N. Young, 451 Jefferson St., plans 3 story and basement, 72 x 200 ft., brick. $150,000. **Architect not** selected.

Buildings (Continued)

Ind., Laporte—High School—School Bd. having plans prepared by Miller. Bullenvider & Dowling, archts., North Michigan Ave., Chicago, 2 story and basement, 160 x 175 ft., brick. $300,000.

Ind., South Bend—Apartment—R. Elbel plans 4 story and basement, 165 x 235 ft., brick, North Michigan St. $350,000. Architect not selected.

Ind., Whiting—Lodge—F. & A. M. Lodge 613 having plans prepared by C. Hatzfeld, archt., 7 South Dearborn St., Chicago, 3 story and basement, 90 x 100 ft., brick and rein.-con. $150,000.

Mich., Detroit — Mercantile — Himelhoch Bros. & Co., 1230 Woodward Ave., plan to convert 7 story and basement, 60 x 75 ft. and 75 x 100 ft. rein.-con., brick and steel office building into mercantile building. $200,000 A. Kahn, 1000 Marquette Bldg., archt.

Ill., Decatur — Temple — Masonic Assn. plans temple, steel dome, here. $500,000. S. A. Clausen, 517 Milliken Bldg., archt.

Wis., Beloit—Office—Beloit Water, Gas & Electric Co., 429 East Grand Ave., having plans prepared by Hetherinton & Krieg, archts., Goodwin Blk., 4 or 6 story, rein.-con. and brick, plain foundation. Pleasant St. $150,000.

Wis., Milwaukee—Apartment—Voelz & Siebert, archts., 373 Bway, preparing preliminary plans 3 story and basement, 50 ft. high, 78 x 100 ft., L shaped, brick and concrete, plain foundation. $150,000. Owner's name withheld.

Wis., Milwaukee—Office and Theatre—Rapp & Rapp, archt., 190 North State St., Chicago, soon take bids 6 story, 180 x 225 ft., 6th and Grand Sts., for Sixth & Grand Bldg. Corp., c/o archits. $500,000.

Ia., Cedar Rapids—Lodge—Shriners and F. W. Runkle, 10th St. near A Ave., having plans prepared and open bids in spring, 2 story and basement, 140 x 180 ft., rein.-con., brick, tile and stone, 6th St. and Q Ave. $300,000. Archt. not announced.

Ia., Sioux City—Hospital—Bd. Trustees New Samaritan Hospital, plans 3 or 4 story and basement, rein.-con., brick, tile and stone, 29th and Douglas Sts. $250,000. E. J. Stason, pres. Architect not announced.

Minn., Chisholm — High School—Bd. Educ. takes bids about Dec. 1, 3 story and basement, rein.-con., brick and tile. $750,000. German & Jensen, Exchange Bank Bldg., Duluth, archts. Noted Jan. 20, 1920.

Minn., Wadena—Hotel—Merchants Hotel had plans prepared 4 story and basement, 75 x 100 ft., rein.-con., brick and tile. $150,000. Architect not announced.

Kan., Kansas City—Memorial—City had plans prepared by Rose & Peterson, archts., 434 Brotherhood Bldg., and soon takes bids 3 story and basement, 75 x 120 ft., stone, rein.-con. and terra cotta, 7th and Barnett Sts. $500,000.

Kan., Topeka—Hotel—Topeka Hotel Co. having preliminary plans prepared by T. W. Williamson & Co., archts., 312 Central Bldg., 10 story and basement, 75 x 150 ft., brick, stone and rein.-con., containing 200 rooms. $600,000.

Kan., Winfield — College — Southwestern College, c/o H. S. Conron, 623 Beacon Bldg., Wichita, having plans prepared by H. A. Noble, archt., Reliance Bldg., Kansas City, Mo., and takes bids in October, 3 story and basement, 150 x 170 ft., stone, here. $200,000. Henrici-Lowry, Commerce Bldg., Kansas City, Mo., structural engr.

Mo., Jefferson City—Hotel—C. J. Huegel plans fireproof hotel. $500,000. Hellmuth & Hellmuth, De Menil Bldg., St. Louis, archts.

Mo., St. Louis—Club Hotel—City Club, Bd. Educ. Bldg., soon takes bids 12 story, 60 x 122 ft., rein.-con., 11th and Locust Sts. $700,000. T. P. Barnett Co., 1549 Arcade Bldg., archts. and engrs.

Tex., Georgetown—High School—School Bd. Having plans prepared by C. H. Page & Bros., archts., Austin Natl. Bank, Austin, 2 story, rein.-con. and brick. $200,000.

Tex., Waco—Library—Baylor University, 5th and Speight Sts., had plans prepared by B. C. Easterwood, archt., 412 Praetorian Bldg., 2 story and basement, rein.-con. and brick, plain foundation. $150,000.

Okla., Okmulgee—Club—Elk Lodge 1136, having plans prepared by Smith & Senter, archts., Okmulgee, 4 story and basement, 50 x 130 ft., brick, concrete and stone. $200,000.

Calif., Fresno—Cathedral and Store—Lodge of Perfection No. 6, Scottish Rite Masons, having plans prepared by C. Werner, archt., Humboldt Bank Bldg., San Francisco, 4 story, fireproof construction, Stanislaus and L Sts. $250,000. T. R. Thompson, 1st Natl. Bank Bldg., secy.

Calif., Madera—Hospital—Madera Co. to vote on $150,000 bonds in November for hospital. Architect not selected.

Calif., Mountain View—High School—Mountain View Union High School Dist. voted $197,000 bonds for high school. Architect not selected.

Calif., Oakland—Cathedral—Scottish Rite Bodies, A. & A. S. R., had preliminary plans prepared by C. Werner, archt., Humboldt Bank Bldg., San Francisco, cathedral, 14th and Alice Sts. $1,000,000.

Calif., Oakland—High School—City having preliminary plans prepared by C. W. Dickey, city school archt., City Hall, high school, Park Blvd. and Hopkins St. $100,000 available at this time, which will finance construction of first unit. Total cost $1,000,000.

Calif., San Francisco — Apartment — Kiernan & O'Brien, 110 Sutter St., had plans prepared by A. W. Burgren, archt., French Bank Bldg., 6 story and basement, 68 x 121 ft., rein.-con. and steel, Geary St. near Taylor St. $225,000.

BIDS DESIRED

N. Y., Brooklyn—Store and Office—S. Ageloff and H. Wittemann, 26 Court St., brick, steel and stone, plain foundation, Flatbush Ave. extension and De Kalk Ave. $250,000. Work will be done by separate contracts. Private plans.

N. Y., New York—Court House—Oct. 9, by H. Bruckner, pres. Bronx Boro, Tremont and 3rd Aves., brick, steel and stone, plain foundation, East 161st St. between Washington and Brook Aves. $200,000.

N. Y., New York—Office—Harby, Abrons & Melins, 15 East 40th St., 11 story, 100 x 110 ft., brick, steel and stone, plain foundation, 27 West 60th St. $1500,000. Work will be done by separate contracts. Rouse & Goldstone, 512 5th Ave., archts. and engrs.

N. Y., New York—Store and Office—Barrett Estate, c/o W. Hohauser, archt. and engr., 116 West 39th St., 8 story, 50 x 100 ft., brick, steel and stone, plain foundation, 566 7th Ave. $200,000. Work will be done by separate contract under supervision of architect.

N. J., Ocean City—Hotel—Nov. 15, by V. B Smith, archt., Guarantee Trust Bldg., Atlantic City, 8 story, 150 x 235 ft., brick, stucco and steel, plain foundation, here, for J. B. Slocum. $800,000

Pa., Oakmont—Store and Apartment—H. Reinhold, Jr., archt., 1513 Walnut St., Phila., taking bids 3 story and basement, 180 x 181 ft., brick and steel, plain foundation, here, for Deavshall Co., Inc. $350,000. Noted Sept. 21.

Pa., Phila.—Store and Loft—Ballinger & Co., archts., 12th and Chestnut Sts., taking bids 9 story, 58 x 183 ft. and 34 x 74 ft., rein.-con. and brick, plain foundation, 112-22 North 12th St., for W. E. Herring, 112 North 12th St. $750,000. Noted Sept. 7.

D. C., Wash. — Church — Oct. 12, by Ballinger & Co., archts., 12 East Chestnut St., Phila., 5 story and basement, 129 x 152 ft., rein-con., brick, steel and cut stone, plain foundation, Maryland Ave., here, for Methodist Episcopal Church. $500,000.

Ga., Atlanta—Schools—Oct. 10, by Bd. Educ., c/o J. N. Landers, City Hall, 2 story and basement, 102 x 371 ft., rein.-con., marble, steel terra cotta, granite, brick and tile, Rawson, Cooper and Eugenia Sts.; 2 story and basement, 197 x 311 ft., with 2 wings, rein.-con., terra cotta, concrete, steel, brick and tile, rock foundation, Faith St. D. Smith, Grant Bldg., archt., for former. W. J. J. Chase, Peachtree Bldg., archt. for latter. A. T. Brown, Forsyth Bldg., engr.

Fla., Plant City—Hotel—Nov. 1, by M. L. Elliott, archt., 413 Curry Bldg., Tampa, 7 story, 105 x 105 ft., brick and steel, Reynolds and Evans Sts., for Plant City Hotel Corp. $150,000. Noted Sept. 14.

Ind., Evansville—High School—Oct. 26, by School Bd., 2 story and basement, 175 x 290 ft., brick and steel, Harlan Ave. $500,000. J. C. Llewellyn Co., 38 South Dearborn St., Chicago, archts. Noted Aug. 17.

Ind., Indianapolis—Hospital and Nurses' Home—Oct. 11, by Bd. of Health, for hospital, 3 story and basement, 44 x 136 ft. with 36 x 40 ft. wing, $175,000, nurses' home, 4 story and basement, 40 x 197 ft. with 38 x 48 ft. wing, $225,000, both brick and hollow tile, Margaret St. A. Scherrer, Indiana Trust Bldg., archt. Noted July 20 and Feb. 9.

Ind., South Bend—Hotel—Oliver Hotel Co., Main and Washington Sts., taking bids 7 story and basement, 65 x 125 ft. addition, brick and rein.-con. $600,000. H. H. Green, 30 North Michigan Ave., Chicago, archt. Noted Jan. 12.

Mich., Dearborn—Engineering Laboratory—A. Kahn, archt., 1000 Marquette Bldg., Detroit, receiving bids and opens same about Oct. 12, 1 story, 18 ft. high, 202 x 804 ft., and 2 story, 27 ft. high, 51 x 235 ft., brick, steel, stone and rein.-con., plain foundation, Oakwood Blvd., here, for Ford Motor Co., Highland Park, $250,000.

Mich., Detroit—Apartment—A. Kahn, archt., 1000 Marquette Bldg., receiving bids 10 story and basement, 70 ft. high, 107 x 120 ft., rein.-con., brick and steel, plain foundation, Pingree Ave., for G. Klein, c/o architect.

Mich., Detroit—School—Oct. 10, by Bd. Educ., 2 story and basement, 120 x 130 ft., rein.-con., brick and steel, Clinton and Chene Sts. $150,000. Malcolmson, Higginbotham & Palmer, 405 Moffat Bldg., archts.

Ill., Chicago—Apartment—W. H. Pruyn archt., 122 South Michigan Ave., receiving bids 3 story, 60 x 175 ft., rein.-con., brick and steel, Lotus St. and West End Ave. $150,000. Owners name withheld.

Ill., Paris—Hotel—Paris Hotel Co. receiving bids 4 story and basement, 60 x 130 ft., brick, here, $200,000. Johnson, Miller & Miller, 30 North 5th St., Terre Haute, Ind., archts. Noted Aug. 10.

Wis., Milwaukee—Apartment—Harris & Jillson, archts., 190 North State St., taking bids 3 story, 125 x 135 ft. $225,000. Owner's name withheld.. Noted June 29.

Wis., Superior—High School—Oct. 17, by L. A. Nichols, secy. Bd. Educ., 2 story and basement, 105 x 256 ft., rein.-con., brick and tile, West 5th St. $250,000. F. E. Johnson, 25 Wisconsin Blk., archt. and engr.

Minn., Duluth—Jail—Nov. 1, by F. W. Borgen, aud. St. Louis Co., 4 story and basement, 49 x 132 ft., rein.-con., granite and terra cotta, 2nd St. and 6th Ave. E. $400,000. Holstead & Sullivan, 407 Palladio Bldg., archts. and engrs. Noted Aug. 3.

Minn., Winona—Theatre—Oct. 12, by Beyerstedt Amusement Co., 2 and 3 story and basement, 36 and 54 ft. high, 60 x 140 ft., rein.-con., brick and tile. $150,000. W. F. Queisser, secy. O. A. Merman, 210 Linker Bldg., LaCrosse, Wis., archt.

Neb., Holdredge—High School—Oct. 17, by Bd. Educ., high school, Davis & Wilson, 515 Security Mutual Bldg., Lincoln, archts. Noted March 2.

Mont., Butte—Lodge—Oct. 10, by Masonic Temple Assn. 3 story and basement, 90 x 100 ft., rein.-con., brick, tile and stone addition. $200,000. W. W. Smith, 10 Richmond Apts., Butte, and Link & Haire, Helena, archts. Noted June 8.

Mo., Columbia—Hospital—Oct. 16, by E. E. Brown, business mgr., 117 Jesse Bldg., 3 story, brick, plain foundation, for Missouri University. $175,000-$200,000. Jamieson & Spearl Arcade Bldg., St. Louis, archts. Noted Feb. 2.

Calif., Exeter — School — Oct. 14, by Trustees Exeter High School Dist., 3 rein.-con. high schools. $150,000. W. H. Weeks, 369 Pine St., San Francisco, archt. Noted June 22.

BIDS RECEIVED

Ia., Waterloo — Apartment — Walnut Realty Co., c/o F. Adams, pres., 302 Walnut St., general contract, 4 story and basement, 100 x 230 x 315 ft., brick, steel, tile and stone, Walnut, Pine and Iowa Sts., from H. Evers, 656 Builders Exch., $248,000; Madsen & Peterson, 646 Builders Exch., $252,650; Beck Eng. & Constr. Co., 1137 Plymouth Bldg., $256,000. All contractors of Minneapolis, Minn.

Calif., San Francisco—Church and School—Roman Catholic Archbishop of San Francisco, 1100 Franklin St., 3 story, rein.-con. and steel, Filbert St. near Powell St., from Grace & Bernieri, Claus Spreckels Bldg., $160,000; R. Trost, 26th and Howard Sts., $167,000; Fennell & Chisholm, 180 Jessie St., $172,047. Noted Aug. 31.

CONTRACTS AWARDED

Mass., Boston—Office—Realty Investment Trust ,c/o Coolidge — Shattuck, archts., 122 Ames Bldg., 12 story, 105 x 110 ft., brick, rein.-con. and steel plain foundation, Beacon and Somerset Sts., to G. A. Fuller Co., 131 State St. Archts. est. $1,250,000.

Mass., Shrewsbury—High School—Bd. Educ., 2 story and basement, 66 x 161 ft., brick and steel, plain foundation, Main St., to J. J. Powers, 15 Ashland St., Worcester. Archts. est. $150,000. Noted Sept. 7.

Buildings (Continued)

N. Y., Brooklyn—Exchange—New York Telephone Co. 15 Dey St., New York, 8 story, brick, steel and stone, plain foundation, Willoughby Ave. here, to James Stewart & Co., 30 Church St., New York. Archts. est. $1,000,000. Noted March 2.

N. Y., Brooklyn—Schools—C. B. J. Snyder, supt. School Buildings, Concord St., P. S. 193, Ave. L, to T. A. Clarke Co., 122 Livingston St., $567,000; P. S. 192, 18th Ave., to G. F. Driscoll Co., 115 Schermerhorn St., $572,990. Noted Sept. 28.

N. Y., Coney Island (Brooklyn P. O.)—Bank—Bank of Coney Island, Surf Ave., brick and stone, plain foundation, Surf Ave., to F. G. Fearon, 280 Madison Ave., New York City. Archts. est. $150,000. Noted June 22.

N. Y., New York—Apartments—Joint Ownership Constr. Co, c/o Rouse & Goldstone, archts. and engrs., 512 5th Ave., 2 brick, steel and stone, plain foundations, Lexington Ave. and 69th St., to Hegeman-Harris, 184 Madison Ave. Archts. est. $750,000 each.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., brick, steel and stone, plain foundation, East 184th St., to E. E. Paul, 101 Park Ave. Archts. est. $200,000. Noted Sept 28.

N. Y., New York—Office—Nine to Eleven East 41st St. Corp., c/o Townsend, Steinle & Haskell, archts. and engrs., 8 West 40th St., 12 story, 44 x 93 ft., brick, steel and stone, plain foundation, 9-11 East 41st St., to Fountain & Choate, 110 East 23rd St. Archts. est. $300,000

N. Y., New Rochelle—Apartment—Pintard Apartments, Inc., c/o E. D. Litchfield, archt. and engr., 477 5th Ave., New York, 6 story, 100 x 152 ft., brick, steel and stone, plain foundation, Main St. and Pintard Ave., here, to T. J. Steen, 8 East 41st St., New York. Archts. est. $500,000.

Pa., Abbottstown—Home—Paradise Protectorate, Harrisburg, 2 story, 55 x 110 ft. brick and steel, plain foundation, here, to J. Stapf, 2246 North 3rd St., Harrisburg.

Pa., Easton—Gymnasium—Lafayette College, 1 story and mezzanine, 106 x 110 ft., rein.-con., brick and steel, plain foundation, to C. McCaul Co., 1713 Sansom St., Phila. $300,000.

Pa., Phila.—Auditorium—Women's Club of Germantown, 2½ story and basement, 70 x 90 ft., rein.-con., brick and steel, plain foundation, Germantown Ave. and Washington Lane, to S. Harting & Sons, 20 East Jackson St. Archts. est. $205,000.

Pa., Pottstown — School — School Bd., 2 story and basement, 66 x 130 ft., rein.-con., brick and steel, plain foundation, to F. H. Kaiser, Pottstown. Archts. est. $200,000.

Pa., Scranton—Store and Office—C. A. Rehrig, 133 Adams Ave., 3 story, 41 x 141 ft., brick and stone, Adams Ave., to Beilman & Son, 220 Ash St. Archts. est. $150,000.

W. Va., Beckley — Bank and Office — Beckley Natl. Bank, 1 story, 50 x 70 ft., brick and stone, Fayette and Main Sts., to J. O. Freeman, Beckley, $115,000. Noted Aug. 17.

Ga., Atlanta—Apartment—E. D. Duncan, Grant Bldg., 9 story and basement, rein.-con., steel and brick, rock foundation, Peachtree and West Peachtree Sts. to Gude & Co., Chandler Bldg., $500,000.

Ga., Atlanta—Schools—For 2 story and basement, brick and tile annex, rock foundation, on English Ave. and Pelham St., to Barge Thompson Co., Brandon Bldg., $179,000; 4 story and basement, rein.-con., rock foundation, Cherry and West 3rd Sts., to Pittman Constr. Co., Rhodes Bldg., $175,000; 3 story, brick annex, rock foundation, Lucile Ave. and Railroad Sts., to W. P. Francis, 74 Marietta St., $174,165; 2 story and basement, concrete, steel and brick, rock foundation, Virginia Ave., to A. G. Krebs Constr. Co., Rhodes Bldg., $146,393; 2 story and basement, concrete, steel, brick and tile, rock foundation, Ivy St. to W. H. George, 74 Marietta St., engrs. est. $143,932; 2 story and basement, concrete, steel and brick, rock foundation, (Roach Mitchell School), and 2 story and basement, concrete, steel and brick, rock foundation (Summer Hill School), to Southern Ferro Concrete Co., Trust Co. of Georgia Bldg., $165,589 and $151,303 respectively.

O., Canton—School—Bd. Educ. 2 story and basement addition, to M. Katzman & Sons, 906 Home Savings & Loan Bldg., Youngstown, $172,512.

O., Cleveland — Apartments — Seventy-Seven-Eleven Euclid Co., c/o T. C. Minor, archt., 9501 Wade Park Ave., two 4 story, 44 x 200 ft., brick, 7711 Euclid Ave., to A. Laws, 2206 East 93rd St.

O., Cleveland—High School—Bd. Educ., East 6th St. and Rockwell Ave., 3 story and basement, 300 x 311 ft., brick, steel and concrete, East 152nd St. and St. Clair Ave., to Drummond-Miller Co., 4500 Euclid Ave., $1,681,865. Noted Sept. 28.

O., Warren—Commercial—Union Savings & Trust Co., 3 story, 52 x 100 ft., terra cotta front, East Market St., to C. Shutrump, Warren, and 407 Home Savings & Loan Bldg., Youngstown. Archts. est. $200,000.

O., Youngstown—School—Bd. Educ., addition to school on Hillman, Princeton and Sherwood Sts., to Moore-Lamb Constr. Co., 203 Stambaugh Bldg., $310,000. Archts. est. $300,000. Noted April 27.

Mich., Detroit—Office—Detroit Life Insurance Co., 4709 Woodward Ave., 10 story and basement, 124 ft. high, 40 x 96 ft., rein.-con., brick and steel, Park Blvd., to O. Misch Co., 1370 Bway. Ave., $287,000.

Ill., Chicago—Apartment—F. J. Campbell, 68th and Merrill Sts., 3 story, 112 x 120 ft., on 68th and Merrill Sts., and 3 story, 68th and Crandon Sts., both rein.-con., brick and steel, to D. O. Crilly Constr. Co., 68th and Merrill Sts., $150,000 each.

Ill., Chicago—Apartment—F. J. Campbell, 68th and Merrill Sts., 3 story, 120 x 125 ft., rein.-con., brick and steel, 68th and Clyde Sts., to D. O. Crilly, 68th and Merrill Sts. Archts. est. $450,000.

Ill., Chicago — Apartment — Edelson & Paulin, c/o Loewenberg & Loewenberg, archts., 111 West Monroe St., 8 story, 150 x 150 ft., rein.-con., brick and steel, 2418-28 Pine Grove Ave., to O. W. Rosenthal-Cornell Co., 80 East Jackson Blvd. Archts. est. $1,000,000.

Ill., Chicago — Apartment — F. B. McGough, c/o Harris & Jillson, archts., 190 North State St., 3 story, 120 x 150 ft. rein.-con., brick and steel, Jarvis Ave., to Nelson & Borg, 7648 East Lake Terrace. Archts. est. $175,000. Noted May 11.

Ill., Chicago—Apartment—P. Zisken, 6141 South May St., 3 story, 110 x 120 ft., rein.-con., brick and steel, 6948-58 Clyde Ave., to H. Entin, 2116 Alice Pl. Archts. est. $150,000.

Ill., Chicago—Gymnasium—Loyola University, Sheridan Rd. and Loyola Ave., 2 story, 95 x 175 ft., rein.-con., brick and steel, 6441-47 Sheridan Rd., to G. W. Stiles Constr. Co., 159 East Ontario St. Archts. est. $200,000.

Ill., Chicago—Hotel—G. F. Adams, c/o J. E. O. Pridmore, archt., 38 South Dearborn St., 3 story and basement, 50 x 150 ft., rein.-con., brick and steel 4826-30 Winthrop Ave., to A. and E. Anderson Co., 19 South La Salle St. Archts. est. $200,000.

Wis., Milwaukee — Hospital — Columbia Hospital, Maryland and Hartford Aves., 5 story and basement, 70 ft. high, 30 x 100 ft., rein.-con. and brick addition, plain foundation, Maryland Ave., to J. L. Stanage, 3216 Vliet St. Engrs. est. $150,000.

Ia., Des Moines—Apartment—Fleisher Constr. Co., 606 Builders Exch. Bldg., Minneapolis, Minn., 6 story and basement, 138 x 170 ft., rein.-con., brick and steel, 3340 West Grand St., by day labor. $750,000. Vorse, Kraetsch & Kraetsch, 911 S and L Bldg., archts.

Ia., Sioux City—Store and Office—War Eagle Hotel Co., c/o F. M. Pelletier, pres., 413 Pierce St., 2 story and basement, 150 x 150 ft., brick, concrete, steel and terra cotta, 6th and Pierce Sts. to K. B. White, Davidson Bldg., $141,000.

Tex., San Antonio—Hotel—H. H. Rogers, Central Trust Bldg., and associates, 9 story, 100 x 100 ft., rein.-con. and brick, to J. DePuy, Bedel Bldg., $300,000.

Okla., Tulsa—Temple—Akdar Temple, 3 story, 150 x 200 ft., 4th and Denver Sts., to Sutherland Constr. Co., Syndicate Trust Bldg., St. Louis, Mo. Archts. est. $800,000. Noted May 11.

Mo., Kansas City—Church—St. Vincent Parish 1 story and basement, 40 x 200 ft., rein.-con., stone and steel, Flora Ave. and South 31st St., to Midwest Building Co., 3108 Flora Ave. Archts. est. $200,000.

Mo., Springfield—Hotel—Colonial Hotel Co., St. Louis and Jefferson Sts., 6 story and basement, 44 x 90 ft., brick, steel and concrete, to Caldwell & Son, State Savings and Trust Bldg., Indianapolis, Ind. Archts. est. $200,000.

Calif., San Francisco — Club — Women's Athletic Club, 6 story addition, Sutter St. near Mason St., to Mission Concrete Co., New Call Bldg., $135,000. Noted Aug. 10.

Federal Government Work

PROPOSED WORK

N. Y., Chelsea — Brick — Treas. Dept., Wash., D. C., rejected bids furnishing and delivering 5,000,000 brick at site of proposed U. S. Veterans' Hospital, here. Noted Aug. 31.

Md., Camp Holabird—Quarters — Constructing Quartermaster, Camp Holabird, plans to convert Bldgs. 709 and 710 into officers' quarters.

Va., Camp Eustis — Repairs—Constructing Quartermaster, Camp Eustis, plans to repair wharf, here.

Va., Norfolk — Filling — Constructing Quartermaster, Norfolk, plans filling around piling at Army Depot.

Ga., Savannah—Catamarans—Constructing Quartermaster, Savannah, plans pontoon catamarans and pipe for Dredge Morgan.

Fla., Pensacola—Steam Distribution System—Spec. 4715—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans steam distribution system, here.

Ala., Montgomery—Barge—Constructing Quartermaster, Montgomery, plans steel barge.

O., Columbus—Replacing Boilers—Constructing Quartermaster, Columbus, plans replacing boilers in Bldg. 57.

Kan., Ft. Leavenworth — Remodeling — Constructing Quartermaster, Ft. Leavenworth, plans converting Bldg. 53 into school.

Tex., Ft. Bliss—Hangars—Constructing Quartermaster, Ft. Bliss, plans 2 steel hangars, here.

Calif., Mare Island—Storage Plant—Spec. 4717—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans fuel oil storage plant, here.

Calif., Tiburon—Water Supply System—Spec. 4716—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans water supply system, here.

BIDS DESIRED

N. H., Portsmouth—Roof—Spec. 4711—Oct. 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., re-roofing Marine Base and boiler house, here.

Mass., Fall River—Extension to Workroom—Oct. 17 by Treas. Dept., Wash., D. C., extension to workroom, here. J. A. Wetmore, acting superv. archt.

R. I., Providence—Dredging—Oct. 30, by U. S. Engineer, Providence, maintenance dredging in Milford Harbor, Conn.; adv. this issue.

N. Y., Buffalo—Superstructure—Oct. 30 at office U. S. Engineer, Buffalo, stone-concrete superstructure on breakwater in harbor; adv. this issue.

N. J., Dover—Sewers—Oct. 11 at office Constructing Quartermaster, 39 Whitehall St., New York City, sewers at Picatinny Arsenal, here; adv. this issue.

Pa., Phila. — Foundations, etc. — Spec. 4736—Oct. 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., foundations and hospital buildings, here

Va., Richmond—Alterations, etc.—Oct. 30, by Treas. Dept., Wash., D. C., alteration, etc., to U. S. Post Office, Court House and Custom House, here. J. A. Wetmore acting superv. archt.

Va., Virginia Beach—Septic Tank, etc.—Spec. 4709—Oct. 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., septic tank and tile drains, here. Noted Sept. 28.

Minn., Rochester—Extension to Workroom, etc.—Oct. 27 by Treas. Dept., Wash., D. C., extension to workroom, etc., in U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Wash., Puget Sound—Dredging—Spec. 4708—Oct. 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging, here. Noted Sept. 28.

Calif., San Diego—Dredging—Oct. 21, at office U. S. Engineer, 725 Central Bldg., Los Angeles, dredging in harbor, here.

BIDS RECEIVED

N. M., Ft. Bayard — Quarters — Treas. Dept., Wash., D. C., officers' and employees' quarters at U. S. Veterans' Hospital, here, from R. E. McKee, 1900 Texas St., El Paso, Tex., $143,200; Romey Bros., El Paso, Tex., $147,500; J. I. Kane & Co., El Paso, Tex. $148,000. Noted Aug. 31.

Alaska, Cordova—Post Office—Treas. Dept., Wash., D. C., for U. S. Post Office, here, from Warrack Constr. Co., Arcade Bldg., Seattle, Wash., $110,300.

Federal Government Works (Continued)

CONTRACTS AWARDED

Mass., Northampton—Hospital—Quartermaster General, 2306 Munitions Bldg., Wash., D. C., group of buildings for U. S. Veterans Hospital here, to G. A. Fuller Co., 949 Bway., New York City, $2,117,000. Noted Sept. 21.

Va., Hampton Roads—Riprap Protection—Spec. 4699—Bureau Yards & Docks, Navy Dept., Wash., D. C., riprap protection for breakwater pier at Naval Operating Base, here, to Arundel Corp., Pier 2, Pratt St., Baltimore, Md., $150,000. Noted Sept. 14.

Fla., Jacksonville—Jetty Repairs—U. S. Engineer, jetty repairs in St. Johns River, to Waterfront Constr. Co., Charleston, S. C., $5.87 per ton. Noted Aug. 24.

Ala., Florence—Barges—U. S. Engineer for 2 steel barges to Charles Ward Eng. Co., South Side, Charleston, W. Va., $34,000. Noted Aug. 24.

Ala., Mobile—Dredge Pontoons, etc.—U. S. Engineer, dredge pontoons and discharge pipe for U. S. Dredge Wahalak, to Penn Bridge Co, Beaver Falls, Pa., $28,903. Noted Aug. 17.

La., New Orleans—Barges—U. S. Engineer, 329 Customhouse, for 2 steel oil barges in Mississippi River, to Midland Barge Co., Midland, Pa., $59,850. Noted Aug. 24.

Mich., Detroit — Boiler — Treas. Dept., Wash., D. C., installation new boiler, in Marine Hospital, here, to R. L. Spitzley Heating Co., 246 Larned St., W., $8,200 (60 days).

Ill., Springfield—Extension—Treas. Dept., Wash., D. C., extension to building and driveway, at U. S. Post Office, here, to L. Van Dorp & Son, 509 Jackson St., Topeka, Kan., $7,202 (90 days).

Ore, Portland—Stone—U. S. Engineer, stone for jetty construction, Yaquina Bay, here, to Miami Quarry Co., Portland (street address not available. $246,600.

Cuba, Guantanamo — Chimney — Spec. 4705—Bureau Yards & Docks, Navy Dept., Wash., D. C., rein.-con. chimney here, to Weber Chimney Co., 322 South Michigan Ave., Chicago, $5,100 (150 days). Noted Sept. 14.

FEDERAL POWER COMMISSION

Applications for Licenses and Permits·

Applications

334—American River Water & Power Co., Auburn, Calif. — Wants preliminary permit for diversion from Rubicon River to Middle Fork of American River. Project includes reservoir at French Meadows in Middle Fork, diversion tunnel and canal to Power house in North Fork, 3 additional diversion dams, canals and powerhouses from No. 1 power house to point on main stream American River near Auburn.

335—Mt. Shasta Power Corp., 445 Sutter St., San Francisco, Calif.—Wants license for 2 transmission lines from Pit River to Cottonwood, Shasta Co.

336—Gannett, Seelye & Carpenter, 204 Locust St., Harrisburg, Pa. — Wants preliminary permit for dam, 20 ft. high, and power house in Juniata River near Newport.

337—P. B. Cross, c/o R. W. Van Norden, Mills Bldg., San Francisco, Calif.—Wants preliminary permit for dam in Deer Creek, 12 mi. tunnel and conduit to power house on same stream, Tehama Co. near Chico.

338—Nevada Irrigation Dist., Grass Valley, Calif.—Wants license for irrigation and power project on Middle Fork Yuba River, also on Canyon Creek, South Fork of North Yuba and North Fork Middle Yuba.

339 — Washington Coast Utilities Co., Arlington, Wash.—Wants license for 1 mi. transmission line near Waterville, Douglas Co.

340 — San Diego Consolidated Gas & Electric Co., Timken Bldg., San Diego, Calif.—Wants license for transmission line between Rincon Indian Reservation and Henshaw dam.

341—J. M. Freeman, Billings, Mont.—Wants license for minor project on Boulder Creek near Shoup, Lemhi Co., Idaho.

342—Virginia-Western Power Co., Clifton Forge, Va.—Wants license for dam and power plant on James River at Balcony Falls, in Natural Bridge, National Forest.

343—West Virginia Power & Transmission Co., 14 Wood St., Pittsburgh, Pa.—Wants preliminary permit to develop power on Cheat River in West Virginia and Pennsylvania, by series of power projects and reservoirs, beginning with dam and power house near Monongalia-Preston County Line, and including projects on Dry Fork and Shavers Fork.

344—San Gorgonia Power Co. c/o W. L. Huber, 1st Natl. Bank Bldg., San Francisco, Calif.—Wants license for 2 diversion dams, conduits, pipelines and power houses in San Gorgonia River, Riverside and San Bernardino Counties.

345—Snow Mountain Water & Power Co., 216 Pine St., San Francisco, Calif.—Wants preliminary permit for reservoir on Middle Fork Eel River, tunnel and conduit to reservoir on Elk Creek, and to existing Van Arsdale Dam.

Miscellaneous

PROPOSED WORK

Street Lighting System—Williamsport, Pa.—See "Streets and Roads."

Transmission Lines—Knoxville, Tenn.—See "Industrial Works."

Transmission Lines—Parkersville (Benton P. O.), Tenn.—See "Industrial Works."

Transmission Line—Clinton, Ind.—See "Industrial Works."

Street Flusher and Sprinkler—Sheboygan, Wis.—Plans to purchase street flusher and sprinkler. $8,000. J. Seeimle, clk.

Reservoir—Centerville, Ia.—Plans concrete reservoir to drain 1,500 acres. $45,000. E. A. Crane, city clk.

Cemetery—Kansas City, Mo.—Moriah Cemetery Assn., c/o G. H. Imbrie, 100 Interstate Bldg., having surveys made improving 80 acres land for cemetery, incl. new walks, roadways, drives and entrance gates, 105th and Holmes Sts. Hare & Hare, 604 Gumble Bldg., landscape archt. Tuttle, Ayres, Woodward Eng. Co., 606 Interstate Bldg., archts.

River Equipment, etc.—Blythe, Calif.—See "Excavation, Drainage and Irrigation."

Transmission Line—Modesto, Calif.—Modesto Irrigation Dist. had plans prepared 37 mi. of 66 kva. wood pole, pin type insulators, copper strand conductor transmission line, involving 740 wood poles, 111 mi. copper and 40 mi. iron wire, 2,400 pin type insulators, etc. $3,500 per mi. P. Jones, Modesto, ch engr.

BIDS DESIRED

Wharf and Bulkhead — Boston, Mass. — Oct. 11, by E. Dana, genl. mgr. Boston Elevated Ry. Co., 108 Massachusetts Ave., 50 x 106 ft. oak pile and timber wharf and bulkhead, at South Boston Power Station. $25,000. C. H. Tenney & Co., 201 Devonshire St., engrs.

Sea Walls—Gloucester, Mass.—Oct. 13, by Dept. Pub. Wks., State House, Boston, 76 lin.ft. granite seawall, 1,008 lin.ft. granite faced concrete seawall, 47 lin.ft. concrete seawall, 3 sets granite steps. F. W. Hodgdon, ch. engr.

Spillway and River Protection—Herkimer, N. Y. — Oct. 13, by Superintendent Pub. Wks., Albany, spillway and protecting river banks at Movable Dam 14, here, 135 cu.yd. cutting concrete, 250 cu.yd. excav., 220 cu.yd. forming embankment, 295 cu.yd. 2nd class concrete and 2,500 lb. metal in stairs. $4,799.

Broken Trap Rock Stone, etc. — New York, N. Y.—Oct. 9, by H. Bruckner, pres. Bronx Boro, Tremont and 3rd Aves., furnishing and delivering 4,000 cu.yd. 1½ in. broken trap rock stone, 2,000 cu.yd. broken trap rock stone screenings, 350 ton asphaltic cement, 200 ton limestone dust or other suitable inorganic dust, 3,500 cu.yd. asphalt wearing surface sand and 3,000 cu.yd. binder stone.

Wood Paving Blocks—New York, N. Y.—Oct. 10, by J. Miller, pres. Manhattan Boro, Municipal Bldg., furnishing and delivering 300,000 wood paving blocks.

Bulkhead, etc.—Laurence Harbor (Cliffwood P. O.), **N. J.**—Oct. 20, by Laurence Harbor Heights Co. at office of Morrisey & Walker, Laurence Harbor, constructing bulkhead, boardwalk, grading, etc. H. O. Todd, 51 Valley Dr., Atlantic Highlands, civil engr.; adv. this issue.

Steam Pumps—Atlanta, Ga.—Oct. 31, by City Purchasing Agent, steam pumps for Hemphill Pumping Station also for Chattahoochee River Pumping Station. P. H. Norcross, 1404 Chandler Bldg., consult. engr.; adv. this issue.

Signal System—Minneapolis, Minn.—Oct. 11, by K E. Alexander, city purch. agt., fire alarm signal system in underground conduits, 99,878 lin.ft. cable, 3 to 55 pairs, 6 to 110 conductors. N. W. Elsberg, city engr.

Hot Water Generators, etc.—St. Louis, Mo.—City taking bids hot water generators, small pumps and 2 small garbage furnaces for Robert Koch Hospital. $25,000. W. E. Bowen, 305 City Hall, engr.

Road Roller—Dallas, Tex.—Oct. 12, by Comrs. Dallas Co., one or more 10 ton road rollers (motor.) Nagle Witt Rollins Courthouse, engrs.

Auto Flushing Machine—San Francisco, Calif.—Bd. Pub. Wks. in market for auto flushing machine with 1,000 gal. tank capacity, pressure from tank to be operated independently. P. J. Owens, 11th and Bryant Sts., Supt. of Street Cleaning Dept.

Rock Fill—San Francisco, Calif.—Oct. 11, by Bd. Pub. Wks., constructing rock fill along Marina Blvd. fronting Yatch Harbor, 3,600 ton Class A and 13,600 ton Class B rock fill. $45,000. M. M. O'Shaughnessy, city engr.

Tractors—San Jose, Calif.—Oct. 16, by H. A. Pfister, clk. Santa Clara Co. furnishing and delivering one or more 60 hp. Cruiser type best track layer tractors, also one or more 30 hp. best track layer tractors.

Steam Rollers—Vancouver, B. C.—J. S Stuart, city purch. agt., taking bids on 3 ton and 5 ton tandem steam roller.

BIDS RECEIVED

Coal Handling Plant—New York, N. Y.—Bd. Health, 505 Pearl St., opened bids Sept. 29, altering and erecting coal handling plant at Riverside Hospital, North Brother Island, Bronx Boro, from McHarg Barton Co., 1328 Bway., $16,800; Guarantee Constr Co., 140 Cedar St., $16,875; W. J. Haskins, 50 Church St., $17,500. Noted Sept. 21.

Granite Paving Blocks, etc.—New York, N. Y.—Bd. Purch., Municipal Bldg., opened bids Sept. 26, furnishing and delivering granite paving blocks, to Dept. Plant & Structures, from J. Leopold Co., Woolworth Bldg., $10,275, Hildreth Granite Co., 150 Nassau St., $10,650; structural steel to Plant & Structures, from Amer. Bridge Co., 30 Church St., $58,450.

Plumbing and Drainage Work, etc.—New York, N. Y.—Bd. Educ., 500 Park Ave., opened bids Sept. 27, plumbing and drainage work in P. S. 139, from J. J. Kenny Sons, 236 West 20th St., $39,100, N. P. Lorenzo, 430 Pearl St., $39,239, Nally Plumbing Co., $39,425; electric wiring and fittings in above school, from Jandous Electric Equipment Co., 109 West 31st St., $20,900, Croker Natl. Fire Prevention Eng. Co., 22 West 30th St., $21,250, T. F. Jackson, 99 John St., $21,560.

Oil Storage Reservoir—Tracy, Calif.—Pacific Oil Co., 79 New Montgomery St., San Francisco, oil storage reservoir, 47,800 cu.yd. cut and fill, 2,400 cu.yd. concrete, 640,000 ft. lumber, 280,000 sq.ft. fabric roofing, here, from Shattuck Constr. Co., Underwood Bldg., San Francisco, $100,000.

CONTRACTS AWARDED

Heating and Ventilating Apparatus, etc. —Brooklyn, N. Y.—C. B. J. Snyder, supt. School Buildings, Concord St., heating, ventilating and temperature-regulating apparatus, in P. S. 67, easterly side of St. Edwards St., etc., to T. F. Hall, 405 Lexington Ave., New York, $71,083. Noted Sept. 28.

Heating and Ventilating Apparatus, etc. —Elmhurst (Flushing P. O.), N. Y.—C. B. J. Snyder, supt. School Buildings, Concord St., Brooklyn, heating, ventilating and temperature regulating apparatus, in P. S. 102, southerly side of Van Horn St., here, to D. J. Rice, 42nd St. and Lexington Ave., New York, $41,487. Noted Sept. 28.

Steel Dock—New Orleans, La.—Algiers Dry Dock & Ship Repair Co., Ltd., 334 Powder St., will build floating all steel dock, 10,000 deadweight ton capacity, by day labor. $400,000. E. Berthaut, pres.

Tunnel—Cleveland, O.—See "Industrial Works."

Portland Cement, etc.—St. Paul, Minn.—H. W. Austin, city purch. agt., 3,000 bbl. Amer. Portland cement, to Speakes Co., Griggs and Fuller Sts., $2.85 delivered; 250 bbl. Atlas-white non-staining portland cement, to St. Paul Builders Material Co., 605 Ryan Annex, $8 per bbl. on track. Noted Sept. 14.

Underground Electric System—Willmar, Minn.—City distribution system for light and power service and ornamental lights, incl. removal of overhead wires, about 15 blocks, to Power Equipment Co., 212 3rd Ave., N., Minneapolis. $60,000.

Telephone Line—Dillon, Mont.—Beaverhead Trans. Co., Dillon, 27 mi. telephone line from Madison River to Dillon, by day labor. $50,000.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Oct. **10.**

Road Improvement

Bradley Beach, N. J.

Sealed proposals will be received by the Board of Commissioners of the Borough of Bradley Beach, at the Borough Hall in the Borough of Bradley Beach, Monmouth, N. J., for grading, graveling, paving, and otherwise improving Ocean Avenue in said Borough, in accordance with Plans and Specifications prepared by Niart Rogers, Borough Engineer.

Bids will be received until eight o'clock P.M., on the 10th day of October, A. D. 1922.

All bids must be addressed to the City Clerk, endorsed on the envelope, "Bid For Paving Ocean Avenue."

Each bid must be accompanied by a certified check in the amount of ten (10) per cent of the total amount bid for the entire work stated in the Proposal, said check to be made payable to the Borough of Bradley Beach, and to be accompanied by a certificate from a surety company stating that said Surety Company will provide the bidder with the required bonds.

Specifications and plans can be obtained of the Borough Clerk upon deposit of Ten Dollars, which amount will be refunded upon the return of same in good serviceable condition.

No contract for said work will be awarded until the same has been approved by the Board of Chosen Freeholders of the County of Monmouth, N. J.

The Commissioners reserve the right to reject any and all bids, to waive any informalities; and also to award separate contracts for any portion or portions of any or all of said work.

FREDERIC P. REICHEY,
Borough Clerk.

NIART ROGERS,
Borough Engineer.
Dated: Sept. 26, 1922.

Bids: Oct. 24.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P. M., on Tuesday the 24th day of October, 1922 for the improvement of highways in the following counties:

HAMILTON	(one highway: 3.57)
ORANGE	(one highway: 3.71)
SARATOGA	(one highway: 2.67)
SUFFOLK	(two highways: 2.41 & 0.09)

ALSO FOR THE RECONSTRUCTION OF THE FOLLOWING:

BROOME	(one contract: 2.27)
CHEMUNG	(one contract: 3.00)
CLINTON	(one contract: 3.19)
OTSEGO	(one contract: 2.00)
STEUBEN	(one contract: 2.50)
SUFFOLK	(one contract: 2.36)
WESTCHESTER	(one contract: 2.67)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "Geueral Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner,
State Commission of Highways.
J. C. FINCH, Secretary.

OFFICIAL PROPOSALS

Bids: Oct. 20.

Bulkhead, Boardwalk, Grading, etc.

Laurence Harbor, N. J.

The Laurence Harbor Heights Co. will receive bids for construction of bulkhead, boardwalk, grading, etc., at the office of Morrisey & Walker, Laurence Harbor, Middlesex Co., N. J., on Friday, October 20th, 1922, at 2 o'clock p.m., plans and specifications may be obtained from Herbert O. Todd, Civil Engineer, 51 Valley Drive, Atlantic Highlands, N. J. Right to reject any and all bids is reserved.

Make Plans Accessible to Distant Bidders

Plans and specifications for inspection by distant bidders may be filed at any of *Engineering News-Record* offices (without charge). Or a sufficient supply may be deposited at such of our offices as seem desirable, subject to your usual requirements in the matter of deposits, etc. (We assume full responsibility for return of plans or deposits). Therefore, Contractors in all parts of the country can bid with equal convenience on contracts advertised in *Engineering News-Record*.

Bids: Oct. 24.

Concrete Water Reservoir

Albuquerque, N. M.

Sealed proposals will be received at the office of the City Clerk of the City of Albuquerque, New Mexico, until 2:00 o'clock p.m. on Tuesday, the 24th day of October, 1922, for constructing a certain reinforced concrete water reservoir for the City of Albuquerque, New Mexico. Each bidder will be required to deposit with the City Clerk to the credit of the City of Albuquerque without endorsement a certified check of deposit in the sum of ten per cent of the total amount bid, as a guaranty that the bidder will enter into contract and execute all bonds and guaranty in the forms provided within ten days after the notice of the award of the contract to him.

Instructions to bidders, proposal and contract forms, plans and specifications are on file at the office of the City Engineer, City Hall, Albuquerque, New Mexico. Copies of plans and specifications may be secured from the City Engineer on and after October 5th, 1922, upon deposit of $15.00, to be returned to the contractor upon submission of a bona fide bid on the work with plans and specifications, or upon returning plans and specifications intact prior to the date of receiving bids. Otherwise the deposit will be forfeited to the City of Albuquerque.

The City of Albuquerque reserves the right to reject any or all bids.

B. H. CALKINS, City Manager.
FRANK KIMBALL, City Engineer.
IDA V. MALONE, City Clerk.

OFFICIAL PROPOSALS

Bids: Oct. 31.

Building, Delivering and Erecting Steam Pumps

(HEMPHILL PUMPING STATION)

Atlanta, Ga.

Sealed proposals for building, delivering and erecting 15 and 30 M.G.D. Steam Turbine Driven Centrifugal Pumps and 15 M.G.D. Cross Compound Pumping Engines for the City of Atlanta, Georgia, will be received by the Purchasing Agent of the City of Atlanta at the City Hall until 2:30 p.m. on the 31st day of October, 1922.

The work will consist of building, delivering and erecting complete with all accessories, one or more Steam Pumps on foundations erected by the City of Atlanta in the Hemphill Pumping Station. The sizes and type of pumps will be determined after receiving bids.

Each proposal must be accompanied by a certified check payable to the City of Atlanta, in an amount equal to five (5) per cent of the bid, as a guarantee that the contract will be entered into if awarded. A bond of one hundred (100%) per cent of the contract price will be required.

Plans and specifications are on file at the office of the General Manager of the Atlanta Water Works, City Hall, Atlanta, Georgia. P. H. Norcross, Consulting Engineer, 1404 Candler Building, Atlanta, Georgia, and with the Engineering News-Record, New York City.

Bidders may obtain copies of the specifications from the Purchasing Agent by enclosing check for twenty-five dollars ($25.00) payable to the City of Atlanta, and to be held until return of specifications in good condition. The City reserves the right to reject any and all bids.

No proposal will be entertained unless made on the form, and sealed in the envelope furnished by the City of Atlanta.

Purchasing Agent, City of Atlanta, Ga.

Bids: Oct. 10.

Reinforced Concrete Pavement, Curb and Storm Water Sewer

Sag Harbor, N. Y.

Sealed proposals will be received and opened publicly by the Trustees of the village of Sag Harbor at the Municipal Building, Sag Harbor, New York, at 12 noon on Oct. 10, 1922, for the construction of approximately 1.14 miles of reinforced concrete pavement; 2,640 lin.ft. concrete curb; storm water sewers as follows: 540 lin.ft. 12-in. sewer, 1,830 lin.ft. 15-in. sewer, and 1,270 lin.ft. 24-in. sewer.

Plans, specifications and proposals may be seen at the office of the village clerk and at the office of the engineer. Copies thereof may be obtained of the engineer upon the payment of $15.00 per set to cover cost of reproduction and mailing, one-half of which will be refunded upon the return of said copies in good order.

Special attention of the bidder is called to sheet in proposal forms entitled "Information for Bidders."

All bids are to be accompanied by certified check equal to 5 per cent of the total amount of bid.

The right is reserved to reject any and all bids.

MORLEY B. LEWIS,
Village President.
H. F. BISHOP,
Construction Engineer,
Westhampton Beach, N. Y.

Bids: Oct. 16.

Road Work

Perth Amboy, N. J.

Notice is hereby given that sealed bids will be received by the Board of Aldermen of the City of Perth Amboy, New Jersey, for the construction of the following extension to:

Route No. 4—Section No. 19, Amboy Avenue, Perth Amboy, Middlesex County; estimated amount of excavation unclassified is 39,088 cubic yards; of sheet asphalt surface (Grade N. A. 1) on an eight (8) inch reinforced Portland Cement Concrete Foundation is 23.943 square yards.

Bids will be received in the meeting room of the Board of Aldermen at the City Hall, Perth Amboy on Monday, October 16, 1922, at 8.30 p.m., Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of Morgan F. Larson, City Engineer, Perth Amboy, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars ($10.00) upon application to Morgan F. Larson, City Engineer, Perth Amboy, New Jersey. Bids must be made on the standard proposal forms in the manner designated therein and as required by the State Highway 1922 specifications, same to be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and the name and section of the Route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the City of Perth Amboy for not less than ten per cent (10%) of the amount of the bid, provided that said certified check shall not be less than $500.00 or more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelopes will be furnished on application. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each Bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the Board of Aldermen.
ARTHUR E. GRAHAM,
City Clerk.

Bids: Oct. 31.

Building, Delivering and Erecting Steam Pumps

(CHATTAHOOCHEE RIVER PUMPING STATION)

Atlanta, Ga.

Sealed proposals for building, delivering and erecting 15 and 30 M.G.D. Steam Turbine Driven Centrifugal Pumps and 15 M.G.D. Cross Compound Pumping Engines for the City of Atlanta, Georgia, will be received by the Purchasing Agent of the City of Atlanta at the City Hall until 2:30 p.m. on the 31st day of October, 1922.

The work will consist of building, delivering and erecting complete with all accessories, one or more Steam Pumps on foundations erected by the City of Atlanta in the Chattahoochee River Pumping Station. The sizes and type of pumps will be determined after receiving bids.

Each proposal must be accompanied by a certified check payable to the City of Atlanta, in an amount equal to five (5) per cent of the bid, as a guarantee that the contract will be entered into if awarded. A bond of one hundred (100%) per cent of the contract price will be required.

Plans and specifications are on file at the office of the General Manager of the Atlanta Water Works, City Hall, Atlanta, Georgia, P. H. Norcross, Consulting Engineer, 1404 Candler Building, Atlanta, Georgia, and with the Engineering News-Record, New York City.

Bidders may obtain copies of the specifications from the Purchasing Agent by enclosing check for twenty-five dollars ($25.00) payable to the City of Atlanta, and to be held until return of specifications in good condition. The City reserves the right to reject any and all bids.

No proposal will be entertained unless made on the form, and sealed in the envelope furnished by the City of Atlanta.

Purchasing Agent, City of Atlanta, Ga.

Bids: Oct. 17.

Highway Work

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at the State Capitol until 10 a.m., October 17, 1922, when bids will be publicly opened and scheduled and contract awarded as soon thereafter as possible for the reconstruction of 30 miles of Reinforced Concrete, 18 miles of either Bituminous on a Concrete Foundation or Reinforced Concrete and 1 mile of Bituminous Macadam Pavement; also for the erection of a Reinforced Concrete Bridge. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 119 Federal Street, N. S., Pittsburgh, Pa. GEORGE H. BILES, Assistant State Highway Commissioner.

Mr. Potter Knows—

(Alexander Potter, C. E.)
(50 Church St., New York)

He recently received 63 requests for plans and specifications on a New Jersey water supply system.

Bids were advertised in the Official Proposal Columns.

"This speaks well for *Engineering News-Record* as an advertising medium," he wrote us.

Bids: Oct. 16.

Paving and Resurfacing Streets

Syracuse, N. Y.

Sealed proposals will be received at the Board of Contract & Supply until Monday, October 16th, 1922, at 9.30 a.m., for furnishing materials and Paving and Resurfacing the following streets.

NEW PAVEMENTS

Kellogg St., Slocum Ave., to Delaware St.
Shuart Ave., Sedgwick St., to Teall Ave.
Shotwell Park (W. Dr.), End of Pres. Pav't. at Melrose to S. L. lot 80.
Shotwell Park (E. Dr.), End of Pres. Pav't. at Melrose to S. I. lot 80 produced.
S. Alvord St., Butternut to Highland St.
Beecher St., Graves St to Jasper St.
Highland St., Highland Ave., to Park St.
Jasper St., Highland St., to End of Street.
Jasper Pl., Seward St., to Highland St.
Schneider St., Butternut St., to Jasper Place.
Coleridge Ave., Wilbur Ave., to Whittier Ave.
Grand Ave., Delaware St., to City Line.
Seward St., Alvord St., to N. L. Graves St.
Graves St., Seward St., to W. L. Highland St. E. L. Highland St., to . L. Beecher St.
E. Castle St., S. State St., to Renwick Ave.
Teall Ave., James St., to Peck Ave.
Merriman Ave., Center Line Massena St., to Geddes St.
Grand Ave., Delaware St., to Geddes St.
S. Geddes St., Stolp Ave., to S. L. Crossett St.
Rugby Road, Teall Ave., to W. L. of Lots 54 & 55.
Holland St., Solcum Ave., to Oswego St.

RESURFACING

Merriman Ave., Oswego St. to Center line Massena St.
Sabine St., Merriman Ave., to Messena St.
Walnut Ave., N. L. Harrison to University Pl. (including Adams St., Marshall St., & Waverly Ave. from Walnut Ave., to Walnut Place).
S. Crouse Ave., E. Fayette St., to University Place.
Holland St., Center line Oswego St., to Delaware St.
S. Milton Ave., Tompkins St., to Coleridge Ave.
Setting back the curb 2 feet on each side of Harrison St., Warren St., to Salina St.

in the City of Syracuse, N. Y., in accordance with the plans and Specifications on file in the office of the Board of Contract and Supply.

A certified check for 5% of the total amount of each proposal, payable to the order of F. C. Sembach, City Treasurer, must accompany each proposal, the same to be forfeited upon failure to enter into contract within five days after notice of award from the Secretary of this Board.

BOARD OF CONTRACT & SUPPLY.
F. E. BARRY, Secretary.

Bids: Dec. 18.

STATE ELECTRICITY COMMISSION OF VICTORIA

Tenders for Plant

Melbourne, Australia.

Tenders are hereby invited for the supply, delivery, etc., of the following for the Morwell Power Scheme.

Copies of Tender Form and Specification and Drawings will be available upon application to: Office of the Bureau of Foreign & Domestic Commerce, United States Department of Commerce, First National Bank Building, CHICAGO, and Office of the Bureau of Foreign & Domestic Commerce, United States Department of Commerce, 734 Custom House, NEW YORK CITY.

SPECIFICATION No. 282. COAL HANDLING PLANT

CHARGE—£2.2.0 for the first 3 copies of Tender Form, Conditions of Contract, Specification and Drawings complete. These charges will be returned on receipt of a bona-fide tender. A fourth copy and any further copies will be supplied for the sum of 10/6 each.

PRELIMINARY DEPOSIT: A Preliminary Deposit of £50.0.0 is to be lodged with tender.

The Specification may be inspected at the above mentioned offices, and also at the office of: The Commissioner for Australia in U. S. A., Room 3012, 61 Broadway, NEW YORK.

The Commission does not bind itself to accept the lowest or any tender.

Tenders on prescribed form, properly endorsed and addressed, must be delivered to the undersigned in Melbourne not later than Noon, 18th December, 1922.

R. LIDDELOW, Secretary.
State Electricity Commission of Victoria,
22-32 William Street.
Melbourne,
Victoria, Australia.

Bids: Nov. 14.

Pumping Machinery

Newport, Ky.

Sealed proposals will be received by the Board of Commissioners of the City of Newport, Kentucky, at the office of said Board in City Hall, until 11 a.m. o'clock on Tuesday, the 14th day of November, 1922.

Bids will be received for Steam and Electric Driven deep well pumping machines of six million (6,000,000) gallons capacity per 24 hours, to be furnished and erected complete for operation in the pumping station of the Newport, Kentucky Water Works in accordance with the specifications for the work.

Each bid shall be accompanied by a cash deposit or a certified check in the sum of ten (10) per cent of the price made in the proposal. Checks to be made payable to the City of Newport, Kentucky, or order.

Said deposit to be made as a guarantee of good faith that the party making the proposal will within ten (10) days if the contract is awarded to him, execute the same with approved surety.

If the bidder fails to execute the contract after the work has been awarded to him, such bidder shall forfeit the sum so deposited.

Envelopes having the bids enclosed should be plainly indorsed "Proposals for Pumping Machines," and addressed to Thos. A. McGeough, Commissioner of Public Property, Newport, Kentucky.

Copies of Specifications will be furnished bidders on or after October 10th, 1922, upon application to the said Commissioner, or the Consulting Engineer.

The Commissioners reserve the right to reject any and all bids.

The City of Newport, Kentucky.
By THOS. A. McGEOUGH.
Commissioner of Public Property.
GEORGE HORNUNG,
Consulting Engineer,
Wool-Sack Building,
Newport, Kentucky.

OFFICIAL PROPOSALS

Bids: Oct. 16.

Construction of Sewer System

Ellsworth, Wis.

Proposals for the construction of a sewerage system and appurtenances will be received by the Village Board of the Village of Ellsworth, Wis., acting as a Board of Public Works, of the said Village up to 8 p.m. on Oct. 16th, 1922, and will be publicly opened and considered immediately thereafter. This work comprises approximately the following quantities:

17,000 ft 8 in. sewer 5-15 ft. deep
4,650 ft. 10 in. sewer 5-13 ft. deep
4,250 ft. 12 in. sewer 5-13 ft. deep
81 ft. Manholes
2 ft. Lampholes
3 ft. Imhoff Tanks, sludge beds, intermittent filters and accessories.

Plans and specifications may be seen at the office of the Village Clerk and at the office of the Engineers. Copies thereof may be obtained of the Engineers upon the payment of $15.00 per set to cover the cost of reproduction and mailing, ½ of which will be refunded upon their return in good order.

No proposal will be considered unless sealed and marked on the outside with the name of the bidder and a notation of the nature of the work for which bid is made, and filed with the Village Clerk.

Bidders must accompany their bids by a bond with sureties executed on the part of the bidder, which sureties shall justify as to their responsibility, and by their several affidavits show that they are worth in the aggregate at least the amount mentioned in the contract in property not by law exempt from execution, or in lieu of such bond, bidders may accompany their bid with a certified check equal to five per cent of the bid and agree to have inserted in the contract a provision for the retention by the Village of twenty per cent of the estimate made from time to time.

Proposals must be submitted on the blank forms provided by the Engineers, free of charge and must be made on the basis of cash payment for the work. The successful bidder may be required to give bond in the full amount of the contract.

Special attention of the bidders is called to the "Instructions to Bidders" in the proposal form. Bidders are to understand that construction is to commence May 1, 1923.

The right is reserved to reject any or all bids.

Dated at Ellsworth, Wis., this 25th day of Sept., 1922.

R. N. CLAPP,
Village President.

ATTEST:
M. D. WOOD,
Village Clerk.

DRUAR & MILINOWSKI,
Consulting Engineers,
500 Globe Bldg.
St. Paul, Minn.

Bids: Oct. 7.

Bridge Repairs

Trenton, N. J.

Sealed proposals will be received by the Joint Commission for the Elimination of Toll Bridges over the Delaware River, between New Jersey and Pennsylvania, until noon Saturday, October 7th, 1922, at the State House, Trenton, New Jersey, for the repairs to the bridge over the Delaware River between Milford, Pike County, Pennsylvania and Montague Township, Sussex County, New Jersey.

Proposals must be submitted on the form furnished by the Commission and accompanied by a certified check for the amount of $800, made payable to the Treasurer of the Joint Commission, as a guaranty of good faith.

Plans, specifications and estimates of the quantities are on file at the office of Louis Focht, Engineer, at 125 West State Street, Trenton, New Jersey; this being the address to which the bids are to be sent.

All bids are to be submitted in a sealed envelope marked, "Proposal for repairs to the bridge at Milford, Pike County, Pa."

The right is reserved to reject any or all bids and to waive any informality in the bids received.

LOUIS FOCHT,
Engineer to the Joint Commission.

OFFICIAL PROPOSALS

Bids: Oct. 10.

Steam Turbine and Accessories

New Orleans, La.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans up to 12 o'clock, noon, Tuesday, October 10th, 1922, for furnishing one 6,000 kw. STEAM turbine and accessories.

Specifications and blank forms of proposals may be obtained at Room 303, No. 526 Carondelet Street, New Orleans.

The right is reserved to reject any or all bids.

A. G. MOFFAT,
Secretary.

GEO. G. EARL,
General Superintendent.
Aug. 10, 1922.

A Bonding Company's Suggestion to Official Proposal Advertisers

"A large part of our contract bond business is submitted to us by wire, and I am a constant reader of the Official Proposals in order to find out the size and nature of the work that is referred to in the bond application. Very frequently I am unable to get any clear idea of what the advertisers are asking bids on, and of course the prospective bidder or contractor is also at a loss to know what kind of a job is being advertised.

"Traveling expenses are heavy at the present time, and contractors pay out considerable sums during the course of a year in investigating prospective contracts. This of course is a large charge that the owners eventually pay, and anything that will reduce the general overhead of contract work will eventually be to the advantage of the owner.

"One way to reduce this overhead is to word the advertisement so that the contractor sitting in his office will know whether or not he should investigate and prepare a bid on the proposed work."

Bids: Oct. 13th.

Repavement

Lawrence, N. Y.

Sealed proposals for furnishing all labor and materials necessary for the repavement of a portion of Central Ave., Lawrence, Long Island, consisting of relaid brick gutters, and (a) Asphalt Blocks, or (b) Sheet Asphalt, or (c) Warrenite for the main pavement.

Plans and specifications can be seen at the office of the Village Clerk in Lawrence or at the Engineers in New York City.

A certified check payable to the "Village of Lawrence" for $500.00 must be filed with each proposal, which will be received at the office of the Engineers on or before 5 P.M., Friday, October 13th, 1922.

TRIBUS & MASSA,
Engineers,
15 Park Row,
New York.

EDMUND A. LYNCH, Pres.
JAMES LOUCHEIM, Clerk,
Lawrence, N. Y.

OFFICIAL PROPOSALS

Bids: Oct. 31.

Barge Canal Terminals

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, October 31st, 1922, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and amendatory laws, and Chapter 402 of the Laws of 1920, as follows:

TERMINAL CONTRACT NO. 91.

For paving a portion of the terminal site at Hallets Cove, New York City.

Contract plans, sheets 1 to 3 inclusive.

Plans may be seen and detailed specifications, engineers' estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE,
Superintendent of Public Works.

September 28, 1922.

Bids: Oct. 31.

Hospital Construction

New York, N. Y

Sealed proposals for Construction, Heating, Sanitary and Electric Work, for Central Heating and Lighting Plant, Kitchen and Dining Room Building and Buildings for Chronic Patients (North and South), and Construction of Tunnels at the Creedmoor Division, Brooklyn State Hospital, Creedmoor, Borough of Queens, Long Island, N. Y., will be received by the State Hospital Commission, Room 1046, 25 Broadway, New York City, N. Y., until 12 o'clock noon (Standard Time), on Tuesday, October 31st, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contracts within thirty (30) days after official notice of award of contracts and in accordance with the terms of Specifications Nos. 3979, 3980, 3981, 3982, 3983, 3984, 3985, 3986, 3987, 3988, 3989, 3990 and 3995. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Brooklyn State Hospital, Brooklyn, N. Y., at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon the deposit of a certified check in the sum of $25.00 made payable to the State of New York for each set of plans and specifications, which check will be returned if plans and specifications are returned in good condition to the State Architect, L. F. Pilcher, Capitol, Albany N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.
Dated: September 21, 1922.

Bids: Oct. 16.

Sewer Work

Hackensack, N. J.

The Hackensack Improvement Commission, the governing body of the City of Hackensack, Bergen County, New Jersey, requests proposals for the following work, to wit:

Contract No. 4—For the construction of about 4,600 linear feet of eight (8) inch vitrified pipe sewers, about 3,400 linear feet of twelve (12), eighteen (18), twenty (20), twenty-two (22), twenty-four (24) and twenty-seven (27) inch vitrified pipe sewers, 1360 linear feet of circular concrete sewers and 2,500 linear feet of egg shaped concrete sewers, together with manholes, catchbasins, and other works appurtenant thereto.

The foregoing work is more particularly described and set forth in the plans and specifications on file with Lemuel Lozier, Engineer of the Commission and with the Clerk of the Commission.

The plans and specifications, information for bidders, forms of proposals and contracts, forms of bonds required and other information can be seen at the office of Lemuel Lozier, Engineer of the Commission, Room 3, Bank Building, Main and Mercer Streets, Hackensack, New Jersey; copies of such plans and specifications may be obtained by bidders on making a deposit of $100.00, which deposit will be refunded upon the return of the plans and specifications in good condition.

The contract will be let to the lowest responsible bidder, subject to the right of the Commission to reject any and all bids.

All bids must be made on the form of proposal to be obtained from the Engineer of the Commission, and must give the prices both in writing and in figures, and must give such other information and be signed in the manner indicated on the form of proposal. Each bid submitted for Contract No. 4 must be accompanied by a certified check for $5,000.00, payable to the Hackensack Improvement Commission.

Checks of the unsuccessful bidders will be returned immediately upon the award of the contract. The check of the successful bidder will be returned to the bidder upon the execution of the contract and the furnishing of the bond required, within ten days after the date of the award thereof, or within such extended time as may be determined by the Commission. In case of failure to execute the required contract, and furnish the required bond within such time, such check shall be forfeited to the Hackensack Improvement Commission as liquidated damages.

The proposals herein required for Contract 4 shall be presented to the Hackensack Improvement Commission, at the Municipal Building, 346 State Street, Hackensack, Bergen County, New Jersey, on Monday, the sixteenth (16) day of October, 1922, at 8 p.m. Standard Time.

No bids will be received prior to said hour and none thereafter.

The proposals shall be submitted in sealed envelopes or packages.

The proposals shall be endorsed as follows: "Proposal for sewers Contract N. 4."

The Hackensack Improvement Commission.
By SPENCER D. BALDWIN, Mayor.
WILLIAM SCHAFF, Clerk.

National Publicity Offers a Two-Fold Advantage

Giving calls for bids National publicity opens the way for additional and possibly lower offers from outside bidders to whom work can be let, if desired.

Then too, local contractors, seeing your contracts advertised Nationally will figure closer, realizing that the field of competitors for the work is greatly enlarged.

An advertisement printed in the Official Proposal Columns of *Engineering News-Record* brings the contract to the attention of not only local bidders but, in addition, any others who might be interested.

Bids: Oct. 10.

Concrete Structures: Filter Equipment and Brick Filter House

Greensboro, N. C.

Proposals will be received by the City Council of Greensboro, North Carolina, until 12 o'clock M. Tuesday, October 10th, 1922, for building a Filtration plant and appurtenances.

The work includes the construction and equipment of a six million gallon filter plant, the construction of a coagulation basin with dividing wall, capacity 1,148,000 gallons, and the construction of a mixing chamber. The principal quantities involved are:

8,000 cubic yards of earth excavation.
1,900 cubic yards of concrete.
225,00 pounds of reinforcing steel.
The equipment of six one-million gallon filter units.
80,000 brick laid in filter house walls.
Steel wash water tank of 70,000 gallons capacity.
1,000 GPM motor-operated pump.
Piping, valves, and miscellaneous items.

Plans will be on file and may be seen at the office of the City Manager, Greensboro, N. C., or at the office of The Ludlow Engineers, Winston-Salem, N. C., after September 15th. After that date copies of the Specifications, Bid Blank, and Contract may be obtained from the Engineers or City Manager. For the convenience of prospective bidders, the Engineers will furnish copies of the plans upon application accompanied by a check for ten ($10.00) dollars to cover the cost, or separate prints at one ($1.00) dollar each.

Each bid must be accompanied by a certified check in the sum of $5,000, or 5% of the amount of partial bids.

Proposals will be opened publicly with the usual rights reserved.

P. C. PAINTER,
City Manager.
J. L. LUDLOW,
Consulting Engineer.

Bids: Oct. 23.

Sewerage System

Dover, N. J.

The Board of Aldermen and the Board of Sewerage of the Town of Dover, N. J., will receive, at a joint meeting to be held on the 23rd day of October, 1922, at 2 p.m., at the Council Chambers in the Municipal Building, North Sussex Street, Dover, N. J., sealed proposals for furnishing materials and doing all work required for the construction of sewers and appurtenances.

The work includes 25.49 miles of 8 inch to 20 inch sewer, 32 tons cast iron pipe, 600 manholes, and 12,000 cu.yds. rock, and other work incidental thereto.

Plans may be seen and specifications and forms of proposals obtained at the office of the Clerk of the Town of Dover, Municipal Building, or Secretary of the Board of Sewerage, 9 South Sussex Street, in Dover, N. J., or at the office of Clyde Potts, Consulting Engineer, 30 Church Street, New York City.

Plans and specifications may be taken away upon the payment of fifteen dollars ($15.00), the same to be refunded if the plans are returned within twenty (20) days in good condition.

Each bid must be accompanied by a certified check for not less than 10% of the amount of the bid, payable to the order of the Board of Sewerage of the Town of Dover.

The Mayor and Board of Aldermen and the Board of Sewerage of the Town of Dover reserve the right to reject any and all proposals and to waive any informality in the proposals received and to accept any proposal which they deem to be most favorable to the interests of the Town.

WM. H. HOCKING,
Mayor.
EDWARD KELLY,
Pres. Board of Sewerage.
JOS V. BAKER,
Town Clerk.
MICHAEL F. MULLEN,
Clerk of Board of Sewerage.

Bids: Oct. 17.

Storm Sewers

Laredo, Texas.

Sealed proposals will be received by L. Villegas, Mayor of Laredo, Texas, until Tuesday, October the 17th, 1922, at 5:00 o'clock p.m., for furnishing materials and constructing storm sewers and appurtenances.

The approximate quantities are as follows:

Manholes	33
12" Standard vitrified pipe	3,560 ft.
15" " " "	2,064 "
18" " " "	3,148 "
21" " " "	1,536 "
24" " " "	5,358 "

Earth excavation, 12.200 cu. yards.
Reinforced concrete, 15 cu. yards.

Each bid will be accompanied by a certified check for five hundred ($500) dollars drawn in favor of the City Treasurer of Laredo, Texas. Plans and specifications may be seen at the office of S. F. Crecelius, Civil Engineer, Puig Building, Laredo, Texas, after October the 5th, 1922.

The City reserves the right to reject any or all of the bids.

L. VILLEGAS,
Mayor.

Bids: Oct. 9.

Street Improvement

Laurel, Miss.

Sealed proposals will be received by the Mayor and Board of Commissioners of the City of Laurel, Mississippi, until two o'clock P.P., on the 9th day of October, 1922, at the office of the City Clerk of said City, for constructing approximately:

19,865 sq.yds. brick pavement with concrete foundation.
16,160 sq.yds. gravel surfacing.
20,243 lin.ft. combined curb and gutter.
4,000 sq.yds. concrete sidewalk.
with all appurtenances thereto.

Plans and profiles may be seen and specifications and proposal forms may be obtained at the office of the City Clerk of the City of Laurel, Mississippi.

J. H. PACE,
Street Commissioner.

Bids: Oct. 19.

Wanaque Aqueduct—Great Notch Tunnel Contract 3—(Unit Price)

Newark, N. J.

Sealed proposals will be received from 12 o'clock noon to 12:15 o'clock P.M. (Eastern Standard Time) on Thursday, October 19, 1922, by the North Jersey District Water Supply Commission of the State of New Jersey, in its office, Room 412, 20 Clinton Street, Newark, New Jersey, and publicly opened and read at the last named hour, for the performing of all necessary work required in the carrying out of the contract for the construction of Great Notch tunnel and approaches.

The work will include the excavation and concrete lining of a 7-foot tunnel 9,100 feet in length and the construction of about 5,000 feet of 7-foot concrete aqueduct in open cut and various appurtenant structures.

A pamphlet containing the information for bidders, form for proposal, form of contract, specifications and drawings may be examined at the office of the Commission and may be obtained at said office upon deposit of $10.00, which deposit will be repaid upon the return of the pamphlet within 30 days.

All bids shall be made on the blank form supplied by the Commission, which provides for a detailed statement as to the bidder's experience and resources as well as the prices for which he will execute the respective items of work.

Proposals must be accompanied by the consent in writing of a surety company qualified to do business in New Jersey, binding itself that if the contract be awarded to the person making the proposal, the said surety company will become surety for the faithful performance of the said contract in an amount equal to 50 per cent of the contract price.

All bids must be accompanied by a certified check for fifty thousand dollars as a guarantee for the good faith of the bidder. Checks of unsuccessful bidders will be returned within 15 days, that of the successful bidder upon the execution of contract and bond.

The Commission reserves the right to reject all proposals or any proposal which may be informal, or the acceptance of which would be, in the judgment of the Commission for the reasons as suggested in "Information for Bidders," or for any other reason, detrimental to the interests of the municipalities for which the work is to be done.

By order of the North Jersey District Water Supply Commission of the State of New Jersey.

LAURENT J. TONNELE,
Chairman.
Attest: EDMOND TYLER,
Secretary.
ARTHUR H. PRATT,
Chief Engineer.
MORRIS R. SHERRERD,
Consulting Engineer.

Bids: Oct. 24.

Sewage Disposal Plant

Albuquerque, N. M.

Sealed proposals will be received at the office of the City Clerk of the City of Albuquerque, New Mexico, until 2:00 o'clock p.m. on Tuesday, the 24th day of October, 1922, for constructing a certain sewage disposal plant for the City of Albuquerque, New Mexico. Each bidder will be required to deposit with the City Clerk to the credit of the City of Albuquerque without endorsement a certified check of deposit in the sum of ten per cent of the total amount bid, as a guaranty that the bidder will enter into contract and execute all bonds and guaranty in the forms provided within ten days after the notice of award of contract to him.

Bidders are expected to inspect the site of the work and to inform themselves regarding all local conditions. Instructions to bidders, proposal and contract forms, plans and specifications are on file at the office of the City Engineer, City Hall, Albuquerque, New Mexico. Copies of plans and specifications may be secured from the city engineer on or after October 5th, 1922, upon deposit of $50.00, to be returned to contractor upon submission of a bona fide bid on the work with plans and specifications, or upon returning plans and specifications intact prior to the date of receiving bids. Otherwise the deposit will be forfeited to the City of Albuquerque.

The City of Albuquerque reserves the right to reject any or all bids.

B. H. CALKINS, City Manager.
FRANK KIMBALL, City Engineer.
IDA V. MALONE, City Clerk.

Contractors Everywhere Read These Advertisements

to see where bids are desired on contracts suited to their available plant and organization. The suggestion is therefore made to advertisers that they word their advertisements so that the contractor will get a good idea of the size and kind of work to be let, and perhaps the plant needed. This should result in an increased number of desirable bidders.

Bids: Oct. 11.

Laundry Equipment

Utica, N. Y.

Sealed proposals for Additional Laundry Equipment at the Utica State Hospital, Utica, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock p.m. (Standard Time) on Wednesday, October 11, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3939. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Utica State Hospital, Utica, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.
Dated: September 26, 1922.

Say this over and over again
Swart Service Really Serves.
SWART
Contract Bonds
Compensation Insurance
92 William St., New York

Bids: Oct. 19.

Wanaque Aqueduct—Great Notch Tunnel Contract 4—(Lump Sum)

Newark, N. J.

Sealed proposals will be received from 12 o'clock noon to 12:15 o'clock P.M. (Eastern Standard Time), on Thursday, October 19, 1922, by the North Jersey District Water Supply Commission of the State of New Jersey, in its office, Room 412, 20 Clinton Street, Newark, New Jersey, and publicly opened and read at the last named hour, for the performing of all necessary work required in the carrying out of the contract for the construction of Great Notch tunnel and approaches.

The work will include the excavation and concrete lining of a 7-foot tunnel 9,100 feet in length and the construction of about 5,000 feet of 7-foot concrete aqueduct in open cut and various appurtenant structures.

A pamphlet containing the information for bidders, form for proposal, form of contract, specifications and drawings may be examined at the office of the Commission and may be obtained at said office upon deposit of $10.00, which deposit will be repaid upon the return of the pamphlet within 30 days.

All bids shall be made on the blank form supplied by the Commission, which provides for a detailed statement as to the bidder's experience and resources as well as the price for which he will execute the work.

Proposals must be accompanied by the consent in writing of a surety company qualified to do business in New Jersey, binding itself that if the contract be awarded to the person making the proposal, the said surety company will become surety for the faithful performance of the said contract in an amount equal to 50 per cent of the contract price.

All bids must be accompanied by a certified check for fifty thousand dollars as a guarantee for the good faith of the bidder. Checks of unsuccessful bidders will be returned within 15 days, that of the successful bidder upon the execution of contract and bond.

The Commission reserves the right to reject all proposals or any proposal which may be informal, or the acceptance of which would be, in the judgment of the Commission for the reason as suggested in "Information for Bidders," or for any other reason, detrimental to the interests of the municipalities for which the work is to be done.

By order of the North Jersey District Water Supply Commission of the State of New Jersey.

LAURENT J. TONNELE,
Chairman.
Attest: EDMOND TYLER,
Secretary.
ARTHUR H. PRATT,
Chief Engineer.
MORRIS R. SHERRERD,
Consulting Engineer.

Bids: Oct. 16.

Junior High School Building

Altoona, Pa.

Proposals will be received by the School District of Altoona, Penna., until 8 p.m., October 16th, for the erection and completion of a Junior High School 224 x 232 ft., three stories and basement, fireproof, also proposals for Heating and Ventilation, Plumbing and Electric Work.

Further information will be supplied on application to the Architect.

JULIAN MILLARD,
Registered Architect,
Altoona, Penn.
WM. B. ITTNER,
Consulting Architect.
W. N. DECKER,
Secretary,
Altoona School District.

CONTRACT BONDS FOR RESPONSIBLE CONTRACTORS
You cannot consistently refuse to sign a friend's bond, if you have already asked HIM to sign YOUR bond; don't hamper yourself with an obligation that may prove embarrassing.
ÆTNA CASUALTY AND SURETY COMPANY
HARTFORD, CONN.
AGENTS EVERYWHERE

OFFICIAL PROPOSALS

Bids: **Nov. 1.**

Hospital

Irvington, N. J.

Sealed proposals for furnishing all the necessary labor and materials for the erection and completion of the new Irvington Hospital, will be received by the Board of Commissioners of the Town of Irvington, N. J., and will be publicly opened and read at a meeting of the said Board of Commissioners to be held in the Town Hall, Irvington, N. J., at 8 p.m., Wednesday, November 1st, 1922 (standard time).

The building will be located on the southeast corner of Chancellor Avenue and Park Place, Irvington, N. J.

Proposals will be received for the following:

Item No. 1. Mason work; carpenter work; iron and steel work; sheet metal and roofing work; glazing; painting; elevator and dumb waiter.
Item No. 2. Plumbing and gas fitting.
Item No. 3. Heating and ventilating.
Item No. 4. Electrical work.

Contractors may bid on any or all items, but separate bids must be submitted for each item.

Each proposal must be accompanied by a certified check for 5 per cent of the amount of such bid, payable to the order of the Board of Commissioners of the Town of Irvington, N. J., or a bid bond in the amount of 5 per cent of such estimate, issued by a surety company approved by the said board, and authorized to conduct business in the state of New Jersey. The successful bidder will be required to furnish the said board within ten days of the award of the contract by the said Board of Commissioners, a bond executed by an approved surety company in the sum of one hundred per centum (100%) of the amount of said contract, conditioned on the faithful performance of the contract.

Should the bidder refuse or neglect to sign the said contract and furnish the said bond within ten days after notification from the Board of Commissioners that the contract has been awarded to him, he shall agree to forfeit the certified check accompanying the bid, or the amount of the bid bond, and said amount shall become the property of the Board of Commissioners.

Plans and specifications of items No. 1 and No. 2 may be seen at the office of Jos. B. Allen, Architect, 1091 Sanford Ave., Irvington, N. J., and of items No. 3 and No. 4 at the office of Runyon and Carey, Engineers, 843 Broad Street, Newark, N. J., between the hours of 9.30 a.m. and 4.30 p.m. and copies may be obtained from them by depositing the sum of twenty-five dollars ($25), which will be returned after bids are received and on return of the plans and specifications.

Any contractor obtaining plans and specifications and not submitting a bid must forfeit his deposit.

The Board of Commissioners reserves the right to waive informalities and to accept or reject any or all bids.

All proposals must comply in all respects with the instructions and general conditions forming a part of the specifications.

Each contractor shall state in his proposal the time he will require for completing the work and shall guarantee completion in such time.

Each proposal must be enclosed in a sealed envelope properly endorsed with the name of the bidder and marked "Proposal for erection of Irvington Hospital." and must state the kind of work for which the proposal is submitted.

HENRY P. BEDFORD,
Director Parks and Public Property.
W. H. JAMOUNEAU,
Town Clerk,
Irvington, N. J.
October, 1922.

Bids: **Sept. 1, 1923.**

Sydney Harbour Bridge

New South Wales, Australia.

INTENDING TENDERERS are hereby notified that the time for receipt of Tenders at Sydney, New South Wales, for the construction of the Superstructure and Substructure of a Cantilever Bridge across Sydney Harbour has been extended by the New South Wales Government until 1st September, 1923.

T. A. COGHLAN,
Agent-General for New South Wales.
Australia House, London, W. C. 2.
14th July, 1922.

U. S. GOVERNMENT

PROSPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a. m. Oct. 11, 1922, for constructing about 545,000 cubic yards of earthwork by the hydraulic method in the Bay Island Drainage and Levee District No. 1, Ill. Further information on application.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., Sept. 29, 1922.—Sealed proposals will be opened in this office at 3 p.m., Oct. 27, 1922, for extension to workroom, mailing vestibule, etc., United States Post Office, Rochester, Minn. Drawings and specification may be obtained from the Custodian at the building, or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

COMMISSIONERS, D. C., Washington, October 6, 1922. Sealed proposals for constructing about eight hundred ninety feet of sewer will be received at Room 509, District Building, until 2 o'clock p.m., October 20, 1922. For detailed information, apply to Room 427, District Building. CUNO H. RUDOLPH, JAMES F. OYSTER, CHARLES KELLER, Commissioners, D. C.

U. S. ENGINEER OFFICE, PROVIDENCE, R. I. Sealed proposals will be received here until 12 o'clock noon, Oct. 23, 1922, and then opened, for dredging in New Haven Harbor, Conn. Further information on application.

U. S. ENGINEER OFFICE, NASHVILLE, TENN.—Sealed proposals will be received here until 11 a.m., Oct. 23, 1922, and then opened, for 3 steel dump scows. Further information on application.

SEALED PROPOSALS, indorsed "Proposals for Buildings, Tupper Lake, N. Y., Specifications No. 4710," will be received at the Bureau of Yarks and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., October 11, 1922, and then and there publicly opened, for buildings at the U. S. Veterans' Bureau Hospital, Tupper Lake, N. Y. The work will include plain and reinforced concrete; artificial stone; hollow tile and brick work; wood framing, sash, doors and finish; plaster and metal lath; slate, promenade tile and tin roofing; sheet metal work; interior marble and tile work; steel sash; steel covered doors; miscellaneous metal work; composition flooring; linoleum; fire escapes; hardware; painting and glazing; electrically and hand-operated dumbwaiters; plumbing; heating; electric light and power; telephones; call bells. Drawings and Specification No. 4710 may be obtained on application to the Bureau of Yards and Docks. Deposit of a check or postal money order for $100, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the drawings and specification. L. E. GREGORY, Chief of Bureau, September 14, 1922.

U. S. GOVERNMENT

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., Sept. 18, 1922. Sealed prosposals will be opened in this office at 3 p.m. Oct. 16, 1922, for construction (except mechanical equipment) of an Infirmary Group (four brick and concrete buildings two and three stories, with a total ground area of 44,600 square feet) for the United States Veterans' Hospital, at Chelsea, N. Y. Drawings and specifications may be obtained at this office in the discretion of the Supervising Architect. Proposals will be considered only from individuals, firms, or corporations possessing satisfactory financial and technical ability, equipment, and organization to insure speedy completion of the contract, and who have established a record for expedition on contracts of similar character and magnitude. Before drawings and specifications are forwarded to prospective bidders, applicants must cite at least one specific instance where a record for speed has been established on a job of equivalent magnitude, giving date of award of contract, amount of contract, specified time for completion and date of actual completion. The fact that any concern obtains a set of the plans and specifications from any source whatever and submits a bid shall not constitute a waiver of the foregoing stipulations. JAS. A. WETMORE, Acting Supervising Architect.

PROPOSAL FOR PIER REMOVAL, ETC.—U. S. Engineer Office, Room 1201, 537 South Dearborn Street, Chicago, Illinois. Sealed proposals for pier removal, dredging, etc., in Calumet Harbor, Illinois, will be received here until 10 a.m., October 24, 1922, and then opened. Further information on application.

SEALED PROPOSALS for insulating 6 in. and 8 in. Sewer Lines at Picatinny Arsenal, Dover, N. J., will be received and publicly opened at 11 a.m., Oct. 11, 1922, at Constructing Quartermaster's Office, Room 510, 39 Whitehall St., N. Y. City, N. Y. Information at above address.

U. S. ENGINEER OFFICE, BUFFALO, N. Y.—Sealed proposals will be received here until 11 a.m., October 30, 1922, and then opened for constructing stone-concrete superstructure on breakwater, Buffalo Harbor, N. Y. Further information on application.

U. S. ENGINEER OFFICE, PROVIDENCE, R. I. Sealed proposals will be received here until 12 o'clock, noon, Oct. 30, 1922, and then opened for maintenance dredging in Milford Harbor, Conn. Further information on application.

U. S. ENGINEER OFFICE, MOBILE, ALA.—Sealed proposals will be received here until 11 o'clock a.m., Oct. 10, 1922, and then opened, for the construction of one 100-ft. Diesel-Electric towboat. Further information on application.

Notice to Advertisers

Owing to the holiday—Columbus Day, Thursday, October 12th, the *"Searchlight"* pages of the October 12th issue of *Engineering News-Record* will close for press earlier than usual. Copy should reach us as follows:

Display Ads—
Copy required by **5 P. M.**, Friday October 6th.

Want Ads—
Copy required by **10 A. M., Saturday, October 7th.**

Proposal Ads—
Copy required by 10 A. M., Monday, October 9th.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Oct. 17	Canandaigua, N. Y. Adv. Oct. 12.	Oct. 12
Oct. 17	Memphis, Tenn. Adv. Oct. 12.	Oct. 12
Oct. 17	Kinney, Minn.	Oct. 12
Oct. 19	Newark, N. J.	Sept. 7
Oct. 20	Morris, Minn.	Oct. 12
Oct. 21	Mayfield, N. Y. Adv. Oct. 12.	Oct. 12
Oct. 24	Albuquerque, N. M. Adv. Oct. 5 and 12.	Oct. 5
Nov. 1	Bay Saint Louis, Miss.	Oct. 5
Nov. 14	Newport, Ky.	Oct. 5

SEWERS

Oct. 16	State College, Pa.	Sept. 21
Oct. 16	Hackensack, N. J.	Sept. 28
Oct. 16	Ellsworth, Wis.	Oct. 5
Oct. 16	Carroll, Ia.	Oct. 12
Oct. 17	Salt Lake City, Utah	Sept. 28
Oct. 17	Laredo, Tex.	Oct. 5
Oct. 19	Brooklyn, N. Y.	Oct. 12
Oct. 20	Wash., D. C.	Oct. 5
Oct. 24	Albuquerque, N. M. Adv. Oct. 5 and 12.	Oct. 5
Oct. 25	Hamilton, Ont.	Oct. 12
Oct. 30	Dover, N. J.	Oct. 5
Oct. 31	Indianapolis, Ind. Adv. Oct. 12.	Oct. 12
Nov. 2	Tulsa, Okla. Adv. Oct. 12.	Oct. 12
Dec. 12	New Orleans, La. Adv. Oct 12.	Oct. 12

BRIDGES

Oct. 16	Sacramento, Cal.	Sept. 14
Oct. 16	Wallace, Idaho	Oct. 12
Oct. 17	Rock Mart, Ga.	Oct. 5
Oct. 17	Crystal Falls, Mich.	Oct. 5
Oct. 19	Chesterfield, S. C.	Sept. 21
Oct. 24	Dover, N. J. Adv. Oct. 12.	Oct. 12
Oct. 25	North Carolina	
Oct. 27	Tennessee	Oct. 12
Oct. 30	Houston, Tex.	Oct. 12
Oct. 31	Sydney, Australia	Oct. 5
Jan. 23	Spokane, Wash.	Jan. 12
Sept. 1, 1923,	Sydney, New South Wales, Australia	Sept. 21
		Aug. 3

DAMS

Oct. 18	Coleman, Tex.	Oct. 12

EXCAVATION, DRAINAGE IRRIGATION

Oct. 17	Ft. Dodge, Ia.	Oct. 12
Oct. 18	Carrollton, Ill.	Oct. 12
Oct. 23	Terre Haute, Ind. Adv. Oct. 12.	Oct. 12
Oct. 23	Hershey, Neb.	Sept. 28
Oct. 27	Minneapolis, Minn.	Sept. 21

STREETS AND ROADS

Oct. 16	Coalmont, Tenn.	Sept. 28
Oct. 16	Dade City, Fla.	Sept. 28
Oct. 16	California	Sept. 28
Oct. 16	Syracuse, N. Y. Adv. Oct. 5 and 12.	Oct. 5
Oct. 16	Perth Amboy, N. J.	Oct. 5
Oct. 16	Houston, Tex.	Oct. 5
Oct. 16	Titusville, Fla.	Oct. 12
Oct. 17	Pennsylvania Adv. Sept. 28 to Oct. 12.	Sept. 28
Oct. 17	Ballinger, Tex.	Oct. 5
Oct. 17	Johnson City, Tex.	Oct. 5
Oct. 17	Louisiana	Oct. 5
Oct. 17	St. George, N. Y.	Oct. 12
Oct. 18	Florida	Oct. 12
Oct. 18	Utah	Oct. 12
Oct. 19	Brooklyn, N. Y.	Oct. 12
Oct. 19	New York, N. Y.	Oct. 12
Oct. 19	Charleston, S. C.	Sept. 28
Oct. 19	Crookston, Minn.	Oct. 5
Oct. 20	West Virginia	Oct. 12
Oct. 20	Missouri	Oct. 12
Oct. 23	Missouri	Oct. 12
Oct. 23	Mound City, Kan.	Oct. 12
Oct. 24	New Jersey Adv. Oct. 12.	Oct. 12
Oct. 24	St. Louis, Mo.	Sept. 28
Oct. 24	St. Louis, Mo.	Oct. 5
Oct. 24	New York Adv. Oct. 5 and 12.	Oct. 5
Oct. 25	North Carolina Adv. Odt. 12.	Oct. 12
Oct. 26	Baltimore, Md.	Oct. 12
Oct. 27	Tennessee	Oct. 12
Oct. 31	Milwaukee, Wis.	Oct. 12
Oct. 31	New York, N. Y. Adv. Oct. 5 and 12.	Oct. 5
Jan. 7	Duluth, Minn.	Sept. 28

INDUSTRIAL WORK

Oct. 16	Cleveland, O.	Sept. 28
Oct. 16	London, Ont.	Oct. 12
Nov. 1	Vischer Ferry, N. Y. Adv. Oct. 12.	Oct. 12

BUILDINGS

Oct. 16	Altoona, Pa.	Sept. 21
Oct. 16	Port Huron, Mich.	Sept. 28
Oct. 16	Patchogue, N. Y.	Sept. 28
Oct. 16	Columbia, Mo.	Oct. 5
Oct. 16	South Orange, N. J.	Oct. 12
Oct. 16	Lake City, Ia.	Oct. 12
Oct. 16	Wash., D. C.	Oct. 12
Oct. 17	Racine, Wis.	Oct. 12
Oct. 17	Holdredge, Neb.	Sept. 21
Oct. 17	Superior, Wis.	Oct. 5
Oct. 18	Baltimore, Md.	Oct. 5
Oct. 18	Brooklyn, N. Y.	Oct. 12
Oct. 19	Athens, O.	Oct. 12
Oct. 19	Phoenix, Ariz.	Sept. 28
Oct. 20	Wash., D. C.	Sept. 28
Oct. 20	East Haddam, Conn.	Oct. 12
Oct. 20	Logan, O.	Oct. 12
Oct. 23	Greensboro, N. C.	Sept. 28
Oct. 26	Evansville, Ind	Oct. 12
Oct. 31	Creedmoor (Jamaica P. O.), N. Y. Adv. Sept. 28 to Oct. 12.	Oct. 5 Sept. 28
Oct. 31	Baltimore, Md.	Oct. 12
Nov. 1	Centerville, O.	Oct. 12
Nov. 1	Plant City, Fla.	Oct. 12
Nov. 1	Duluth, Minn.	Oct. 5
Nov. 1	Irvington, N. J.	Oct. 5
Nov. 15	Ocean City, N. J.	Oct. 12
		Oct. 5

FEDERAL GOVERNMENT WORK

Oct. 16	Earthwork—Yuma, Ariz.	Sept. 14
Oct. 16	Hospital—Chelsea, N. Y.	Sept. 28
Oct. 16	Mechanical Equipment — Chelsea, N. Y.	Sept. 28
Oct. 17	Extension to Workroom — Fall River, Mass.	Oct. 5
Oct. 18	Quarters—Edgewood, Md.	Sept. 21
Oct. 18	Foundations, etc. — Phila., Pa.	Oct. 5
Oct. 18	Septic Tank, etc.—Virginia Beach, Va.	Oct. 5
Oct. 18	Roof—Portsmouth, N. H.	Oct. 5
Oct. 20	Dredge Tenders — Phila., Pa.	Sept. 28
Oct. 21	Dredging — San Diego, Calif.	Oct. 5
Oct. 23	Dredging — Providence, R. I. Adv. Sept. 28 to Oct. 12.	Sept. 28
Oct. 23	Dump Scows — Nashville, Tenn. Adv. Sept. 21 to Oct. 12.	Sept. 21
Oct. 24	Pier Removal, etc. — Chicago, Ill. Adv. Sept. 28 to Oct. 12.	Sept. 28
Oct. 24	Laboratory—Wash., D. C.	Oct. 12
Oct. 25	Dredging — Puget Sound, Wash.	Oct. 5
Oct. 26	Extension—Adrian, Mich.	Oct. 12
Oct. 27	Extension to Workroom, etc. —Rochester, Minn. Adv. Oct. 5 and 12.	Oct. 5
Oct. 30	Superstructure — Buffalo, N. Y. Adv. Oct. 5 and 12.	Oct. 5
Oct. 30	Dredging—Providence, R. I. Adv. Oct. 5 and 12.	Oct. 5
Oct. 30	Alterations, etc.—Richmond, Va.	Oct. 5
Oct. 31	Dredging—Honolulu, H. T.	Aug. 31
Nov. 1	Laundry — New York, N Y. Adv. Oct. 12.	Oct. 12
Nov. 1	Alterations, etc. — Fitzsimons, Colo. Adv. Oct. 12.	Oct. 12
Nov. 6	Pier, etc. — Milwaukee, Wis. Adv. Oct. 12.	Oct. 12
Nov. 6	Breakwater—Chicago, Ill. Adv. Oct. 12.	Oct. 12
Nov. 6	Dump Scows — Buffalo, N. Y. Adv. Oct. 12	Oct. 12
Nov. 14	Hospital—Chillicothe, O.	Oct. 12

MISCELLANEOUS

Bids Close		See Eng. News-Record
Oct. 16	Tractors—San Jose, Calif.	Oct. 5
Oct. 18	Brick—Wash., D. C.	Sept. 28
Oct. 20	Bulkhead, etc. — Lawrence Harbor (Cliffwood P. O.), N. J.	Oct. 5
Oct. 20	Foundation, etc. — New York, N. Y.	Oct. 12
Oct. 24	High School Equipment—Wash., D. C. Adv. Oct. 12.	Oct. 12
Oct. 30	High School Equipment—Wash., D. C. Adv. Oct. 12.	Oct. 12
Oct. 31	Steam Pumps — Atlanta, Ga. Adv. Oct. 5 and 12.	Oct. 5
Nov. 4	Transformers, etc. — Melbourne, Australia	Aug. 17
Nov. 13	High School Equipment—Wash., D. C. Adv. Oct 12.	Oct. 12
Nov. 21	High School Equipment—Wash., D. C. Adv. Oct. 12.	Oct. 12
Dec. 18	Coal Handling Plant — Melbourne, Victoria, Australia	Sept. 21

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

W. Va., Bluefield—Bluefield Water Works Impvt. Co., having plans prepared mechanical water filters, 2,000,000 gal. capacity. $70,000. Ford, Burdick & Howson, 8 South Dearborn St., Chicago, engrs.

Miss., Corinth—Soon takes bids water distribution system, incl. 25,212 ft. 4-6 in. c.i. pipe, two 400 gal. centrifugal pumps, one 750 gal. centrifugal motor driven pump, one deep well pump, 13 fire hydrants. $35,000. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, Mo., consult. engr.

O., St. Clairsville—Nov. 7 to vote on $60,000 bonds to be used with $65,000 previous bond issue for 200 ft. reservoir, 25 ft. high, 30,000 gal. capacity, south of here. C. Rothormond, Martins Ferry, engr.

Mich., Clawson—Village having plans completed waterworks system incl. 11,150 ft. 8 in. and 200 ft. 6 in. c.i. mains, 17 fire hydrants, fifteen 8 in. gate valves, seventeen 6 in. gate valves with boxes, specials, 75,000 gal. elevated steel water tank, etc. Ruhling, Holdsworth & Hudson, 16549 Woodward Ave., Highland Park (Detroit P. O.), engrs.

Mich., Ecorse—Having plans prepared 2 mi. 6 in. c.i. mains, incl. specials, hydrants, etc. $75,000. M. L. Brown & Son, 120 Madison Ave., Detroit, engrs.

Mich., Ferndale—Having tentative plans completed for replacing 2 mi. 8 in. c.i. mains with 12 in. c.i. main, from here to Pleasant Ridge, also reserve well at connection. $40,000. G. Jerome, 1331 Majestic Bldg., Detroit, engr.

Ill., Astoria—Making plans waterworks, incl. 30,000 gal. impounding reservoir, 200,000 gal. a day rapid sand filter plant, 4 motor driven centrifugal pumping units, filter plant, pump house, 13,200 ft. 6 in. c.i. mains, etc. $40,000. W. A. Fuller Co., 1917 Railway Exch., St. Louis, Mo., engrs.

Tex., Ballinger—Sold $25,000 bonds to increase quantity and quality of water supply. J. E. Pirie, Ballinger, engr.

Tex., Greenville—C. S. Clark and A. H. Dunlap, members of State Bd. of Water Engineers, Austin, making survey of drainage area north of here, for purpose of locating larger water supply. City election in October to vote on $100,000 bonds for project. A. D. Duck, city engr.

Tex., Teague—Plans extensive waterworks improvements. J. B. Hawley, Dallas, consult. engr.

Okla., Tulsa—Water Comn., rejected bids opened Sept. 25 gate valves for Spavinaw Water Supply Project, Contr. 9. Will re-

Waterworks (Continued)

advertise. Trammell & Holway, 329 Kennedy Bldg., engrs. D. H. Maury, 1445 Monadnock Bldg., Chicago, consult. engr. Noted Aug. 24.

Okla., Tyrone—Town Bd. soon receives bids waterworks system including power house. $70,000. H. Knott, city engr.

Ont., Hanover—Oct. 16, to vote on $135,000 bonds for 3½ mi. of 4 in. mains, concrete reservoir, pumping station, (steam), steel water tower, and additional 6 in. mains. Prices wanted on all materials and equipment. J. Taylor, city engr.

Ont., Wheatley—Having plans prepared new waterworks system. $30,000. Prices wanted on all equipment. R. O. Wynne-Roberts, 40 Jarvis St., Toronto, engrs.

Ont., Windsor — Having plans prepared for filtration plant. $500,000 bonds will be voted on in January. James, Proctor & Redfern, Confederation Life Bldg., Toronto, engrs.

BIDS DESIRED

N. Y., Canandaigua—Oct. 17, by Bd. Pub. Wks., City Hall, furnishing and delivering c.i. pipe and specials. W S. Lozier, 321 Cutler Bldg., Rochester, consult. engr.; adv. this issue.

N. Y., Mayfield—Oct. 21 at office of F. J. Warner, village clk., for water system. M. Vrooman, Gloversville, engr.; adv. this issue.

La., New Orleans—See "Sewers."

Tenn., Memphis—Oct. 17, by Memphis Artesian Water Dept., 105-107 North 2nd St., one portable gasoline engine driven air compressor mounted on trucks of steel construction, together with tools, etc. J. Sheahan, acting genl. supt.; adv. this issue.

Minn., Kinney—Oct. 17, by village, one motor-driven, double stroke, deep well, geared plunger pump, with motor, starting apparatus, pipe fittings, etc., 150 g.p.m. capacity, for Water Dept. J. Colombo, clk.

Minn., Morris—Oct. 20, by city, pump station, also furnishing and installing crane. (Separate bids also invited on furnishing crane only, without installing.) F. J. Haight, mgr. C. F. Tweed, 531 Metropolitan Bank Bldg., Minneapolis, engr. Noted Jan. 12.

Tex., Coleman—See "Dams."

BIDS RECEIVED

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity Municipal Bldg., opened bids Oct. 6, mains on subway bridge over New York, New Haven & Hartford R.R., from Beaver Eng. & Contg. Co., 57 Chambers St., $10,080; Vulcan Rail & Constr. Co., Maspeth, $19,094; H. E. Fox Constr. Co., 81 East 125th St., $19,363. Noted Sept. 28.

O., Cleveland—Opened bids Sept. 29, furnishing and laying 10,400 lin.ft. 60 in. (a) riveted steel, (b) lockbar or (c) c.i. mains, in Wade Park Ave., from Martin & McDace, Illuminating Bldg., (a) $376,190; P. F. Connelly, 313 Commonwealth Bldg., (b) $398,341, (c) $537,101. Noted Sept. 7.

O., Parma Heights (near Cleveland)—Opened bids Sept. 29, 22,622 ft. 12 in. c.i. mains, from D. Pfahl & Co., Guardian Bldg., Cleveland, $109,500; Hadded Mall Co., Schofield Bldg., Cleveland, $112,472.

Mo., St. Louis—Bd. Pub. Serv., City Hall, opened bids Oct. 3, furnishing and delivering 210 ton 6 in., 88 ton 8 in., 200 ton 12 in. A, 230 ton 12 in., 327 ton 20 in. and 2332 ton 36 in. B coated c.i. pipe, from U. S. Cast Iron Pipe & Fdry. Co., Security Bldg., at $47.60 per ton; 160 ton coated c.i. special castings, from Bessemer Fdry. & Mchy. Co., $87.20 per ton, Amer. Cast Iron Pipe Co., 716 Scarritt Bldg., Kansas City, $106, U. S. Cast Iron Pipe & Fdry. Co., Security Bldg., $125, tap valves, from A. P. Smith Mfg. Co., $16,263, Chapman Valve Mfg. Co., 1452 South 2nd St., $17,305; 300 single nozzle, short barrel post fire hydrant top parts, from A. P. Smith Mfg. Co., $38.90 each. Amer. Fdry. & Mfg. Co., 11th and Hebert Sts., $39.50, Kennedy Valve Mfg. Co., $44.91. Noted Sept. 28.

CONTRACTS AWARDED

N. C., Taylorsville—See "Sewers."

O., Columbus—See "Streets and Roads."

O., Columbus—Franklin Co., 18,740 ft. 6-12 in. c.i. mains in Sewer Dist. Clinton 2, Clinton Twp., to Pitt Constr. Co., Inc., Fulton Bldg., Pittsburgh, Pa., $33,698. Noted Oct. 5.

Ill., Hanover—For 17,163 lin.ft. 4-8 in. c.i. pipe, in place, 10,821 lb. specials, gate valves, fire hydrants, centrifugal pump, single phase motor, 40,000 gal. elevated steel tank, on 70 ft. tower, etc., to Kruse Constr. Co., Spencer, Ia., $20,000. Noted Sept. 21.

Ill., Jerseyville—For 34,320 ft. 10 in. and 2,640 ft. 4 in. c.i. mains, 1 story, 26 x 36 ft. stone pump house, rein.-con. reservoir, 100,000 gal capacity, pumps, etc., to C. M. Hanes, Jerseyville, $215,740. Noted July 27.

Wis., Milwaukee—Sewerage Comn., 508 Market St., feed water softener and purification system, from Cochrane Eng. Co., 53 West Jackson Blvd., Chicago, $10,318; Wayne Tank & Pump Co., Anthony Hotel, Ft. Wayne, Ind., $10,810; Permutit Co., 440 4th Ave., New York City, $16,260.

N. D., North Fargo (Fargo P. O.)—Waterworks system, incl. 880 lin.ft. 8 in., 1,335 lin.ft. 10 in. and 2,040 lin.ft. 12 in. c.i. pipe, 100,000 gal elevated steel tank on 100 ft. tower, pump house, pump, hydrants, valves, etc., to Schruth & Jackson, 633 Plymouth Bldg., Minneapolis, Minn., $34,383.

S. D., Colome—Waterworks system incl. 11,000 lin.ft. 6 in. c.i. pipe, concrete well, pumphouse and machinery, to Ellerman-McLain Co., Yankton, $27,000.

Okla., Tulsa—Water Comn., constructing Spavinaw Water Supply Project, Contr. 1, telephone line, to D. E. Emnoss, Vinita, $11,606; Contr. 2, clearing site for dam, Contr. 3 dam, Contr. 5 tunnel and approaches, and Contr. 10 laying c. i. pipe, to Standard Paving Co., 321 North Boston St., $120,250, $787,610, $304,058 and $49,358 respectively; Contr. 4 60 in. concrete conduit pipe, and Contr. 6, 54 in. concrete conduit pipe, to Walbridge-Aldinger Co., 2356 Penobscot Bldg., Detroit, Mich., $2,136,980 and $1,715,160 respectively; Contr. 7 Mohawk Reservoir, to R. D. Davies & Son, Tulsa, (street address not available) $109,956; Contr. 8 furnishing c. i. pipe, to U. S. Cast Iron & Foundry Co., East Burlington St., Burlington, N. J., $210,792; Contr. 11 high pressure reservoir, to Trailor Dewey Contg. Co., Tulsa, (street address not available) $150,554. Noted Aug. 24.

Que., Montreal—Water Works Dept., 11 Place D'Armes, 11,000 ft. 40 in. steel force mains from pumping station to Atwater and Sherbrooke Sts., and 2,000 ft. 30 in. steel force main in Sherbrooke St. from Atwater to Oliver Sts., to Laurin & Leitch Eng. & Constr. Co., 590 Union Ave. $500,000.

Sewers

PROPOSED WORK

N. Y., Auburn—Plans 12 in. or larger combined sewer in Liberty St. and Curtis Pl. $25,000. M. F. Dullea, city engr.

Pa., Carbondale — Plans surface sewers in Main St. $7,000, Maple Ave. $1,370, Copeland Ave. $2,450, Dundaff St. $9,850, Chestnut Ave. $785, 8th Ave. $11,650, Salem Park $3,850, Laurel St. $7,900. W. L. Giles, city engr.

Miss., Corinth—Soon takes bids 29,000 ft. 8-10 in. vitr. pipe sewer in various streets, 85 brick manholes with c.i. frames and covers, 10 ton c. i. pipe with sewer crossing streams, 6,200 cu.yd. earth trenching. $35,000. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, Mo., consult. engr.

Mich., Grosse Pointe Farms (Detroit P. O.)—Plans 3,500 ft. vitr. crock or segment block sewer in Kerby Rd. from Ridge Rd. to Black Marsh Creek, incl. 1,750 ft. 36 in., 940 ft. 24 in. and 810 ft. 22 in. pipe. $25,000. R. H. Erly, engr.

Mich., Royal Oak (Detroit P. O.)—Plans prepared for 17,600 ft. main trunk sewer, incl. 610 lin.ft. 18 in., 2,250 ft. 15 in., 4,332 ft. 12 in., 5,620 ft. 10 in., 2,176 ft. 8 in. and 1,420 ft. 6 in. vitr. crock pipe. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engrs.

Wis., Birnamwood — Having plans prepared storm and sanitary sewers. $25,000. W. G. Kirchoffer, Dean Blk., Madison, engr.

Wis., Eagle River—Having plans prepared sanitary and storm sewers and disposal tank. $25,000. W. G. Kirchoffer, Dean Blk., Madison, engr.

Wis., La Crosse—Plans trunk sewer extension in 16th St. $60,000. C. Congdon, City Hall, acting city engr.

Ia., Muscatine—Making plans sanitary sewerage system in South Muscatine. $25,000. J. Selden, city engr.

N. D., Grafton—Having plans prepared sewage disposal plant. $27,000. W. J. LaMarre, city aud.

Que., Montreal—Plans 600 ft. of 2 x 3 brick sewers in Fullum St. from Hochelaga to Sherbrooke Sts. $3,832, 1,416 ft. in 15th Ave. from Masson to Dandurand Sts. $7,450, 200 ft. in Decarie Blvd. from Bourret St. to Lots 51-398, $1,224, 2,635 ft. in Ridgewood Ave. from Rielle to Jolicoeur Sts. $15,548 E. Fusey, supt. sewer dept.

Ont., North Bay—Having plans prepared 24-30 in. concrete sewers. $25,000. Work will probably de done by day labor. F G. Mackie, city engr.

BIDS DESIRED

N. Y., Brooklyn—Oct. 19, by E. Riegelmann, boro pres., Boro Hall, sewers in 77th St. between 11th and 12th Aves., Ft. Hamilton Parkway between 53rd and 54th Sts., Ocean and Ft. Hamilton Parkways, Farragut Rd., East 12th, 77th, East 21st, 66th, East 37th, 57th, 67th, Carroll, East 42nd and Chester Sts., Brooklyn, 15th, Shepherd and Riverdale Aves.

La., New Orleans—Dec. 11, by Sewerage & Water Bd., 526 Carondelet St., labor-material percentage contract for year 1923. G. G. Earl, genl. supt.; adv. this issue.

Ind., Indianapolis — Oct. 31, by Bd. of Sanitary Comrs., City Hall, constructing Sect. 3, Div. 3, and furnishing and erecting mechanical equipment for sewage disposal plant. J. A. Craven, pres.; adv. this issue.

Ia., Carroll—Oct. 16, for 9,000 lin.ft. 8 in sanitary sewers, 2 pumping stations, etc. $25,000. W. A. Arts, clk.

Okla., Tulsa—Nov. 2, by Bd. Comrs., 5,700 ft. storm sewer, 5,100 ft. of which will be in tunnel cut. C. Schultz, city engr.; adv. this issue.

Ont., Hamilton—Oct. 25, by G. Coppley, mayor and chn. Bd. Control, sewer in Kenilworth Ave., incl. 550 lin.ft. 5 ft. and 3,177 ft. 2 ft. 8 in. x 4 ft. concrete sewer, 153 ft. 4 ft. 6 in. x 4 ft., 85 lin.ft. 4 ft. 9 in. x 3 ft. 9 in., and 43 ft. 4 ft. 6 in. x 5 ft. 6 in. monolithic sewer, 1,338 lin.ft. 12 in. and 515 ft. 24 in. vitr. pipe. $100,000, E. R Gray, city engr.

BIDS RECEIVED

Pa., Phila.—Opened bids Oct. 3, vitr. pipe sewer in (1) Bigler St. and Moyamensing Ave., (2) Colorado, Penn and 21st Sts., (3) Colna, Smedley, 16th and 17th Sts., and Dickens and Holbrook Aves., (4) Pollock St., brick sewer in (5) 67th Ave. and 21st St., from O'Neill Co., 127 East Mermaid Lane, (1) $26,523 (2) $27,568 (3) $26,152 (4) $24,430 (5) $27,573; A. A. Pastori, 5904 Woodland Ave., (1) $27,188 (2) $28,176; W. H. Yellman, Lincoln Bldg., (1) $27,966; A. J. Ellis, 5724 North Marshall St. (2) $25,324 (3) $26,753 (4) $25,788 (5) $27,602; A. Joffola, 1203 Tree St., (3) $25,849; A. Leva, Phila., (street address not available) (4) $26,873; Girard Underpinning Co., 2930 Diamond St., (5) $26,419. Noted Sept. 28.

O. Cleveland Heights (Warrensville P. O.)—Opened bids Oct. 2, sewers in (1) North Compton Rd., (2) Hyde Park Ave., (3) Blanche Ave., mains in (4) Blanche, South Compton and Hyde Park Rds., from B. H. Whittaker, 343 The Arcade, Cleveland, (1) $7,386 (2) $5,233 (4) $17,262; Palermo & Consolo, 14110 Benwood Ave., Cleveland, (1) $7,412 (2) $4,828 (3) $30,511 (4) $17,518; Iafornaro Constr. Co., 3218 Murray Hill Rd., Cleveland, (3) $32,022. Work involves 2,380 ft. 36 and 48 ft. brick and 8,350 ft. 8-24 in. vitr. tile pipe. Noted Sept. 28.

O., Geneva—W. E. Morgan, village clk. and Burgess & Niple, engrs., 141 East Broad St., Columbus, opened bids Oct. 2 sewage disposal plant, from D. E. Beattie, 715 Chitty St., Akron, $52,990.

Mich., Detroit—Opened bids Sept. 30, (1) Ryan Ave. Arm of Seven Mile Rd. Sewer (2) Fenelon Ave. Arm of Seven Mile Rd Sewer (3) Edison Ave. Arm (4) Houston Ave. Arm of Gratiot Ave. Sewer (5) Westminster Ave. Arm, from W. Blanck & Co., 823 Ford Bldg., (1) $52,591 (2) $39,859 (5) $53,768; R. D. Baker, 1631 Elmhurst Ave., (1) $51,739 (2) $37,286 (4) $43,902; J. Wagner, West Grand Blvd., (1) $48,602; C. R. Lennane Co., 2631 Woodward Ave., (2) $40,784 (4) $41,264 (5) $53,771; Lennane & McIlvenna, 1205 Book Bldg., (3) $59,130; J. A. Mercier, 216 Hammond Bldg., (3) $60,900, Connelly Bros., 603 Hodges Bldg., (3) $58,260 (5) $49,691; A. Rossi, 3447 St. Aubin Ave., (4) $44,924. Noted Sept. 28.

Mich., Detroit—Building sewers as follows: (1) Lateral 3634 (2) Lateral 3727 (3) Lateral 3728 (4) Lateral 3729 (5) Lateral 3730 (6) Lateral 3731 (7) Lateral 3732 (8) Lateral 3733 (9) Lateral 3734 (10) Lateral 3735 (11) Lateral 3736, from Judd Co., 2287 12th St., (1) $18,921 (9) $34,260; Hammen & Co., 4612 Woodward Ave., (1) $17,645 (5) $5,248 (9) $28,673 (10) $58,750; Western Constr. Co., 1208 Ford Bldg., (1) $17,679 (4) $3,963 (5) $3,929 (6) $4,152; J. A. Mercier, 216 Hammond Bldg., (2) $4,357 (4) $4,320 (5) $4,392 (6) $4,562 (7) $4,577 (10) $61,589

Sewers (Continued)

(11) $24,347; W. Blanck & Co., 823 Ford Bldg., (2) $4,403 (3) $11,756 (7) $4.844 (11) $28,837; Detroit Drainage Constr. Co., Penobscot Bldg., (3) $11,300; C. R. Lennane Co., 2631 Woodward Ave., (3) $11,744. A. Rossi, 5307 Constr. Co., 1026 Dime $4,430; Liberty Constr. Co., 1026 Dime Bank Bldg., (6) $4,760 (7) $4,720 (9) $33,500 (10) $63,700; J. Zacolia, Detroit, (street address not available), (8) $729; Cappello & Fattore, Detroit, (street address not available) (8) $800; J. F. Gentile, 920 Rowena Ave., (9) $775; Coolsaet Bros., Detroit, (street address not available), (2) $4,212; J. Montie, 400 Penobscot Bldg., (11) $28,342.

Wis., Milwaukee — For 3,814 ft. storm sewer, etc., in Keefe Ave. from 25th St. to Hopkins Rd. and along Hopkins Rd. to Mud Creek, 3,159 lin.ft. 60-72 in. concrete sewer, 655 lin.ft 48 x 84 in. rein.-con. sewer, one overflow chamber, etc., from L. G. Zimmerman, 2826 State St., $109,409; H. Hohensee, Ludington Ave., Wauwatosa, $123,818; Wenzel & Henoch, 498 27th St., $124,656.

CONTRACTS AWARDED

N. Y., New York—H. Bruckner, pres. Bronx Boro, sewer in Webster Ave., to Spadaro Contg. Co., 827 East 217th St., $518,984; paving with sheet asphalt West 190th St., etc., to C. D. Beckwith, 2875 Bway., $7,979. Noted Oct. 5.

N. C., Taylorsville—Constructing sewerage and waterworks systems, to Electrical Constructors Co., 508 West 4th St., Charlotte, $63,418. Noted June 8.

O., Columbus—Franklin Co., vitr. sewer in Sewer Dist. Clinton 2 Contr. 13, to Gangl Constr. Co., 737 2nd Natl. Bldg., Akron, $55,929; Sewer Dist. Clinton 2 Contr. 12, to C. F. Smith, 54 Davies St., Dayton, $12,163; vitr. or concrete sewer in Sewer Dist. Marion 1, to W. Neilson, 1616 Summit St., $18,721. Noted Oct. 5.

O., Columbus—See "Streets and Roads."

Mich., Cadillac—General contract for 2 story, concrete and brick sewage disposal and filtration plant, to G. C. Stewart, Cadillac, $34,487; control equipment to Specific Flush Tank Co., Chicago, Ill., (street address not available), $3,900. Aug. 17.

Mich., Lincoln Park (Wyandotte P. O.) —For 8,030 ft. of 8-48 in. vitr. crock sewer in Emmons Blvd., to Callahan & Grosse, Lincoln Park, $38,192. Noted Sept. 14.

Mich., Springwells — Building 3,447 ft. Sect. 10 main trunk sewer, to Detroit Drainage Constr. Co., 5099 Lemay Ave., Detroit, $65,578; 5,058 ft. Sect. 14 main trunk sewer, to J. Porath, 745 Griswold St., Detroit, $103,677; grading Schaffer Rd., incl. 13,500 cu.yd. excav., 95 cu.yd. rein.-con., 6,000 lb. reinforcing, to Closser Bros., 8427 Stencfor Ave., Detroit, $14,059; bridge over Roulo Creek to Gass-Thurston Co., 1520 15th St., Detroit, $4,500. Noted Sept. 28.

Wis., Milwaukee—Metropolitan Sewerage Comn. of Milwaukee Co., 508 Market St., intercepting sewer from Port Washington Rd. to 32nd St. and Hopkins Rd. in North Milwaukee, to Mid-West Constr. Co., 253 Walker St., $367,314. Noted Oct. 5.

Wis., Mount Horeb — Equipment for sewage disposal plant incl. 2 air lifts, settling tank, compressor, air tank, to Wisconsin Fdry. & Machine Co., 623 East Main St., Madison.

Calif., Delano—Sewers, etc., to Stroud Bros., 210 Union St., Bakersfield, 1 rein.-con. settling tank $7,000, 2 sludge beds with roadways, 200 ft. drain $252, 3,978 lin.ft. 24 in. concrete pipe sewers $2.34, 434 lin.ft. 18 in. $1.86, 18,227 lin.ft. 15 in. $1.44, 9,131 lin.ft. 12 in. $1.245, 9,961 lin.ft. 10 in. $1.085, 38,778 lin.ft. 8 in. $0.92, etc., total $119,000.

Waste Disposal

BIDS RECEIVED

W. Va., Charleston—Constructing garbage incinerator, from C. F. Walters, Clarksburg, $23,850; Superior Garbage Incinerator Co., Dallas, Tex., (street address not available), $40,000; Davis Garbage Furnace Co., Charleston, (street address not available), $41,500. Noted Sept. 31.

Bridges

PROPOSED WORK

Pa., Carbondale—Plans to construct its share of Main Viaduct, mostly steel. $90,000. W. L. Giles, city engr.

Pa., Carbondale — Plans steel viaduct over Dundaff St. $30,000. T. A. Boles, clk. Engineer not announced.

SEWERAGE SYSTEM—MARION, OHIO

Following are lowest three bids opened Aug. 31, by E. A. Schultz, dir. Pub. Serv., for outlet section of main sanitary sewer, Contract B, (A) Kohlbarger & Hoyles, Marion, (awarded contract); (B) Harris-Andrews-Henderson Co., Youngstown; (C) D. E. Beattie Co., Akron. The unit bids were as follows:

	A	B	C
9,150 cu.yd. earth excavation (0 to 6 ft. cut)	$0.50	$1.20	$0.65
2,950 cu.yd. earth excavation (6 to 9 ft. cut)	.80	1.20	.70
1,900 cu.yd. earth excavation (9 to 12 ft. cut)	1.00	1.20	1.00
1,050 cu.yd. earth excavation (12 to 15 ft. cut)	2.00	1.20	1.25
300 cu.yd. earth excavation (15 to 18 ft. cut)	3.00	1.20	2.00
25 cu.yd. earth excavation (18 to 21 ft. cut)	4.00	1.20	3.00
50 cu.yd. rock excavation	8.00	3.50	3.50
100 lin.ft. 4-in. vitrified pipe sewer	.25	.17	.50
100 lin.ft. 6-in. vitrified pipe sewer	.30	.22	.75
100 lin.ft. 8-in. vitrified pipe sewer	.40	.33	.80
100 lin.ft. 10-in. vitrified pipe sewer	.50	.48	.80
100 lin.ft. 12-in. vitrified pipe sewer	.60	.60	.80
100 lin.ft. 15-in. vitrified pipe sewer	1.00	.77	1.00
100 lin.ft. 18-in. vitrified pipe sewer	1.40	1.03	1.50
100 lin.ft. 20-in. vitrified pipe sewer	1.80	1.21	1.60
100 lin.ft. 22-in. vitrified pipe sewer	2.25	1.58	2.00
100 lin.ft. 24-in. vitrified pipe sewer	2.40	3.00	2.30
860 lin.ft. 39-in. vitrified segment block sewer	5.65		7.50
7,550 lin.ft. 42-in. vitrified segment block sewer	5.90		8.00
860 lin.ft. 39-in. reinforced concrete pipe sewer	‡5.10 *5.90	4.60	5.00
7,550 lin.ft. 42-in. reinforced concrete pipe sewer	‡5.50 *6.40	5.22	6.00
860 lin.ft. 39-in. monolithic concrete sewer, type "A"	6.00		8.00
200 lin.ft. 39-in. monolithic concrete sewer, type "B"	8.50	9.00	1,500
7,550 lin.ft. 42-in. monolithic concrete sewer, type "A"	6.35		9.00
800 lin.ft. 42-in. monolithic concrete sewer, type "B"	9.20	10.00	10.00
860 lin.ft. 39-in., 2 ring, brick sewer	7.00		7.00
7,550 lin.ft. 42-in. 2-ring, brick sewer	7.80		8.00
18 ton cast iron pipe and fittings	70.00	70.00	80.00
10 cu.yd. concrete, class "A"	20.00	18.00	14.00
50 cu.yd. concrete, class "B"	15.00	17.00	12.00
360 lin.ft. expansion joints	1.00	1.40	
5,000 lb. steel reinforcement	.05	.06	.05
10 cu.yd. brick masonry	25.00	25.00	22.00
15 M Ft. B.M. sheeting and shoring left in place	60.00	35.00	20.00
5 M.Ft.B.M. lumber in foundations	75.00	45.00	40.00
7 standard manholes, having a depth of 8 ft. or less	75.00	60.00	90.00
12 standard manholes, having a depth greater than 8 ft	100.00	70.00	100.00
Drop manholes (lump sum)	150.00	60.00	150.00
6 12-in. stubs	5.00	.60	1.00
3 24-in. stubs	10.00	5.20	4.00
1 30-in. stubs	15.00	7.50	7.00
70 6-in. slants	.50	1.50	1.00
Junction chamber (lump sum)	700.00	1,000.00	1,000.00
Spillway (lump sum)	650.00	720.00	500.00
25 sq.yd. restoring cinder or gravel roadway	.50	3.50	4.00
50 sq.yd. restoring macadam roadway	.60	3.50	4.00
25 sq.yd. restoring concrete roadway	2.00	4.00	4.00
50 sq.ft. restoring stone walks	.25	.70	.30
50 cu.yd. cinder or gravel filling	2.00	3.50	4.00
10 cu.yd. removing existing masonry	3.50	5.00	10.00
Extended totals reinforced-concrete pipe sewer	$76,316	$80,619	$81,320

‡ Core Joint Concrete Pipe.
* Independent Concrete Pipe.

Pa., Carbondale — Plans bridge over Racket Brook on Williams Ave. $1,000; rebuilding Brooklyn Bridge $5,000; replacing White Bridge on Cottage St. $8,000; new bridge over Lackawanna River near No. 3 shaft $12,000. W. L. Giles, city engr.

Pa., Pittsburgh—Allegheny Co. soon takes bids building bridge 7 incl. approaches across Allegheny River, at 40th St. near Foster St.

Va., Richmond—Boulevard Bridge Corp. plans 2,200 ft. steel, concrete and masonry bridge over James River near southwest city limits. S. McGuire, 1008 West Grace St., pres.

North Carolina—State Hy. Dept., Raleigh, plans 1½ mi. bridges and approaches from Bladen Co. line to Great Swamp on Route 211, State Project 392, Robeson Co. $45,000. C. M. Upham, state highway engr.

Fla., Port Tampa—Gandy Bridge Co., St. Petersburg, having plans prepared one 75 ft. double lift steel draw bridge over Ship Channel, 13,490 lin.ft. rein.-con. $1,200,000. G. S. Gandy, Jr., St. Petersburg, engr.

Fla., Seabring—Highland Co. having preliminary plans prepared steel span bridge, probably I beam or truss. $50,000. W. C. Peacock, Sebring, engr.

Ia., Charles City — Floyd Co. making plans concrete bridge over Cedar River. $50,000. G. H. Elliott, Charles City, engr.

BIDS DESIRED

N. J., Dover — Oct. 24, by State Hy. Dept., Trenton, repairing bridge over Barnegat Bay from Seaside Heights to Island Heights, here. J. L. Vogel, 772 Broad St., Newark, bridge engr.; adv. this issue.

North Carolina—Oct. 25, by State Hy. Comn., Raleigh, bridges and culverts on State Project 152, Hyde Co., 230 cu.yd. concrete, 19,000 lb. reinforcing, 1,600 ft. untreated and 3,600 ft. treated timber piles, 1,160 sq.yd. asphaltic wearing surface, 36,800 ft. untreated and 82,800 ft. creosoted lumber. $30,000. C. M. Upham, state highway engr.

North Carolina — See "Streets and Roads."

Tennessee—Oct. 27, by State Hy. Dept., Nashville, bridges over 20 ft. span located as follows at sta. 72-27 two 18 ft. spans; sta. 159-31 three 26 ft. one 40 ft. and one 114 ft. spans; sta. 234-81 five 20 ft. spans; sta. 357-75 two 16 ft. spans; sta. 555-37 two 40 ft. and four 32 ft. spans, above includes 2,122 cu.yd. dry excav., 1,901 cu.yd. concrete, 82.22 cu.yd. special concrete, 208,006 lb. deformed steel bars, 117,636 lb. fabricated structural steel, 2,112 lb. steel castings, etc. D. Q. McComb, Nashville, ch. engr.

Kan., Mound City — See "Streets and Roads."

Idaho, Wallace—Oct. 16, by W. I. Bassett, dist. engr. Bureau Highways, Coeur d'Alene, building four 90 ft. steel bridges, concrete substructures, between here and Kellogg, Shoshone Co.

BIDS RECEIVED

Calif., Stockton—Constructing bridge on Center St. over Mormon Channel, (1) bridge complete with all railroad traffic removed from bridge, (2) bridge complete allowing railroad companies to keep traffic in continuous operation, from Davis-Heller-Pearce Co., Delta Bldg., (1) $44,000 (2) $45,500; Davison & Nicolsen, 180 Jessie St., San Francisco, (1) $47,500 (2) $65,000; A. W. Kitchen, 110 Market St., San Francisco, (1) $47,920 (2) $52,000. Noted Sept. 21.

CONTRACTS AWARDED

Connecticut—See "Streets and Roads."

Ohio — W. H. Duffy, dir. Pub. Serv., Columbus, raising existing span and building new spans, etc. for Rathbone Bridge, 1,100 ft. long, 16 ft. wide, across Scioto River in Concord Twp., Delaware Co., to E. M. Scully, 1431 Eastwood Ave., Columbus, $120,717. Noted Sept. 28.

Mich., Springwells—See "Sewers."

Ia., Atlantic—Supervs. Cass Co., to Pittsburgh-Des Moines Steel Co., 9th and Tuttle Sts., Des Moines, 6 rein.-con. box culverts,

Bridges (Continued)

$8,218, concrete figures $26.50 per cu.yd.; Henningson Constr. Co., Atlantic, 11 rein.-con. box culverts, $17,942, concrete figures $25.62 per cu.yd.

Tex., Houston—Bridge on Sabine St., to Smith, Starkey & Brown, 303 Stewart Bldg., $161,307. Noted Aug. 10.

Dams

PROPOSED WORK

Wis., Laona—Connor Lumber Co. making plans concrete and steel dam to replace present dam, gate hoist, concrete abutment walls. $25,000. L. A. De Guere, Wisconsin Rapids, engr.

BIDS DESIRED

Tex., Coleman—Oct. 18, by City Comn., dam and main extensions incl. 155,000 cu.yd. earth excav., concrete spillway, 23,000 ft. 10 in. c.i. pipe, valves and castings, pump house and pumps. Elrod Eng. Co., 3202 Elm St., Dallas, engrs.

Excavation, Drainage, Irrigation

BIDS DESIRED

Ind., Terre Haute—Oct. 23, by F. Rush. construction comr., Room 19, Natl. Block, 6th and Wabash Aves., cleaning, repairing and extending drainage ditches; adv. this issue.

Ia., Ft. Dodge—Oct. 17 by Supervs. Webster and Greene Counties for Joint D.D. 212 Webster Co. and 105 Greene Co., 1600 ft. double strength tile and 45,710 ft. standard tile, ranging from 6-42 in., 4,000 cu.yd. open ditch, etc.; open ditch 2,000, tile drain $88,625. J. L. Parsons, Ft. Dodge, engr.

CONTRACTS AWARDED

Fla., Ft. Lauderdale—Constructing canal, 35 ft. bottom, to N. A. Campbell, West Palm Beach, 81,000 cu.yd. earth excav. at $0.20 per cu.yd., 9,000 cu.yd. rock excav. at $1.71, total $31,590. Noted Sept. 14.

Fla., Melbourne—Crane Creek D.D., 850,000 cu.yd. dredging, to Canal Constr. Co., McCall St., Memphis, Tenn., $0.16 per cu.yd.

Fla., St. Petersburg—Gandy Bridge Co., 1,200,000 cu.yd. dredging for Gandy Bridge fill, to Seaboard Dredging Co., 105 Jackson St., Tampa, $0.25 per cu.yd.

Wis., Mauston — Farm Drainage Bd., Juneau Co., 19,040 ft. 8-16 in. tile drain, average depth 5 ft., some open ditch work, to Havey Bros. Co., Lyndon Station Engrs. est. $25,000.

S. D., Aberdeen—Brown Co., Portage-Detroit-Crow Creek Drain, incl. 1,000,000 cu.yd excav., to Northern Minnesota Drainage Co., Litchfield, Minn., $130,600.

Wash., Wenatchee—Wenatchee Irrigation Dist., Chelan Co., replacing 2,000 ft. side hill flume with concrete ditch; concreting 1,100 ft. tunnel and 2,000 ft. main canal between Sunnyslope and Cashmere, ½ mi. Sunnyslope lateral and ½ mi. ditch in East Wenatchee; replacing 1,600 ft. of 42 and 48 in. pipe on Columbia River Bridge, 1,000 ft. steel and remainder wood pipe. $85,000. Work will be done by day labor. C. C. Williams, Wenatchee, engr.

B. C., Port Coquitlam—Provincial Government, Victoria, dredging and clearing logs and driftwood for new channel for Coquitlam River, south of railroad and highway bridges, incl. 45,000 cu.yd. excav., to A. B. Palmer & Co., 929 Main St., Vancouver, $25,000.

Streets and Roads

PROPOSED WORK

N. Y., Auburn — Plans paving Owasco, Seymour and Mary Sts. $25,000. M. F. Dulla, city engr.

N. J., Flemington—Hunterdon Co. plans paving 21 mi. concrete road from Lambertville to Whitehouse Sta. G. Davis, Whitehouse Sta., engr.

Pa., Carbondale—Plans repaving South Main and Pike Sts. $8,000, North Main St. $7,500, 6th Ave. $3,000; paving River and Dundaff Sts. $20,000, North Church St. $10,000. W. L. Giles, city engr.

Pa., New Castle—Plans paving Montgomery Ave. between Atlantic Ave. and Mahoningtown. To exceed $25,000. Engineer not announced.

Pa., Wesleyville—Plans grading and paving 2,260 ft. Euclid Blvd. $25,000.

W. Va., Charleston—City Council takes bids about Nov. 15, paving 1¼ mi. Park Dr., Morris and Lee Sts., 24 ft. $55,000. E. Bruce, 1222 Lee St., engr.

Fla., Monticello — Dec. 12, to vote on bonds to pave 12,000 yd., type of pavement not decided. W. A. Smith, Huntington, W. Va., consult. engr. This corrects report in Sept. 21 issue.

Fla., Plant City—Plans to vote on $65,000 bonds paving Baker, Mahoney, Walker, Howard, Davis, Haines, Cherry, Franklin and Saunders Sts. G. B. Wells, city atty.

Fla., Sebring—Highlands Co. having preliminary plans prepared surfacing with 5 or 6 in. rock on 5 mi. road from Sebring via O'Berrys to Hardee Co. line, $25,000; surfacing with conglomerate material to be dredged from canal, 18 in. thick, 23 mi. road from Lake Annie to Kissimmee River, $200,000; grading and claying with probably 5 to 10 mi. fill, 30 mi. road from De Soto City or Sebring to Bassenger; 6 in. compacted rock base and probably asphalt surface 45 mi. road from Polk Co. to Glades Co. via Avon Park, Sebring, Venus, etc., $300,000. W. C. Peacock, Sebring, engr.

O., Dayton—Montgomery Co. plans paving 4 mi. Dayton-Greenville Pike also 4 mi. Germantown-Middletown Pike, 18-20 ft., 90,000 sq.yd. concrete or brick. $160,000. W O. Pease, co. surv.

Michigan—State Hy. Dept., Lansing, rejected bids Oct. 5, grading 5.38 mi. State Trunk Line Rd. 18-13, Midland Co. Will readvertise. Noted Sept. 28.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and surfacing 8 mi. State Trunk Line Rd. 15-12, Menominee Co., waterbound macadam or gravel, 16 ft., 4 mi. State Trunk Line Rd. 10-33, Sect. A, Cheboygan Co., gravel, 16 ft., gravel surfacing 5½ mi. State Trunk Line Rd. 19-2, Sect. A, Sanilac Co., 16 ft. F. F. Rogers, state highway comr.

Mich., Detroit—Plans paving with 3½ in. sheet asphalt on 8 in. concrete, with Amherst or Berea curbstone, 9,450 sq.yd. Davison Ave. from Conant Ave. to Six Mile Rd., 46 ft., $47,280, 1,840 sq.yd. Reeder Ave. from Junction to Campbell Sts., 26 ft., $9,230, 2,590 sq.yd. Goddard Ave. from Six Mile Rd. to Stender Ave., 26 ft., $12,980, 6,000 sq.yd. Dumbarton Rd. from Ely to Grand River Aves., 30 and 36 ft., $30,310. J. W. Reid, city engr.

Mich., Grosse Pointe Park (Detroit P. O.)—Had plans prepared paving 1,500 ft. Somerset Rd. from Waterloo to Mack Aves., 4,000 sq.yd. sheet asphalt, asphaltic concrete or Willite, 3,000 lin.ft. concrete curbing. $25,000. C. H. Marden, 502 Whitney Office Bldg., Detroit, engrs.

Kan., Garden City—Comrs. Finney Co. and City Council soon take bids concrete paving, curbing and guttering 0.933 mi. Santa Fe Trail and various city streets, 18 ft. $40,000. B. Allen, co. engr.

Kan., Garden City — Finney Co. had plans prepared concrete paving, curbing and guttering 0.846 mi. Great Plains Highway, 18 ft. $40,000. B. Allen, co. engr.

Kan., Independence—Comrs. Montgomery Co. soon take bids constructing 4.51 mi. Independence-Caney Rd., 18 ft., gravel or bituminous macadam. $140,000. H. K. Hibbard, co. engr.

Kan., Kansas City—Wyandotte Co. rejected bids concrete paving 1.027 mi. Golden Belt Rd., 18 ft. Will readvertise in spring. O. K. Williamson, Court House, co. engr. Noted Sept. 28.

Kan., Topeka—Comrs. Shawnee Co. soon take bids constructing 4.016 mi. road from Meriden Spur to Capitol Highway, 18 ft., concrete, brick or bituminous macadam, $160,000; 4.03 mi. Capitol Highway, 18 ft., concrete, brick or bituminous macadam. A. C. Lagerwall, co. engr.

Kan., Wichita—Comrs. Sedgwick Co. soon take bids constructing 10.8 mi. North Lawrence Ave., 18 ft., concrete or brick. $450,000. M. Roseberry, co. engr.

S. D., Sioux Falls—Plans paving and curbing 5 blocks 15th St. from Duluth to Grange Aves., grading 10 blocks Grange Ave. from 12th to 22nd Sts., 3 blocks Main Ave. from 26th to 29th Sts., paving alley in Block 3, Bennett 1st. addition. $30,000. W. C. Leyse, city aud.

Mo., St. Louis—Bd. Pub. Serv., City Hall, is receiving preliminary estimates on 541,758 sq.yd. paving and 110,757 cu.yd. grading. $2,387,415. Bids will be received within next 3 months. W. M. Horner, City Hall, engr.

Tex., Houston—City Council rejected bids street paving. $160,000. Will readvertise later. J. C. McVey, co. engr.

Tex., Laredo—Had plans prepared grading, curbing and paving 8 mi. various streets, 26, 28 and 30 ft., bituminous top on 6 in. concrete. $600,000. S. F. Crecelius, Laredo, engr.

Tex., McKinney—Rd. Dist. 4, McKinney Precinct, Collin Co. voted $450,000 bonds for road and highway improvements, incl. Henry Exall Highway. F. W. Cawthon, co engr. Noted Sept. 7.

Calif., San Francisco — City and San Francisco Co. had plans prepared improving Vicente St. between Forestside and 19th Aves., 19,592 cu.yd. cut, 8,225 cu.yd. fill, 1,865 lin.ft. 8-18 in. ironstone [illegible] sewers, 3,240 lin.ft. concrete curb, 93,1[illegible] sq.ft. asphaltic concrete pavement, 3,1[illegible] ft. artificial stone walks, etc. $59,5[illegible] M. M. O'Shaughnessy, city engr.

Que., Montreal—Plans asphalt pavements on 3,200 ft. Place D'Youville from McGill St. to Place Royale, 34 to 106 ft., $69,898, 1,025 ft. Marguerite Bourgeois St. from Wellington to Favard Sts., 30 ft., $13,249; 1,745 sq.yd. asphalt and 1,630 sq.yd. block, Osborne St. from Windsor to Mountain Sts., $26,570; concrete sidewalks 1,175 ft. Boyer St. from DuRosaire to Jarry Sts., 5 ft., $4,965, 1,391 ft. Montgomery St. from Hochelaga to Sherbrooke Sts., 5 ft., $6,908, 810 ft. Clarke St. from Mozart to Baby Sts., 5 ft., $3,883, 673 ft. Charlemagne St. from Masson to Vermette Sts., 5 ft., $2,723, 1,896 ft. De Razilly St., from Jolicoeur to Allard Sts., 5 ft., $6,285, 3,180 ft. Grand Ave. from Waverly to Baby Sts., 5 ft., $12,595, 1,677 ft. Des Ormeaux St. from Notre Dame to Honfleur Sts., 5 ft., $10,092, 1,827 ft. Hochelaga St. from Frontenac to Wurtele Sts., 5 ft., $7,650, 2,081 ft. Notre Dame St. from St. Francis Xavier to McGill Sts., 6.25 to 10 ft., $10,335, 3,170 ft. Laverdure St. from existing sidewalk to Lamarche St., 5 ft., $16,566, 2,109 ft. Laverdure St. from Kelly St. to Lot 256-47, 5 ft., $9,556, 7,384 ft. De La Roche St. from Gouin Blvd. to city limits, 5 ft., $25,938, cement slab sidewalks 280 ft. Cote St. Michel Rd. from Boyer to St. Hubert Sts., 4 ft., $254; cement flag sidewalks 13,048 ft. Greenshields St. from Beaumont St. to Cremazie Blvd., 4 ft., $10,318, 1,650 ft. De Lanaudiere St. from DeCastleneau to Villeray Sts., 4 ft., $1,348, 496 ft. Delormier St. from Des Carrieres Rd. to Rosemount Blvd., 4 ft., $408, 1,089 ft. Gertrude St. from Fabre St. to Delormier Ave., 4 ft., $893, 2,137 ft. Hanatoux St. from Fabre St. to Delormier Ave., 4 ft., $1,733, 999 ft. 42nd Ave. from Peloquin to Sacred Heart Sts., 4 ft., $809, 499 ft. Desjardins St. from Rosemount Blvd. to Bellechasse St., 4 ft., $400, 1,200 ft. 5th Ave. from Rosemount Blvd. to Civic 100-830, 4 ft., $963, 600 ft. De Castleneau St. from DeLanaudiere to De La Roche Sts., 4 ft., $524. H. A. Terreault, dir. pub. wks.

Ont., Toronto — York Twp. soon takes bids paving 1,900 lin.ft., Lauder Ave., 24 ft. asphalt on concrete. $25,000. F. Barber, 40 Jarvis St., engr.

BIDS DESIRED

N. Y., Brooklyn—Oct. 19, by E. Riegelmann, boro pres., Boro Hall, grading, curbing and flagging Clinton Pl., Kings Highway, Rutland Rd., Ave. H, Bay Ridge and Narrows Aves., East 19th, 58th and 76th Sts., 77th St. from 16th to New Utrecht Aves., 77th St. from 18th to 19th Aves.; paving with asphalt Clinton Pl., Kings Highway, Ave. R, Rutland Rd., East 8th St. from Ocean Parkway to Caton Ave., East 8th St. from Ave. K to Ave. M, East 12th, East 37th, Arc, 78th, 86th and 83rd Sts., 77th St. from 16th to New Utrecht Aves., 77th St. from 18th to 19th Sts., Kingston, Midwood and Snediker Aves.; paving and repaving with asphalt 88th St., curbing and paving with asphalt East 7th, Newport and Montgomery Sts.; grading, curbing and paving New Utrecht Ave., permanent asphalt; sodding, curbing and flagging, etc. 76th St.

N. Y., New York — Oct. 19, by Dept. Parks, Municipal Bldg., furnishing and setting curb-stones and paving with sheet asphalt Morningside Dr. between 110th and 122nd Sts.

N. Y., St. George — Oct. 17, by J. A. Lynch, pres. Richmond Boro, repaving Castleton Ave. from Bard to Burgher Aves., Castleton Ave. from Bard to Cebra Aves. also Richmond Ave., etc., bituminous concrete.

New Jersey—Oct. 24, by State Hy. Dept., Trenton, 8 in. gravel surfacing Route 4, Sect. 7-A, New Gretna Alternate, Burlington Co. A. L. Grover, ch. clk.; adv. this issue.

Md., Baltimore—Oct. 26, by W. F. Broening, pres. Bd. of Awards, grading, curbing and paving with cement concrete, 1-2-4, and old granite block, Weaver, Arabia, Batavia, and Lanrate Sts. Cottage, Glyndon and Tyndale Aves., and Oakley, Harcourt and Canterbury Rds., Contract 227-OC-OA-NA. 920 sq.yd. old granite block, 13,150 sq.yd. concrete, 1210 lin.ft. old stone curbing, 2,485 cu.yd. earth excav., etc.; paving with sheet asphalt, 1½ x 1½ on 6 in. concrete Kenoak Ave. from Old Pimlico Rd. to Hilltop Rd., and Hilltop Rd. from Kenoak to South Aves., 7,780 sq.yd. sheet asphalt, 1,030 sq.yd. sheet asphalt, railway area 7,800 lin.ft. unarmoured concrete curbing. R. K. Compton, 214 East Lexington St., engr. Noted Sept. 7.

West Virginia—Oct. 20, by State Rd. Comn., Charleston, gravel surfacing 1.9 mi. River Rd., Project 58, Pleasants Co., 16 ft., $50,000; shale surfacing 2.5 mi.

Streets and Roads (Continued)

Northwestern Turnpike, Project 3,010, Mineral Co., 18 ft., $60,000 2.5 mi. Northwestern Pike, Project 3,010 B, Morgan Co., 16 ft., $25,000; paving with slab waterbound macadam 1 mi. Sisterville-Middlebourne Rd., Project 3,197, Tyler Co., 16 ft., $35,000; grading and rock asphalt paving 3 mi. Welch-Coalwood Rd., Project 3,153, McDowell Co., 16 ft., $100,000. G. H. Hill, 311 Broad St., Charleston, engr.

North Carolina—Oct. 25, by State Hy. Comn., Raleigh, hardsurfacing Projects 101, 105A, and 105B, Beaufort Co., 113B, Chowan Co., 220 and 282 Duplin and Wayne Counties, 901 Buncombe Co.; topsoil, sand-clay or gravel surfacing Project 133 Gates and Pasquotank Counties, Project 152 Hyde Co.; bridge Project 254 Lenoir and Pitt Counties; adv. this issue.

Florida—Oct. 18, by State Hy. Dept., Tallahassee, improving 11.6 mi. sect. Rd. 1, between Lake City and Welborn, Columbia and Suwannee Counties, alternate proposals on 2½ in. penetration macadam on 8 in. rock, 3 in. asphalt with binder course on 8 in. rock, 6 in., 8 in., 6 in. plain concrete. W. F. Cocke, state highway engr.

Fla., Titusville—Oct. 16, by Bd. Comrs. Brevard Co., improving 2 sections State Rd. 4, 7.25 mi. between Sharpes and Titusville, and 7.01 mi. between Bonaventure and Eau Gallie, alternate proposals on following classes of 18 ft. paving, 2½ in. penetration macadam on 8 in. rock, 3 in. asphalt with binder course on 8 in. rock, 6 and 8 in. plain concrete surface. E. C. Johnson, chn.

Fla. Wauchula—Oct. 18, by Comrs. Hardee Co., laying marl on rock roads and oiling surfacing 6 mi. road from Buchanan eastward; 22 mi. Dixie Highway from Polk Co. to De Soto Co. via Bowling Green and Wauchula; 13 mi. from Zolfo Springs to Crewsville; 8 mi. from Ft. Green to Bowling Green; 7 mi. from Zolfo Springs to Ona Rd.; 7 mi. from Limestone to Lilly; 11 mi. from Ona to Limestone; 16 mi. from Wauchula to Highlands Co. line. H. S. Jaudon Eng. Co., Elberton, Ga., engrs. Noted Sept. 21.

Tennessee—Oct. 27, by State Hy. Dept., Nashville constructing 10.75 mi. road between Wilson Co. line and Carthage, Federal Aid Project 68, 16 ft., incl., 41,260 cu.yd. common, 23,733 cu.yd. solid rock, 52,920 cu.yd. borrow and 258 cu.yd. dry excav., 5,425 sq.yd. scarifying, 104,008 sq.yd. hand placed course stone base "C", 564.05 cu.yd. concrete, 52,569 lb. deformed steel bars, etc.; 8.01 mi. road between Tiptonville and point 5 mi. west of Hornbeak, Federal Aid Project 71, Lake and Obion Counties, 16 ft., 26,619 cu.yd. common and 2,881 cu.yd. borrow excav., 10,480 sta. yd. overhaul, 75,176 sq.yd. 7 in. one course gravel surface, 283.48 cu.yd. concrete, 25,500 sq.yd. grassing slopes, etc., bridge over 20 ft. span at sta. 306-56. D. Q. McComb, Nashville, ch. engr.

Wis., Milwaukee—Oct. 31, by H. Bleyer, secy. Harbor Comn., City Hall, grading area north of harbor entrance, alternate bids on 75,000 cu.yd. and 122,000 cu.yd. grading. F. A. Kaiser, c/o owner, engr.

Kan., Mound City—Oct. 23, by Comrs. Linn Co. grading and bridge abutments on 3.056 mi. La Cygne-Pleasanton Prescott Rd., Project 132, Sect. A, 29½ ft. grading $30,000 bridge abutments $20,000; 5.735 mi. La Cygne-Pleasanton-Prescott Rd., Project 109-B, 29½ ft., grading $85,000 bridge abutments for 4 bridges $25,000. C. E. Kinney, co. engr.

Missouri—Oct. 20, by State Hy. Dept. at div. office Greenfield, 4.029 mi. road from Greenfield south and west, 12 ft., Federal Aid Project 159 A, Dade Co., 15,229 cu.yd. earth and 297 cu.yd. rock excav., 3,050 cu.yd. borrow, 125.4 cu.yd. concrete masonry, 28,481 sq.yd. specification C gravel pavement, 12 ft. wide, 7 in. at center, 4 in. at edges, etc. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Oct. 20, by State Hy. Dept. at div. office Ironton, 11.26 mi. road from Ironton to Potosi, 24 ft., Federal Aid Project 107 A, Iron Co., 30,717 cu.yd. earth and 1,673 cu.yd. rock excav., 27,549 cu.yd. borrow, 536.7 cu.yd. concrete masonry, etc.; 0.975 mi. road from Ironton to Potosi, 16 ft., Federal Aid Project 107 B, Iron Co., 1,167 cu.yd. earth excav., 538 cu.yd. borrow, 9,156 sq.yd. reconstructed cu.yd. borow, 125.4 cu.yd. concrete material for base course, 9,156 sq.yd. specification A bituminous macadam, 45 cu.yd. concrete masonry, etc. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Oct. 20, by State Hy. Dept. at div. office Platte City, 13.687 mi. road from Platte City southeastwardly, 24 ft., Federal Aid Project 96, Platte Co., 90,773 cu.yd. earth and 4,300 cu.yd. rock excav., 13,649 cu.yd. borrow, 435.4 cu.yd. concrete masonry, etc. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Oct. 23, by State Hy. Dept., at div. office Ozark, 4.507 mi. road from Springfield to Hollister, 24 ft., State Aid Project 20.213 Christian Co., 22,416 cu.yd. earth excav., 2,611 cu.yd. borrow, 259.3 cu.yd. concrete masonry, etc. B. H. Piepmeier, Jefferson City, state highway engr.

Utah—Oct. 18, by State Rd. Comn., Salt Lake City, grading and hardsurfacing with 2 in. bitulithic on 6 or 7½ in. concrete, 4.5 mi. highway, 18 ft., from Brigham to Corinne, Federal Aid Project 38 A, Boxelder Co., $157,500. H. C. Means, state highway engr.

BIDS RECEIVED

Connecticut—State Hy. Dept., Hartford, opened bids Sept. 26, paving 26,256 ft. Housatonic River Rd., 18 ft., in Kent, 10,820 cu.yd concrete, 8,840 cu.yd. earth and 1,230 cu.yd. rock excav., 13,700 cu.yd. borrow, from Mascetti & Holley, 561 South Main St., Torrington, $125,818; Osborne & Barnes, Odd Fellows Bldg., Danbury, $145,665, C. W. Blakeslee & Sons, 58 Waverly St., New Haven, $157,298, cement furnished by State, $38,000; 17,150 ft. New Haven-New London Rd., 18 ft., in Branford, 8,620 cu.yd. concrete, 1,840 cu.yd. earth and 600 cu.yd. rock excav., 16,400 cu.yd. borrow, from A. D. Bridges Sons, Inc., Hazardville, $106,451, Sperry Eng. Co, 82 Church St., New Haven, $116,541, C. W. Blakeslee & Sons, 58 Waverly St., New Haven, $117,010, cement furnished by State $25,000. Noted Sept. 14.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids Oct. 4, repaving (1) Furman St. proposition 1 (2) Furman St. proposition 2, (3) Flatbush Ave. extension, (4) South 9th St., all foregoing grade 1 granite, (5) roadway of Neptune Ave., (6) roadway of Utica Ave., both asphalt on 6 in. concrete, from M. J. O'Hara Contg. Co., 717 65th St., (1) $94,080 (2) $99,970 (3) $16,370; Leonard Paving Co., 233 Bway., New York, (1) $94,199 (2) $100,618; F Gallagher, 490 Park Pl., (1) $94,772 (2) $101,508; Utilities Contg. Co., (3) $12,389; M. I. Sax, (3) $13,531; F. Donovan, (4) $4,749; T. B. Scott, 671 Halsey St., (4) $4,895; C. Gallagher, 745 Dean St., (4) $5,262; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (5) $54,942; Boro Asphalt Co., 1301 Metropolitan Ave., (5) $55,841 (6) $13,588; Cranford Co., 152 9th St., (5) $56,227 (6) $15,042; Cleveland Trinidad Paving Co., Flushing, (6) $15,136. Noted Sept. 28.

N. Y., St. George — J. A. Lynch, pres. Richmond Boro, Boro Hall, opened bids Oct. 5, repaving (1) roadway of Washington Ave. (2) roadway of Henderson Ave., bituminous concrete, from J. E. Donovan, 2205 Richmond Terrace, Port Richmond, (1) $20,625, (2) $26,402; W. P. McDonald Sons, 17 West 42nd St., New York, (1) $21,490, (2) $26,937; J. Johnson Sons, 455 Bway., West New Brighton, (1) $25,060, (2) $31,133. Noted Sept. 28.

La., New Orleans—Opened bids Sept. 19 paving 55 streets. Unit prices will be published in Oct. 19 issue. Noted July 6.

O., Cleveland—Cuyahoga Co. opened bids Sept. 30, paving Chagrin River Rd., 2,900 lin.ft. 4 in. concrete gutter, 17,000 lin.ft. earth excav., 1,050 sq.yd. penetration concrete, 16,300 sq.yd. Kentucky rock asphalt and 16,300 sq.yd. 4 or 5 in. waterbound macadam, engrs. est. $73,260, from Romono Bros., c/o Pavers Exch., Society for Savings Bldg., $58,403 and $71,503; O. C. Scott, Chagrin Falls, $60,610 and $70,805. Noted Sept. 21.

O., Cleveland—Cuyahoga Co. opened bids Sept. 30, paving Noble Rd., 24,600 lin.ft. stone curb, 26,000 lin.ft. 4 in. vitr. tile gutter, 24,000 cu.yd. earth excav., 37,400 sq. yd. vitr. brick, 39,400 sq.yd. asphalt, 9,800 cu.yd. concrete base, engrs. est. $274,075, from Cleveland Trinidad Paving Co., The Arcade, $285,735, River Constr. Co., Schofield Bldg., $288,940, General Asphalt Paving Co., Cleveland, (street address not available), $289,648; Hilliard Rd., 7,650 lin.ft. stone curb, 12,090 cu.yd. earth excav., 21,000 sq.yd. vitr. brick, 20,000 sq. yd. asphalt on concrete, (a) brick, (b) asphalt, engrs. est. $124,000, from Highway Constr. Co., Elyria, (b) $114,420, River Constr. Co., Schofield Bldg., (a) $116,128, Gould & Maybach, 823 East 140th St., $118,398. Noted Sept. 21.

O., Greenville—W. R. Hawkins, dir. Pub. Serv., opened bids Sept. 29, paving Wayne Ave. from 5th to Sater Sts., 30 ft., 9,640 sq.yd. brick on concrete, from W. Tice, Greenville, $36,065; McHugh Bros., Springfield (street address not available), $43,365; E. E. Studebaker, Greenville, $57,366.

Michigan—State Hy. Dept., Lansing, grading and surfacing 10.514 mi. Assessment Dist. Rd. 444, Genesee and Lapeer Counties, from J. Caldwell, Columbiaville, $81,721; Saginaw Constr. Co., Saginaw, $93,349; J. A. McKay & Son, Detroit (street address not available) $98,933 Noted Sept. 21.

Michigan—State Hy. Dept., Lansing, opened bids Sept. 28, grading and surfacing 1,386 mi. State Trunk Line Rd. 35-9 Gladstone Co., from Nebel Bros., Gladstone, $21,894; Delta Contg. Co., Escanaba, $23,573. Noted Sept. 21.

Michigan—State Hy. Dept., Lansing, opened bids Sept. 29, grading 8,612 mi. Federal Aid Project 87, Wayne Co., from Fonty & Wolcott, Delta, O., $42,684; Colman & Harding, Detroit, (street address not available), $44,197; Hull & Donaldson, Dryden, $44,691. Noted Sept. 21.

Michigan—State Hy. Dept., Lansing, opened bids Oct. 1, grading and gravel surfacing 7.98 mi. Assessment Dist. Rd. 384, Ionia and Eaton Counties, from C. Barber, Cressy, $46,967; C. W. McCreery, Ovid, $48,374; J. F. Curtis, Bellevue, $50,469. Noted Sept. 21.

Mich., Detroit—Paving with one course concrete (1) 2,000 sq.yd. Alley 1577 (2) 2,600 sq.yd. Alley 1578 (3) 550 sq.yd. Alley 1579 (4) 550 sq.yd. Alley 1580 (5) 800 sq. yd. Alley 1581 (6) 550 sq.yd. Alley 1582 (7) 870 sq.yd. Alley 1583 (8) 1,500 sq.yd. Alley 1584 (9) 1,500 sq.yd. Alley 1585 (10) 1,600 sq.yd. Alley 1586 (11) 800 sq.yd. Alley 1587 (12) 520 sq.yd. Alley 1588, from Otis Cement Constr. Co., 806 Hammond Bldg., (1) $5,630 (2) $7,239 (3) $1,542 (4) $1,579 (5) $2,112 (6) $1,831 (7) $2,376 (8) $4,205 (9) $3,980 (10) $4,611 (11) $2,259 (12) $1,838; R. J. Powelson Co., 6445 Iroquois Ave., (1) $5,472 (2) $7,239 (3) $1,568 (9) $4,086 (10) $4,535 (11) $2,300 (12) $1,873; J. Porath, 34 McGraw Bldg., (1) $5,738 (2) $7,160 (8) 4,153; H. Mincel, 4573 Cooper St., (3) $1,529 (4) $1,575 (5) $2,097 (6) $1,819 (7) $2,350; A. F Lester, 309 Sun Bldg., (4) $1,566 (5) $2,083 (6) $1,806; G. Nunn, 6409 3rd Ave., (7) $2,349 (8) $4,230 (10) $4,507 (11) $2,226.

Missouri—State Hy. Dept., Jefferson City, opened bids Sept. 29, (1) 7.523 mi. road from Warrenton to St. Charles, 18 ft., State Project Route 2, Sects. 72 and 73, St. Charles Co., (2) 12.452 mi. road from Warrenton to St. Charles, 18 ft., State Project Route 2, Sects. 70, 72 and 73, St. Charles Co., (3) 18.255 mi. road from St. Charles to Warrenton, 18 ft., State Project 2, Sects., 66, 67, 72 and 73, St. Charles Co., (4) 5.803 mi. road from St. Charles to Warrenton, 18 ft., State Project Route 2, Sects. 66 and 67, St. Charles Co., (5) 8.594 mi. State Project Route 1, Sects. 41 and 42, 18 ft., Clay Co., from Godfrey-Meeker, St. Louis (street address not available) (1) $279,658 (3) $637,458; Carterville Constr. Co., Carterville, (2) $515,192 (3) $701,667 (4) $201,729; Moreno Burkham Constr. Co., Syndicate Trust Bldg., St. Louis, (3) $676,000; W. D. Lonergan Constr. Co., New Madrid, (4) $184,203; Keeley Bros. Constr. Co., East St. Louis, Ill., (4) $184,873; Capitol Constr. Co., 1207 Cherry St., Des Moines, Ia., (5) $343,000; Koss Constr. Co., 2818 5th Ave., Des Moines, Ia., (5) $344,606. Noted Sept. 21.

Missouri—State Hy. Dept., Jefferson City, opened bids Sept. 28, (1) 4.457 mi. road from North Kansas City to Gashland, 18 ft., State Project Route 1, Sect 42, Clay Co., 24,993 cu.yd. earth and 8,742 cu.yd. rock excav., 10,163 cu.yd borrow, 47,066 sq.yd. part cement concrete pavement, 3,100 lin.ft. concrete gutter, 316.2 cu.yd. concrete masonry, etc. (2) 4.469 mi. road from Houston to Phelps Co. line, 24 ft., State Project Route 7, Sect. 78, Texas Co., 13,305 cu.yd. earth excav., 726 cu.yd. borrow, 123 cu.yd. concrete masonry, etc. (3) 3.163 mi. road from Springfield to Memphis, 16 ft., State Project Route 16, Sect. 37, Wright Co., 13,168 cu.yd. earth and 540 cu.yd. rock excav., 660 cu.yd. borrow, 8,763 cu.yd. 1 course gravel surface ¼ mi. haul, 262,632 cu.yd. gravel additional ¼ mi. haul, etc. (4) 4.929 mi. road from Warrensburg to St. Charles, 18 ft., State Project Route 2, Sect. 70, St. Charles Co., 48,262 cu.yd. earth excav., 51,741 sq.yd. concrete pavement, 279 cu.yd. concrete masonry, etc., (5) 3.166 mi. road from Warrenton to St. Charles, 18 ft., State Project Route 2, Sect. 66, St. Charles Co., 19,243 cu.yd. earth excav., 7,700 cu.yd. borrow, 33,432 sy.yd. cement pavement, 216.3 cu.yd. concrete masonry, etc., (6) 4.137 mi. road from North Kansas City to Gashland, 24 ft., State Project Route 1, Sect. 41, Clay Co., 24,474 cu.yd. earth excav., 4,687 cu.yd. borrow, 43,686 sq.yd. part cement and concrete pavement, 254.7 cu.yd. concrete masonry, etc., (7) 4.636 mi. road on Kings Highway, 16 ft., State Project Route 25, Sect. 12, Perry Co., 13,681 cu.yd. earth excav., 13,341 cu.yd. gravel, furnished at siding, 13,341 cu.yd. 1 course gravel surface ¼ mi. haul, 96,216 cu.yd. gravel additional ¼ mi. haul, etc., (8) 2.958 mi. road east and west of State Road, 18 ft., State Project Route 10, Sect. 26, Chariton Co., 20,509 cu.yd. earth excav., 8,434 cu.yd.

Streets and Roads (Continued)

sledged stone base, 8,434 cu.yd. sledged stone base ¼ mi. haul, 101,217 cu.yd. sledged stone base additional ¼ mi. haul, 937 cu.yd. waterbound macadam, 937 cu.yd. waterbound macadam ¼ mi. haul, 11,246 cu.yd. waterbound macadam additional ¼ mi. haul, 3,514 cu.yd. crushed stone quarry, 3,514 cu.yd. crushed stone ¼ mi. haul, 42,174 cu.yd. crushed stone additional ¼ mi. haul, 73,414 gal. bituminous binder refined tar, 163.4 cu.yd. concrete masonry, etc., **(9)** 4,943 mi. road from Nevada to Eldorado Springs, 24 ft., State Project Route 26, Sect. 6, Vernon Co., 14,160 cu.yd. earth excav., 1,009 cu.yd. borrow, 2,562.8 cu.yd. concrete masonry, etc., **(10)** 2,637 mi. road from Warrenton to St. Charles, 24 ft., State Project Route 2, Sect. 67, St. Charles Co., 15,091 cu.yd. earth excav., 3,371 cu.yd. borrow, 1.507 cu.yd. concrete masonry, 27,848 sq.yd. concrete pavement 18 ft. wide, etc. **(11)** 4.886 mi. road from Raymondville northward, 24 ft., State Project Route 7, Sect. 77, Texas Co., 19,482 cu.yd. earth and 1,320 cu.yd. rock excav., 490 cu.yd. sub base, 184.9 cu.yd. concrete masonry, etc., **(12)** 2,216 mi. road from Mt. Sterling to Rosebud, 24 ft., State Project Route 12, Sect. 44, Gasconade Co., 8,969 cu.yd. earth and 1,673 cu.yd. rock excav., 159.7 cu.yd. concrete masonry, etc., **(13)** 0.341 mi. road on Kings Highway, 26 ft., State Project Route 25, Sect. 22, Cape Girardeau Co., 2,493 cu.yd. earth excav., etc., **(14)** 5 mi. road from Versailles to Linn Creek, 12 ft., State Project Route 5, Sect. 56, Morgan Co., 264 cu.yd. grading per 100 ft. station, 10,275 cu.yd. 1 course gravel surface ¼ mi. haul, 56.646 cu.yd. gravel additional ¼ mi. haul, 10,275 cu.yd. screening gravel, etc., **(15)** 3.783 mi road from Warrenton to St. Charles, 18 ft., State Project Route 2, Sect. 73, St. Charles Co., 31,895 cu.yd. earth excav., 880 cu.yd. borrow, 39,660 sq.yd. part cement concrete pavement, 2,000 lin. ft. concrete gutter, 253.1 cu.yd. concrete masonry, etc., **(16)** 4.943 mi. road to Humansville, northwardly and southwardly, 24 ft., State Project Route 13, Sect. 46, Polk Co., 13,285 cu.yd. earth excav., 10,556 cu.yd. 1 course gravel surface ¼ mi. haul, 34,820 cu.yd. gravel additional ¼ mi. haul, 10,556 cu.yd. screening gravel, etc. **(17)** 1.687 mi. road from Monett to Springfield, State Project 16, Sect. 19, Lawrence Co., 16,312 cu.yd. earth excav., 17,873 sq.yd. part cement concrete pavement, 117.6 cu.yd. concrete masonry, etc. **(18)** 2.764 mi. road from Mexico eastwardly, 24 ft., State Project Route 22, Sect. 9, Audrain Co., 8.239 cu.yd. earth excav., 7,917 cu.yd. 1 course gravel furnished at siding, 7,917 cu.yd. gravel surface ¼ mi. haul, 55,513 cu.yd. gravel additional ¼ mi. haul, etc. **(19)** 3.22 mi. road from Novinger westwardly, 14 ft., State Project Route 6, Sect. 38, Adair Co., 16,301 cu.yd. earth excav., 9,299 cu.yd. 1 course gravel furnished at siding 9,299 cu.yd. surface ¼ mi. haul, 118,817 cu.yd. gravel additional ¼ mi. haul, etc. **(20)** 4.928 mi. road on Kings Highway, 26 ft., State Project 25, Sect. 20, Cape Girardeau Co., 34,915 cu.yd. earth and 2,062 cu.yd. rock excav., 169.4 cu.yd. concrete masonry, etc. **(21)** 4.377 mi. road on Kings Highway, 26 ft., State Project 25, Sect. 21, Cape Girardeau Co., 30,674 cu.yd. earth excav., 123.7 cu.yd. concrete masonry, etc. **(22)** 2.569 mi. road through Edinburg Special Rd. Dist., 18 ft., State Project Route 6, Sect. 22, Grundy Co., 12,093 cu.yd. earth excav., 7,325 cu.yd. sledged stone base, 7,325 cu.yd. sledged stone base ¼ mi. haul, 121,998 cu.yd. sledged stone base additional ¼ mi. haul, 813 cu.yd. waterbound macadam, 813 cu.yd. waterbound macadam ¼ mi. haul, 13,543 cu.yd. waterbound macadam additional ¼ mi. haul, 3,052 cu.yd. crushed stone furnished at quarry, 3,052 cu.yd. crushed stone ¼ mi. haul, 50,786 cu.yd. crushed stone furnished additional ¼ mi. haul, etc. **(23)** 4.789 mi. road east and west through Shannon Co., 24 ft., State Project Route 2, Sect. 60, Shannon Co., 39,277 cu.yd. earth excav., 13,933 cu.yd. 1 course gravel surface ¼ mi. haul, 73,754 cu.yd. gravel additional ¼ mi. haul, 73,933 cu.yd. screening gravel, 189.9 cu.yd. concrete masonry, etc. (24) 1.657 mi. road from Monticello eastwardly, 24 ft., State Project Route 6, Sect. 60, Lewis Co., 10,819 cu.yd. earth excav. 4,770 cu.yd. gravel at siding, 4,770 cu.yd. 1 course gravel surface ¼ mi. haul, 237,989 cu.yd. gravel additional ¼ mi. haul, 106.8 cu.yd. concrete masonry, etc. **(25)** 4.931 mi. road from Alton eastwardly, 24 ft., State Project Sect. 4, Oregon Co., 40,078 cu.yd. earth excav., 125 cu.yd. borrow, 239.1 cu.yd. concrete masonry, etc. **(26)** 2.36 mi, road from Loose Creek eastward and westward, 16 ft., State Project Route 7, Sect. 38, Osage Co., 15,960 cu.yd. earth and 1,767 cu.yd. rock excav., 6,956 cu.yd. gravel surface course, ¼ mi. haul, 41,867 cu.yd. gravel additional ¼ mi. haul, etc. **(27)** 3.74 mi. road from Warrenton to St. Charles, 24 ft., State Project Route 2. Sect. 72, St. Charles Co., 25,461 cu.yd. earth excav., 13,100 cu.yd. borrow, 39,430 sq.yd. concrete pavement, 18 ft. wide, 7¼ in. at edges, etc. **(28)** 4.018 mi. road from Fremont westwardly, 24 ft., Carter Co., 26,675 cu.yd. earth excav., 11,692 cu.yd. 1 course gravel surface ¼ mi. haul, 123,041 cu.yd. gravel additional ¼ mi. haul, 11,692 cu.yd. screening gravel, etc., from

Capitol Constr. Co., 1207 Cherry St., Des Moines, Ia., (1) $190,824 (6) $150,185.

Koss Constr. Co., 2818 5th Ave., Des Moines, Ia., (1) $190,869.

J. O. Patterson, 311 Ridge Bldg., Kansas City, (1) $192,798.

Cooper Constr. Service Co., St. Louis (street address not available), (2) $9,113 (11) $21,167 (12) $11,692 (23) $44,806 (28) $38,353.

Summerfield-Jones Co., Springfield (street address not available), (3) $39,959.

M. E. Gillioz, Monett, (3) $44,893 (7) $53,512 (14) $19,093 (16) $30,590 (17) $64,441.

E. A. Luck, Black Rock, Ark., (3) $84,188.

Godfrey-Meeker, St. Louis (street address not available), (4) $178,490 (5) $102,349 (10) $82,962 (15) $148,048 (27) $139,610.

Moreno-Burkham Constr. Co., Syndicate Trust Bldg., St. Louis, (4) $200,386 (5) $103,843 (10) $81,782 (27) $146,100.

Unit Constr. Co., Title Guaranty Bldg., St. Louis (4) $211,736 (15) $157,443 (27) $159,824.

Frazier-Davis Constr. Co., Arcade Bldg., St. Louis, (5) $130,140.

P. P. Young, R.F.D. 6, St. Joseph, (6) $155,970.

Cook-O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, (6) $164,511 (9) $16,241.

G. P. O'Reilly & Co., St. Louis (street address not available), (7) $43,006 (13) $2,195 (18) $48,902 (21) $14,495.

Kiefner Mecker-Geile & Endres, Perryville, (7) $46,556.

E. C. Johnson, Carrollton, (8) $90,365.

Moss & Moss, Nevada, (9) $14,430.

Easley Bros., Aurora, (9) $15,755 (16) $38,594.

W. D. Lonergan Constr. Co., New Madrid, (10) $82,438.

Doehla & Kolkmeyer, Jefferson City, (12) $11,152 (26) $19,253.

J. P. Sparks, Washington, (12) $11,882.

Vandivort, Hartle & Bedwell, Jackson, (13) $1,265 (20) $21,147 (21) $13,086.

L. Penzel, Jackson, (13) $1,318 (20) $20,953.

Wassman Constr. Co., Kansas City (street address not available), (14) $16,107.

Felix Kersting Co., Jefferson City, (14) $23,229 (26) $23,243.

Burham Constr. Co., St. Louis (street address not available), (15) $157,068.

Baker & Koontz, Carthage, (17) $47,451.

Springfield Constr. Co., Springfield (street address not available), (17) $67,421.

J. L. Simmons, La Plata, (19) $59,514.

A. C. Brown, Jefferson City, (20) $40,534 (21) $26,608.

Harrison Constr. Co., Des Moines, Ia., (street address not available), (22) $72,633.

Millin Constr. Co., Springfield, (street address not available), (23) $48,782.

Davis Constr. Co., Imboden, Ark., (23) $50,665 (28) $43.839.

Henderson-Washam, Jacksonville, (24) $37,561.

W. F. Plummer, Inc., 536 Monroe St., Springfield, (25) $32,932.

Cook & O'Brien, Kansas City (street address not available), (25) $33,106.

J. Pope, Jefferson City, (26) $17,259. Noted Sept. 21.

Mo., St. Louis—Bd. Pub. Serv., City Hall, opened bids Oct. 3, from F. A. Stiers Constr. Co., 4500 Enright St., recutting old granite block and supplying new granite where needed, etc., ao 5,000 ft. Bway. from Chippewa to Arsenal Sts., 21,570 sq.yd. recut granite block bed course grouting, $4.25 per sq.yd., 3,610 cu.yd. concrete, 8.50 etc., total $120,698. Noted Sept. 28.

Tex., Lufkin—Angeline Co. grading and gravel surfacing 9.72 mi. State Highway 7, 16 ft., 12.87 acres clearing 40,257 cu.yd. borrow, 1,165.46 cu.yd. concrete, 39,586 cu.yd. roadway, 73,673 gal. asphalt, 1,227 cu.yd. trap rock, 104,050 lb. reinforcing 20,465 cu.yd. gravel surfacing, from J. S. Moore & Sons, Lufkin, $170,317; J. Thomson, San Augustine, $170.589; Cook & Arrington, Crockett, $200,511. Engrs. est. $162,856.

Calif. Fresno—Improving Mono St. between Van Ness and P Sts., (a) 86,040 sq.ft. grading (b) 80,159 ft. asphaltic pavement (c) 5,645 ft. concrete gutter (d) 3,247 ft. concrete curb, from Thompson Bros., G and Divisadero Sts., (a) $0.0525 (b) $0.2185 (c) $0.33 (d) $0.65; California Rd. and Street Impvt. Co., Bank of Italy Bldg., (a) $0.058 (b) $0.219 (c) $0.35 (d) $0.60. Noted Sept. 14.

Calif., Lindsay — Improving various streets, (a) 6,000 cu.yd. grading (b) 425,000 ft. 1½ in. warrenite on 2½ in. asphaltic concrete (c) 41,000 sq.ft. concrete gutters (d) 5,100 lin.ft. concrete curb (e) 575 sq.yd. concrete walks, from Clark & Henery Constr. Co., 38 South Sutter St., Stockton, (a) $1.88 (b) $0.222 (c) $0.28 (d) $0.65 (e) $0.21, total $125,413; Federal Constr. Co., Call Bldg., San Francisco, (a) $1.65 (b) $0.249 (c) $0.27 (d) $0.64 (e) $0.29, total $134,987; Valley Paving & Constr. Co., Visalia, (a) $1.95 (b) $0.243 (c) $0.28 (d) $0.60 (e) 0.21, total 135,510. Noted Sept 7.

Calif., San Diego—Improving 14th St. 161,910 sq.ft. 1½ in. bituminous concrete on 4 in. concrete, 269 ft. curb, etc., from G. R. Daley, Owl Bldg., $35,884; Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles, $38,627; California Constr. Co., Granger Bldg., $41,246.

Que., Montreal—Opened bids for sidewalks on St. Lawrence St. from Canadian Pacific Ry. to Isabeau St., incl. (1) 8,152 sq.yd. grading (2) 8,152 sq.yd. stone foundation (3) 8,152 sq.yd. concrete (4) 8,152 sq.yd. wearing surface, from Leger & Lamoreux, 78 Bernard St., (1) $1 (2) $0.70 (3) $1 (4) $0.74, total $28,393, Rondou, Corlier & Co., 3506 Christophe Colomb St., (1) $0.50 (2) $0.50 (3) $1.45 (4) $1, total $28,516, F. Lapan, 601 Lacordaire St., (1) $0.65 (2) $0.75 (3) $1.60 (4) $0.75, total 31,085; also asphalt pavements on (a) St. Emelie St. from Atwater to Bourget Sts. incl. (1) 2.500 sq.yd. grading, (2) 2,500 sq.yd. concrete foundation, (3) 2,500 sq.yd. 3 in. asphalt, (b) De Villiers St. from Monk Blvd. to Rielle St., (1) 7,950 sq.yd. grading, (2) 7,950 sq.yd. concrete foundaton, (3) 7,950 sq.yd. 2 in. asphalt, from Sicily Asphaltum Paving Co., 60 St. Viateur St., (a1) $0.95 (a2) $1.64 (a3) $1.77, total $11,270, (b1) $1 (b2) $1.75 (b3) $1.73, total $45,868, B. Frault, Ltd., 2855 Rosemount Blvd., (a1) $1 (a2) $1.75 (a3) $1.75, total $11,400, (b1) $1.10 (b2) $1.75 (b3) $1.75, total $46,679, Quinlan, Robertson & Janin Ltd., 52 Duluth Bldg., (a1) 1 (a2) $1.70 (a3) $1.85, total $11,775, (b1) $0.90 (b2) $1.70 (b3) $1.70, total $43,949.

CONTRACTS AWARDED

Connecticut—State Hy. Dept., Hartford, to Mascetti & Holley, 561 South Main St., Torrington, paving 25.222 ft. New Litchfield Rd., 20 ft., in Litchfield and Torrington, 11,000 cu.yd. concrete, 11,800 cu.yd. earth excav. and borrow, 4,300 cu.yd. rock excav., 3,500 cu.yd. 12 in. stone base, $128,251, 5,300 ft. Washington Rd., 16 ft., in Bethlehem, 9,425 sq.yd. 7 in. native stone macadam, etc., $17,376; to A. Vito Constr. Co., Norwich, paving 4,050 ft. Pendleton Hill Rd, 16 ft., in Voluntown, 7,270 sq.yd. 7 in. native stone macadam, 1,800 cu.yd. earth and 200 cu.yd. rock excav., etc., $13,014, 6,075 ft. Pendleton Hill Rd., 16 ft., in North Stonington, 11,000 sq.yd. 7 in. native stone macadam, 3,700 cu.yd. earth and 500 cu.yd. rock excav., $18,093; to J. Arborio, 82 Church St., New Haven, 8,000 ft Hadlyme Rd., 16 ft., in Lyme, 14,684 sq.yd. 7 in. native stone macadam, etc., $25,203; to Lane Constr. Co., 37 Colony St., Meriden, 4,272 ft. North Main St., 16 ft., in Essex, 7,840 sq.yd. 7 in. native stone macadam, etc., $12,300; to Holbrook Co., New London, 2 span concrete deck girder bridge over Quinnipiac River, North Haven, $19,213. Noted Sept. 14.

N. Y., New York—See "Sewers."

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., to P. J. Kearns Contg. Co., 2306 Creston Ave., widening and repaving 57th St. $18,530, 25th st. $15,418, 26th St. $14,717, 20th St. $29,211; to Brusstar Constr. Co., Harlem River and 150th St., 30th St. $14,080. Noted Sept. 28.

Pa., Beaver—Paving with vitr. brick (1) Insurance St. (2) Corporation St. (3) College Ave., to McDonald & Hartman, Rochester, (1) $6,053, (2) $4,455; to A. Dahl, Ellwood City, (3) $25,346. Noted Sept. 7.

Del., Wilmington—Newcastle Co. grading and constructing 2 mi. road from Fairview School to Pleasant Hill, 16 ft., asphalt penetration on waterbound macadam, to I. J. Hollingsworth & Co., Marshallton, $57,793. Noted Sept. 21.

Maryland—State Rds. Comn., Baltimore, paving sections of State Highway, Contr. CL-31, to Thomas, Bennett & Hunter, Westminster, $84,098; Contr. BC-42, to Baltifore Asphalt Block and Tile Co., 1320 North Monroe St., Baltimore, $33,950; Contr. P-39, to G. B. Mullen, 1296 Upshur St., Wash., D. C., $121,348; Contr. SM-21, to St. Marys Constr. Co., Mechanicsville, $16,037; Contr. D-28, to Holt Constr. Co., Federalsburg, $34,934. Noted Sept. 7.

Md., Baltimore—Bd. of Awards, grading, curbing and paving with sheet asphalt, 1½ x 1½, 1-3-6 concrete base, Lombard, Harvey,

Streets and Roads (Continued)

Wolfe, and Ann Sts., East Ave. and Calverton Rd., to P. Flannery & Sons, Harford Rd. and 25th St., Baltimore, $74,767. Noted Sept. 14.

Virginia—State Hy. Dept., Richmond, concrete paving 6.43 mi. Richmond-Petersburg Turnpike from Falling Creek to Dutch Gap, to C. M. Henley, 23 South Beech St., Richmond, $170,734; 6.27 mi. Louisa Rd. west, 22 ft., to L. R. Colbert, Richmond, (street address not available), $199,590.

W. Va., Charleston—Paving with asphalt South Ave., to Board & Haley, 1012 Virginia Ave., $52,826.

North Carolina — State Hy. Dept., Raleigh, grading, reconstrucing old macadam and asphalt surfacing 10.64 mi. State Project 351, New Hanover Co., to Southern Willite Paving Co., Real Estate Exch. Bldg., Richmond, Va., $181,824; clearing and grading 3.84 mi. State Project 847, McDowell Co., to C. W. Lacy, Wilmington, $65,374. Noted Sept. 14.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 1.985 mi. Sect. "K-2" Cincinnati-Chillicothe Rd., Clermont Co., bituminous macadam tar, to C. J. Nible, Westboro, $44,801; 1.22 mi. Sect. "S-1," Newark-New Lexington Rd., Perry Co., bituminous macadam tar, to W. F. Payne, Springfield (street address not available), $33,590; rein.-con. girder bridge on Sect. "L-2" Columbus-Portsmouth Rd., Pike Co., to Chillicothe Constr. Co., Chillicothe, $3,693. Noted Oct. 5.

O., Cincinnati—Hamilton Co. improving Willey Rd., etc., waterbound macadam, to J. Ruebel Constr. Co., 1872 Hanfield St., $30,436. Engrs. est. $36,237. Noted Oct. 5.

O., Cincinnati—Hamilton Co. improving Compton Rd. 217 from west corporation line of Mt. Healthy to Cincinnati-Brookville Rd. I C H 40, 16,000 cu.yd. earth excav., 23,500 sq.yd. bitoslag, to Scully Bros., 242 Lorraine Ave., $113,357. Engrs. est. $113,793.

O., Columbus—W. H. Duffy, dir. Pub. Serv., grading, curbing, laying water services and sewer connections and paving 550 ft. North St. and 2,378 ft. Dunedin Rd., both 60 ft. wide, asphalt, to B. F. Patterson, 1214 Neil Ave., $7,180 and $61,000 respectively; 441 ft. Pembroke Ave., 50 ft., asphalt, to A. J. Pugh, 401 Commerce Bldg., $5,133; 161 ft. Morgan St., 40 ft., brick, and alley west of Linwood Ave., from alley north of Fair to Madison Aves., to R. J. Dienst, 480 South 5th St., $3,148 and $1,319 respectively; 410 ft. alley west of Linwood Ave. from Mound to Fulton Sts., 25 ft., concrete, to Federal Paving Co., Columbus, (street address not available), $2,686. Noted Sept. 28.

O., Warren—Trumbull Co. paving 3½ mi. Nelson-Moser Rd., 16 ft., Braceville Twp., bituminous macadam, to F. Mango, Niles, $44,375.

Michigan — State Hy. Dept., Lansing, grading and surfacing 1.855 mi. State Trunk Line Rd. 32-4, Sect. D, Montmorency Co., to Louks & Fenton, Whittemore, $27,316. Noted Sept. 28.

Michigan — State Hy. Dept., Lansing, grading and surfacing 1.281 mi. Federal Aid Project 91, Berrien Co., to Municipal Contg. & Supply Co., Gary, Ind., $25,369. Noted Sept. 21.

Mich., Springwells—See "Sewers."

Wis., Milwaukee—Grading 40, 100 cu.yd. 44th, 45th, 46th, 47th, 48th, 49th, 50th, 51st, Hodley and Locust Sts., to A. Schroeder, Jr., 1461 Green Bay Ave., $20,080; Pease St., 3,047 sq.yd. concrete paving and 10,517 sq.ft. cement walks, to G. Czerwinski, 376 16th Ave. $9,855; 1,442 sq.yd. concrete paving in alley, to J. Weiber & Son, 878 Franklin Pl., $3,763; 8,034 sq.yd. concrete paving, etc., in alleys, to J. Bluhm & Son, 164 Burleigh St., $20,553; 3,253 sq.yd. concrete paving in alleys, to A. E. Retzloff, 948 4th St., $8,529.

Ia., Davenport—To Central Eng. Co., 711 Putnam Bldg., grading and concrete paving Federal Aid Project 185, River to River Rd. from here, northwest, 53,744 sy.yd., Type A concrete, etc., $153,099, Federal Aid Project 54, Davenport-Durant Rd. from Muscatine Co. line east, 57,584 sq.yd. Type A concrete, etc., $155,904, Sect. B, Div. 9, Federal Aid Project 55, Davenport-Harrison St.-New Liberty Rd., northwest of here, 79,749 sq.yd. Type A concrete, etc., $228,279, Sect. C. Div. 4, Federal Aid Project 55, from Le Claire southwest toward here, 51,640 sq.yd. Type A concrete, etc., $144,486: to Thompson & McDaniel, Wapello, grading Federal Aid Project 185, 40,245 cu.yd. earth, 2,339 cu.yd. macadam excav., etc., $14,385.

Kan., Garnett—Anderson Co. will gravel 4.032 mi. King of Trails Rd., 18 ft., by day labor. $32,429. Former bids rejected. J. P. Irons, Garnett, engr.

S. D., Aberdeen—Paving with rein.-con. 12th Ave. S. E. between Main and Kline Sts., 5th St S. E. between Lincoln and Kline Sts. and one block on Railway Ave., to C. H. Atkinson Paving Co., Watertown, $2.35 per sq.yd.

Missouri—State Hy. Dept. at div. office, Benton, surfacing 7.329 mi. road from Sikeston east and west, 16 ft., Federal Aid Project 5, Scott Co., to N. Davis, Sikeston, $60,577. Noted Aug. 3.

Missouri—State Hy. Dept. at div. office Kennett, 5.801 mi. road from White Oak northwardly, 24 ft., Federal Aid Project 183 B, Dunklin Co., and 8.426 mi. road from Kennett northeastwardly, 16 ft., Federal Aid Project 183 C, Dunklin Co., to W. A. Leach, Poplar Bluff, $68,541 and $149,689 respectively. Noted Aug. 3.

Missouri—State Hy. Dept. to Keokuk, 16 ft., Federal Aid Project 171, Clark Co., to Henderson & Washam, Jacksonville, $60,957. Noted Oct. 5.

Tex., Ft. Worth — Constructing ¾ mi. Central Ave., 30 ft., 13,000 sq.yd. 2 in. Uvalde rock asphalt on 5 in. concrete, 4,000 lin.ft. concrete curb and gutter, and ¾ mi. Bryan Ave. from Rosedale to Railroad Ave., 26-30 ft., 13,200 sq.yd. 2 in. Uvalde rock asphalt on 5 in. concrete, 7,920 lin.ft. concrete curb and gutter, to Genl. Constr. Co., Cotton Exch. Bldg., $41,080 and $44,880 respectively. Engrs. ests. $40,000 and $41,000 respectively.

Tex., Ft. Worth—Tarrant Co. gravel surfacing 1.17 mi. Mansfield Arlington Rd. and 4.54 mi. Matlock Rd., 14 ft., to McCoy & Richardson, Arlington, $25,324; paving with 1 in. cold mixed rock asphalt, 1,535 ft. Main St. in Grapevine, Tex., from College to Wall Sts., 40-45 ft., to Genl. Constr. Co., Cotton Exch., $8,060.

Tex., San Angelo—Paving with inverted penetration bituminous macadam, curbing and guttering 5 mi. Chadbourne, Beauregard and other streets, 20 ft., to Metcalfe, Metcalfe & Thompson, San Angelo, crushed stone, $33,600; to T. Montgomery, San Angelo, curbing and guttering, $5,000; to J. E. Ward, 224 South Lancaster St., Dallas, asphalt and trap rock screenings, $32,950. Engrs. est. $150,000.

Tex., Wellington — Paving 10,500 sq.yd. various streets with brick, to Panhandle Constr. Co., Corsicana, $3.57 per sq.yd., total $37,485. Noted Aug. 10.

Tex., Winters—Paving, curbing, guttering, preparation of subgrade, etc., on Main and Post Office Sts., 2½ in. brick, to Janes Constr. Co., Dallas, (street address not available), $24,397. Engrs. est. $25,000. Noted Sept. 14.

New Mexico—State Hy. Comn., Santa Fe, gravel surfacing Federal Aid Project 14-B, between Tesuque and Pajuaque, Santa Fe Co., and 9.318 mi. Federal Aid Project 72, between Pecos and Rowe, San Miguel Co., to Peterson, Shirley & Gunther, 1102 Woodman of the World Bldg., Omaha, Neb., $10,834 and $72,770 respectively plus 10 per cent for engineering and contingencies. Noted Sept. 7.

Wash., Spokane—Paving ⅜ mi. 19th Ave. from Rockwood to Grand Sts., 40 ft., to G. H. Weller, North 618 Madelia St., $15,500, engrs. est. $12,200; ⅜ mi. Indiana Ave. from Division to Hamilton Sts., 40 ft., asphalt on crushed rock, to C. M. Payne Constr. Co., East 127 Mission St. $24,349, engrs. est. $27,800.

Calif., Berkeley—Paving Telegraph Ave. from south city limits and Dwight Way, 2 in. asphaltic concrete surface on 5 in. asphaltic concrete, to Oakland Paving Co., 5000 Bway., Oakland, $94,687. Noted Oct. 5.

Calif., San Francisco—Improving Collingwood St. between 21st and 22nd Sts., etc., to Eaton & Smith, 407 11th St., $70,700. Noted Sept. 28.

Que., Montreal — To Sicily Asphaltum Paving Co., 60 St. Viateur St., paving 5,150 sq.yd. Greene Ave., 3 in. asphalt, $27,965; to B. Brault Ltd., 2855 Rosemount Blvd., 4,080 sq.yd. Cartier St., 3 in. asphalt, $19,222, 3,640 sq.yd. St. Valier St., 2 in. asphalt, $17,091, 2,650 sq.yd. Sheppard St., 2 in. asphalt, $11,523, 8,400 sq.yd. Rouen Ave., 3 in. asphalt, $46,814; to Quinlan Robertson & Janin Ltd., 52 Duluth Bldg., paving 3,100 sq.yd. Bericourt St., 2 in. asphalt, $16,564, 8,600 sq.yd. Hadley St., $39,500; to E. Lapan, 601 Lacordaire Ave., concrete sidewalks, 2,500 sq.yd. Rosemount Blvd., 5 ft., $10,268, 4,100 sq.yd. Omer St., 5 ft., $18,314; to Duranceau & Duranceau, 152 Hamilton St., 1,100 sq.yd. Clarke St., 5 ft., $5,790, 2,400 sq.yd. Beaubien St., 6 ft., $10,560, 3,081 sq.yd. Maplewood Ave., 4 ft., $15,365; to Rondou, Corlier & Co., 3506 Christophe Colomb St., 980 sq.yd. Drolet St., 6 ft., $5,121, 1,084 sq.yd. Jarry St., 5 ft., $6,762. Noted Sept. 28.

Ont., Barrie—A. W. Smith, town clk., and James, Proctor & Redfern, engrs., 36 Toronto St., Toronto, 15,000 sq.yd. bitulithic pavement on concrete, with concrete curbs and gutters ,to Warren Bituminous Paving Co., 54 University Ave., Toronto. Engrs. est. $50,000. Noted Sept. 7.

Ont., Burlington—Concrete pavement on 8,000 sq.yd., Burlington Ave. to Frid Constr. Co., Clyde Blk., Hamilton. Engrs. est. $30,000.

Ont., Toronto — F. Barbar, engr. York Twp., 40 Jarvis St., 4 mi. 4-6 ft. concrete sidewalks with 6 x 18 in. curb on King Edward Ave. and Vaughan Rd., to A. Johnson 35 Burgess Ave., Windermere Ave., to Natl. Contg. Co., 9 Garnock Ave., Greendale, Thornhill and Woodmount Aves., to P. Licastro, 1423 Dufferin St., Livingston, Corbett and Summitt Aves., to S. Simpson, c/o engineer, Poulton Ave., to H. S. Walton, 60 Gamble Ave. Total est. $30,000. Noted Sept. 7.

B. C., Prince Rupert—Grading 5,531 ft. 4th and 5th Aves., to C. Lundquist Prince Rupert, $22,059, paving, new sidewalks, moving water mains, etc., on above project, to be done by day labor. F. J. Whittaker city engr. Noted Aug. 24.

Industrial Works

PROPOSED WORK

N. Y., Buffalo—Birk-Notman Motor Co., Inc., 828 Main St., plans 1 story, 50 x 150 ft., concrete, brick and steel garage, Hertel and Delaware Aves. $40,000.

N. Y., New York—New York Edison Co., 130 East 15th St., soon takes bids 3 story, 44 x 123 ft., brick, steel and concrete power house, plain foundation, 10-12 Stone St. $150,000. W. Whitehill, 709 6th Ave., archt. E. M. Van Norden, 130 East 15th St., engr. Noted July 13.

N. Y., White Plains—New York Telephone Co., 15 Dey St., New York, having plans prepared by McKenzie, Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., New York, 2 story, 155 x 205 ft. auto service and repair shop, brick, steel and concrete, plain foundation, White Plains Rd. $200,000.

Pa., Clarion — Berney-Bond Glass Co., plans to rebuild brick and steel factory recently destroyed by fire. $400,000. Engineer not announced.

Pa., Coraopolis—Vulcan Refining Co., having plans prepared by E. C. Dilworth, engr., 302 Walsh Bldg., Pittsburgh, 1 story, 56 x 60 ft. steel boiler house.

Pa., Pittsburgh—Hubbard Co., Granite Bldg., having plans prepared for additions and new buildings, 1 story, 63rd and Butler Sts. Private plans.

Pa., Scranton—T. F. Leonard Estate, 505 Lackawanna Ave., takes bids about Nov. 1, for 2 story, 80 x 130 ft. concrete, brick and steel garage, Adams Ave. Architect not announced.

Pa., Williamsport—Demarest Silk Co., 606 Railway St., plans 3 story and basement, concrete, brick and steel addition to mill, Railway St. $100,000.

W. Va., Clarksburg—Clarksburg Ice & Storage Co., plans 1 story, 50 x 120 ft ice plant. $50,000. Architect not selected.

W. Va., Clarksburg—Carmichael Motor Co. having preliminary plans prepared by E. J. Wood & Son, archts., Lowndes Bldg., 2 story and basement, 83 x 126 ft., rein.-con., brick, stone, steel and tile, garage, 6th St. $65,000.

La., Rayville—Plans to vote on $150,000 bonds for new municipal electric light plant.

Tenn., Knoxville—Hall-Tate Co., North Gay St., plans 75 x 125 ft. factory, West Jackson Ave. $150,000. Architect not selected.

Tenn., Knoxville—Mahan—Kerr Motor Co., Market St., having plans prepared by Barber & McMurry, archt. and engrs., Burwell Bldg., 3 story and basement, 90 x 100 ft., garage and show room, Market and Cumberland Sts. $150,000.

O., Steubenville — Pennsylvania-Ohio Power & Light Co., 2521 East Boardman St., Youngstown, plans new steam electric plant, here, to furnish power and light as far north as Warren and Youngstown. $15,000.

O., Zanesville — Amer. Gas & Electric Co., Newark, plans large steam power and light station, here. $20,000,000.

Ind., Elkhart—Curtain Supply Co. having plans prepared by Muncie & Jenson, archts., 38 South LaSalle St., Chicago, 1 story, 172 x 400 ft. factory, concrete block and steel. $100,000.

Ind., Evansville—Fellwock Motor Co., 3 U 4th St., plans 2 story and basement service station, brick. $60,000. C. Shapbell, Furniture Bldg., archt.

Ind., Ft. Wayne—Wayne Oil Tank and Pump Co., Anthony Hotel, having plans prepared by Austin Co., archts., 208 South La Salle St., Chicago, 1 story, 50 x 320 ft. factory, brick and steel. $40,000.

Ind., Hammond—Hydrox Co., 24th St. and Lake Park Ave., Chicago, plans 3 story and basement plant, brick, Hohman St., here. $100,000. McCormick Co., Inc., Century Bldg., Pittsburgh, Pa., archts.

Industrial Works (Continued)

Ind., Indianapolis—Vonnegut Hardware Co., 120 East Washington St., plans 4 story and basement warehouse, brick, South Missouri St. $150,000. Architect not selected.

Ind., Jasper—Hoosier Desk Co. having plans prepared by C. A. Shopbell, archt., Furniture Bldg., Evansville, 3 story and basement, 60 x 200 ft. factory addition, brick and timber. $40,000.

Ind., South Bend—Ward Bakery Co., 5659 South La Salle St., Chicago, plans 4 story and basement bakery, brick, South Main St., here. $175,000. Architect not selected.

Mich., Detroit—Pub. Lighting Comn., 138 East Atwater St., having plans prepared by Smith, Hinchman & Grylls, engrs., 800 Marquette Bldg., first unit of electric plant, 40,000 k.w., Morrell St. and Detroit River, $1,000,000. Ultimate capacity of plant will be 120,000 kw. and cost $5,000,000.

Mich., Greenville—Michigan Canned Food Co., 817 Book Bldg., Detroit, had plans prepared by Industrial Constr. Co., engrs., Eau Claire, Wis., and will probably take bids in spring 3 story, brick and stone factory, incl. power house. $150,000.

Mich., Loretto—Peninsular Power Co., Natl. Bldg., Madison, Wis., having plans prepared by Mead & Seastone, engrs., Journal Bldg., Madison, Wis., brick and steel hydro electric power plant and 55 ft. concrete arch dam, 250 ft. long, single vertical unit, $200,000, also transmission line from plant to adjoining places, $25,000.

Ill., Chicago—Olson Rug Co., 32 Laflin St., having plans prepared by Davidson & Weiss, archts., 53 West Jackson Blvd., 5 story, 84 x 187 ft., factory, Laflin St. near Madison St.

Wis., Milwaukee—A. C. Beck Co., 1 East St., plans 2 or 3 story box factory to replace one recently destroyed by fire. Architect not selected.

Wis., Rhinelander—Wisconsin Regrinding Co., plans 1 story, 50 x 90 ft., brick, rein.-con. and steel, machine shop, plain foundation. $40,000. A. P. Schneidewind, Sheboygan Falls, pres. Architect not selected.

Wis., Wittenberg—Holman Mfg. Co., 1910 North 13th St., Sheboygan, plans 2 story and basement, 60 x 95 ft., brick, rein.-con. and steel factory, plain foundation. $50,000. Architect not selected.

Minn., Minneapolis — Lavoris Chemical Co., 52 Western Ave., having plans prepared by Long & Thorshov, archts., 1028 Andrus Bldg., 3 story and basement, 45 x 110 x 143 ft. factory and office, rein.-con., brick and tile, 3rd St. and 10th Ave. N. $125,000.

Ark., Russellville — Arkansas Light & Power Co., Arkadelphia, plans hydro-electric plant along Illinois River. $100,000.

Tex., Dallas—Southern Wire & Iron Mfg. Co., Harwood and Santa Fe Sts., has purchased 7 acre site and plans 4 unit wire plant. $50,000. Architect not announced.

Colo., Denver—Denver Custom Garment Co., 1517 Lawrence St., having plans prepared by H. W. J. Edebrook, archt., Colorado Theatre Bldg., 2 story and basement, 60 x 125 ft., factory and office, rein.-con., plain foundation. $75,000.

Ariz., Phoenix — Southwest Portland Cement Co., 356 South Spring St., Los Angeles, Calif., having plans prepared by company engineering department, cement plant, here. $1,500,000. O. J. Binford, genl. mgr.

Calif., San Francisco—Simmons Co., 198 Bay St., plans 3 story, 42 ft. high, 75 x 275 ft. warehouse, Bay and Powell Sts. $50,000. Private plans.

Que., Montreal East—Red Star Sales Co., Canada Cement Bldg., Montreal, plans refinery, here, with capacity of 1,000 bbl. (35,000 gal.) super gas per 24 hours. $250,000.

Ont., Saulte Ste. Marie—F. W. Reese and T. J. Wilcox plan gas plant. $200,000.

Ont., Toronto—Toronto Hardware Mfg. Co., 402 Dufferin St., plans concrete and brick factory. $60,000. Architect not selected.

BIDS DESIRED

Conn., Bridgeport—Fletcher-Thompson, Inc., archts. and engrs., 542 Fairfield Ave., taking bids 3 story and basement, 60 x 110 ft. factory addition, brick and rein-con., plain foundation, Seaview Ave., for Huber Ice Cream Co., 800 Seaview Ave. $150,000. Noted Sept. 14.

N. Y., Rochester—F. J. Zorn, 64 North Plymouth Ave., taking bids 2 story, 100 x 212 ft. and 58 x 182 ft., rein.-con. and steel garage, 195 St. Paul St. $75,000. Foote & Carpenter, State and Church Sts., archts.

N. Y., Vischer Ferry—Nov. 1, by C. L. Cadle, supt. Pub. Wks., Albany, power house at Vischer Ferry dam, Saratoga Co., here, Contr. B-3; adv. this issue.

Pa., Pittsburgh—Stroh Steel Hardening Process Co., Westinghouse Bldg., will build 1 story, 68 x 100 ft. steel foundry and machine shop, Chateau and Ridge Sts. $250,000. Work will be done by separate contract. Noted Sept. 7.

Pa., Vandergrift—McCutcheon Bros. taking bids 1 story and basement, 70 x 130 ft. brick and tile garage, Washington Ave. and 12th alley, $40,000. G. M. Rowland, Bakewell Bldg. Pittsburgh, archt.

Ill., Chicago—A. L. Alschuler, archt., 28 East Jackson Blvd., receiving bids 4 story factory, rein-con., brick and steel, George St. near North Crawford Ave., for Valentine-Seaver Co., 1721 Sedgwick St. $400,000. Noted Aug. 31.

Ill., Oak Park—Davis & Kramer, archts., 400 North Michigan Ave., receiving bids 1 story, 100 x 122 ft. brick garage, Madison St. and East Aves., here, for J. Stacey, c/o architect. 50,000.

Wis., Kohler—Brust & Philipp, archts., 405 Bway., taking bids 4 story, 70 x 160 ft., rein.-con. mill, plain foundation, for Kohler Co. $75,000.

Wis., Milwaukee—A. G. Wolff, archt., 453 Mitchell St., taking bids 2 story and part basement, 40 x 80 ft. addition to garage, brick and concrete, plain foundation, for F. Kraning, 1147 Forest Home Ave. $40,000.

Wis., Wausau — Oppenhamer & Obel, archts., Spencer Bldg., taking bids 3 story and basement, 60 x 76 ft., addition to warehouse, brick and concrete, plain foundation, for Radandt Furniture Co., 202 Scott St. $45,000.

Calif., Oakland—A. Kahn, archt., 1,000 Marquette Bldg., Detroit, Mich., receiving bids 2 story, 80 x 684 ft., factory, brick, concrete and steel, Hillside and 72nd Sts., for Chevrolet Automobile Co., Foothill Blvd. at 69th Ave. $250,000. Noted Sept. 21.

Ont., London — Oct. 16, by Middlesex Motors Ltd., 781 Dundas St., 75 x 200 ft. auto service station and repair shop. $55,000.

CONTRACTS AWARDED

Mass., Somerville (Boston P. O.)—Sands, Taylor & Wood Co., 131 State St., Boston, 2 story, 50 x 75 x 200 ft. warehouse, brick, and concrete, plain foundation, Fitchbury St., here, to Clark & Lee Co., 77 Summer St., Boston. Archts. est. $75,000.

Mass., Weymouth (Boston P. O.)—Edison Electric Illuminating Co., 70 State St., Boston, power plant, 60,000 kw. capacity, here, to Stone & Webster, 120 Bway., New York City. $8,000,000.

R. I., Pawtucket—J. and P. Coats, Inc., 366 Pine St., 2 and 3 story, 95 x 370 ft. and 95 x 270 ft. mill additions, brick and timber, to J. W. Bishop Co., 109 Foster St., Worcester, Mass. Archts. est. $400,000. Noted Sept. 28.

N. Y., Brooklyn—Court Height Realty Co., c/o J. Lubroth, archt. and engr., 44 Court St., 2 story, 55 x 205 ft., brick, steel and concrete garage, plain foundation, 22 Concord St., to H. Gretsch, 50 East 42nd St., Newark. Archts. est. $75,000.

N. Y., Jamestown—Clark Hardware Co., 13-15 East 3rd St., 3 story, 46 x 90 ft., brick addition to warehouse and hardware store, to C. Haas, 10th and Monroe Sts. Archts. est. to exceed $40,000. Noted Oct. 5.

N. Y., Jamestown—Jamestown Lounge Co., Winsor St., 6 story, 102 x 144 ft., brick factory addition, by day labor under supervision of A. De Sellius. To exceed $40,000. Noted Oct. 5.

Pa., Phila. — Reading R.R., Reading Terminal, 1 story and basement, 75 x 150 ft. oil house, 40 x 112 ft. and 30 x 140 ft. concrete platforms, to R. E. Lamb Co., 843 North 19th St.

Pa., Phila.—Osmond & Keene, 1619 Sansom St., 1 story, 89 x 125 ft. and 25 x 29 ft. rein.-con., brick and steel garage, plain foundation, Greene St. and Queen Lane, to F. G. Stewart, 1519 Sansom St. Archts. est. $70,000.

Pa., Pittsburgh — Equitable Gas Co., Phila. Co. Bldg., general contract, 1 story, 50 x 164 ft., 50 x 140 ft., and 15 x 20 ft. repair and machine shop, Reedsdale St., to C. H. Kerr Co., Vanadium Bldg.

Pa., Rossmere (Lancaster P. O.)—Rowe-Stuart Motors Corp., 1 story, 120 x 300 ft. brick factory, to Gibbs-Mueller Co., Real Estate Trust Bldg., Phila.

Pa., Sharpsburg—L. Z. Hodil, 88 Bridge St., 1 story and basement, 95 x 140 ft. brick and tile garage, Main St. and Pennsylvania R.R., to Good Constr. Co., State Theatre Bldg., Pittsburgh. Engrs. est. $40,000.

W. Va., Charleston—A. W. Hafter, Virginia St., 1 story, 50 x 127 ft. garage, brick, steel and tile, to S. Ruchkin, c/o owner, $40,000.

W. Va., Weirton — Weirton Steel Co., eight 1 and 2 story steel sheet mills, brick, steel and iron, to McClintic-Marshall Co. Oliver Bldg., Pittsburgh, Pa., $1,500,000.

Ind., Indianapolis—Rockwood Mfg. Co., 1801 English Ave., 1 story, 75 x 100 ft. machine shop, brick and timber, 1801 English Ave., to Builders Constr. Co., 540 North Meridian St. Archts. est. $40,000. Noted Oct. 5.

Mich., Detroit—Maxwell Motor Co., 12200 East Jefferson Ave., 1 story, 80 x 440 ft. concrete, brick and steel factory, to H. K. Ferguson Co., 6523 Euclid Ave., Cleveland, O. Archts. est. $200,000.

Ill., Chicago — Whitney & Williams, archts., 122 South Michigan Ave., 2 story, 75 x 150 ft., rein.-con. garage, Bway. near Glen Lake Ave., to Simon Johanson, 1308 Norwood St. Archts. est. $75,000. Owner's name withheld.

Ill., Chicago—Pullman Co., 101st St. and Corliss Ave., 1½ story, 200 x 250 ft. foundry addition, rein.-con., brick and steel, to Sumner-Sollitt Co., 225 North Michigan Ave. Archts. est. $600,000.

Ill., Chicago—F. G. Arnold Co. c/o Z. E. Smith, archt., 304 East 55th St., 1 story, 75 x 160 ft. garage, 3725-29 Ogden Ave., to Carlson & Erickson, 19 South La Salle St. Archts. est. $50,000. Noted Sept. 28.

Ill., Chicago—Purity Packing Co., 3247 West 47th St., 2 story, 100 x 125 ft. canning factory, 3247-61 West 47th St., to Robson Co., 38 South Dearborn St. Archts. est. $100,000.

Ill., Chicago—F. Gustafson, 5724 Kenmore Ave., 1 story, 109 x 200 ft. garage, 405-23 East Erie St., to Nelson & Berg, 7648 East Lake Terrace. Archts. est. $80,000.

Wis., Brillion—Calumet Canning Co. will build 2 story, 50 x 110 ft. canning factory and power house, brick, rein.-con. and steel, plain foundation, by day labor $45,000. J. E. De Master, 623 End Court, Sheboygan, pres. Private plans.

Wis., Janesville — Bower City Machine Co., 759 McKey Blvd., 1 story, 50 x 90 ft., machine and repair shop, brick, rein.-con. and steel, plain foundation, to W. R. Hayes Co. 12 Pleasant St. Engrs. est. $40,000.

Wis., Milwaukee — Milwaukee Woven Wire Wks., 3014 Clarke St., 3 story, 131 x 140 ft. L shaped, brick and timber warehouse, plain foundation, 30th and Clarke Sts., to W. F. Johnson, 733 31st St. Engrs. est. $75,000. Noted Aug. 17.

Wis., Monroe—United Telephone Co. will build 2 story, 40 x 65 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, by day labor. $40,000. Private plans.

Wis., New Diggings — Imperial Mining Co. will build 2 story, 75 x 190 ft. zinc mill, brick, rein.-con. and steel, plain foundation, by day labor. Private plans.

Wis., Waukesha—Waukesha Lime & Stone Co. will build 2 story, 50 x 120 ft., pulverizing plant, brick, rein.-con. and steel, plain foundation, by day labor, to replace plant recently destroyed by fire. $50,000. Private plans.

Calif., San Francisco—Lyon Warehouse Co., 3430 Bway., Oakland, will build 8 story, rein.-con. warehouse, Van Ness Ave. and McAllister St., here, by day labor under supervision of W. Knowles, archt., Hearst Bldg. $225,000. Noted May 25.

Calif., San Francisco—Bothin Real Estate Co., 604 Mission St., 3 story, rein.-con. garage, Natoma, Hunter and Sherwood Sts., to Cahill Bros., 110 Sutter St., San Francisco, $45,000. Noted Sept. 14.

Ont., Weston—Moffatts Ltd., 2 story, 60 x 100 ft. brick and steel addition to factory, to G. R. Simms, Richmond Hill. 60,000.

Buildings

PROPOSED WORK

Mass., Roxbury (Boston P. O.)—Synagogue—Temple Mishkow Feflia, Moreland St., soon lets contract, 3 story, brick, concrete and steel, plain foundation, Seaver St. $350,000. Krokyn, Brown & Rosenstein, 7 State St., Boston, archts. Noted Oct. 5.

Conn., Rockville—School—School Bd. plans 2 story, brick and steel, West District. $150,000. Architect not selected.

N. Y., Bronxville — School — Bd. Educ. having plans prepared by Guilbert & Bettelle, archts. and engrs., 2 Lombardy St. Newark, N. J., 4 story, brick, steel and stone, plain foundation. $400,000.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, having plans prepared by C. B. J. Snyder, archt. and engr. Concord St. and Flatbush Ave., P. S. 142, 5 story, 60 x 100 ft., brick, steel and stone, plain foundation, Henry St., here.

Buildings **(Continued)**

N. Y., Buffalo — Church — South Park United Presbyterian Church, 653 McKinley Parkway, purchased 200 x 220 ft. site for concrete, brick and steel, McKinley Parkway. $175,000.

N. Y., Freeport—High School—Bd. Educ. soon takes bids brick, steel and stone, plain foundation, Pine St. $600,000. W. Adams, 15 West 38th St., New York, archt. and engr. Noted April 6.

N. Y., Merrick—School—Bd. Educ. plans brick, steel and stone, plain foundation. $175,000. Architect not selected.

N. Y., Mt. Vernon—Exchange—New York Telephone Co., 15 Dey St., New York, having plans prepared by McKenzie, Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., New York, altering 46 x 200 ft. brick, steel and stone, South 6th Ave., here. $430,000.

N. Y., New York—Apartment—T. A. Meyer, arch. and engr., 150 East 42nd St., preparing plans 14 story, 80 x 85 ft., brick steel and stone, plain foundation, 174 West 86th St. $750,000. Owner's name withheld.

N. Y., New York—Schools—Bd. Educ., 500 Park Ave., having preliminary plans prepared by C. B. J. Snyder, archt. and engr., Concord St. and Flatbush Ave., Brooklyn, 5 story addition, P. S. 133, Walton Ave. and 184th St., $350,000; also P. S. 72, 5 story, 100 x 100 ft., 104th St. and Lexington Ave., both brick, steel and stone, plain foundations.

N. J., Newark—Clubhouse—B. P. O. E. 21, 27 Green St., having plans prepared by N. J. Convery, archt., 942 Broad St., and McKim, Mead & White, associated archts., 101 Park Ave., New York City, 12 story, 100 x 150 ft., brick, steel and stone, plain foundation, Broad and Camp Sts. $1,000,000. Noted June 1.

Pa., Hazelton—Lodge—Elks Lodge plan brick club and lodge building. $150,000. Architect not announced.

Pa., Phila.—Theatre—N. E. Amusement Co., c/o E. A. Stopper, archt., 1507 Arch St., plans 1 story and basement, 53 x 153 ft. rein.-con., brick and steel, plain foundation, Torresdale and Wissinoming Aves.

D. C., Wash.—Apartment—H. Wardman, 1430 K St., N. W., having plans prepared by Wardman & Waggaman, archts., 1430 K St., for apartment building, 13th and I Sts. $1,100,000.

N. C., Burlington — Hotel — Burlington Hotel Co. plans hotel. $250,000-$700,000. R. L. Holt, pres. Architect not selected.

Fla., Orlando—Bank and Office—State Bank & Trust Co., soon lets contract 9 story. W. L. Stoddart, 9 East 40th St., New York City, archt. and engr. Noted Aug. 17.

Ia., Burlington—Hotel—Hotel Burlington, soon receives bids 4 story and basement, rein.-con., brick, tile and stone addition, $150,000. E. G. Disque, secy. Temple & Burrows, 64 Davenport Savings Bank Bldg., Davenport, archts.

Tenn., Nashville — Memorial and Auditorium—Alumni Assn. and Vanderbilt University having plans prepared by H. C. Hibbs, archt., Fourth & First Natl. Bank Bldg., memorial and auditorium on campus. $200,000.

Ky., Covington — Hospital — Salvation Army, 120 West 14th St, New York City, having preliminary plans prepared by H. D. Chase, archt. and engr., 120 West 14th St., 4 story and basement, brick, steel and stone, plain foundation, here. $250,000.

O., Cleveland Heights (Warrensville P. O.)—Apartment—F. N. Riley, 1508 Williamson Bldg., Cleveland, having sketches made by J. M. Dyer, archt., Ulmer Bldg., Cleveland, 6 and 12 story, brick, steel and concrete, Cedar Rd., here. $750,000.

O., Dayton—School and College—St. Mary's Female Educational Institute, Cincinnati, purchased 13 acre site on Forest Ave, here, and plans 3 brick buildings. $300,000. Architect not selected.

O., Oberlin—Hospital—Oberlin College, taking bids 3 story, 43 x 102 ft. and 43 x 48 ft., brick, steel and concrete. $200,000. C. Gilbert, 244 Madison Ave., New York City, archt. Noted Jan. 26.

O., Springfield—Office—Superior Gas Engine Co., Sheridan Ave., plans 3 story, modern brick. $150,000. Architect not announced.

O., Waverly — High School — Bd. Educ. having plans prepared by Glass & Austin, archts., Gasco Bldg., Columbus, 2 story and basement, 100 x 100 ft., brick and concrete. $145,000.

Ind., Evansville—Hotel—Vendome Hotel Co. plans 6 story addition, brick, 3rd St. $300,000. F. J. Schlotter, 113½ Upper 4th St., archt.

Ind., Hammond—Hotel—Hammond Hotel Improvement Co., plans 2 story and basement, brick, (walls and foundation to be built for 5 story), State St. $150,000. J. P. Berelos, mgr. C. H. Crane, Bond Bldg., Detroit, Mich., archt.

Ind., Mishawaka—High School—School Bd. plans 2 story and basement, brick. $600,000. Architect not selected.

Ind., New Castle — Bd. of Trustees Y.M.C.A. plans 3 story and basement, brick. $200,000. McGuire & Shook, Pythian Bldg., Indianapolis, archts.

Ind., Richmond—Lodge—Eagles' Lodge No. 666, 222 East Marshall St., having plans prepared by G. W. Mansfield, archt., Richmond, 3 story and basement, 48 x 66 ft., brick. $150,000.

Ind., South Bend — Hospital Annex — Epworth Hospital, 123 West Navarre St., plans 5 story and basement, brick, West Navarre St. $276,000. R. E. Schmidt, 104 South Michigan Ave., Chicago, archt.

Ind., South Bend — Temple — Masonic Temple Assn. having plans prepared by Osgood & Osgood, archts., Fine Arts Bldg., Grand Rapids, Mich., 6 story and basement, 132 & 165 ft., rein.-con., brick and stone, Main and Morris Sts. $750,000. W. H. Adams, Campus Bldg., Detroit, engr.

Mich., Adrian — College — St. Josephs Academy having plans prepared by P. Dederichs, archt., Chamber of Commerce Bldg., Detroit, 3 story and basement, rein.-con., brick and steel addition, incl. auditorium and gymnasium. $150,000.

Mich., Grand Rapids—High School—H. Turner, archt., 923 Michigan Trust Bldg., takes bids in spring, 4 story, 100 x 130 ft. rein.-con., brick and steel addition, for Bd. Educ. $300,000.

Mich., Holland—Hospital—Holland Hospital Assn. plans to vote on $250,000 bonds Nov. 7, for 4 story and basement, 40 x 125 ft. hospital and 40 x 75 ft. boiler room, brick, steel and stone. Robinson & Campau, 715 Michigan Trust Bldg., Grand Rapids, archts.

Mich., Lansing — Theatre — Lansing Theatre Co., 128 West Allegan St., plans campaign to raise $750,000, for 10 story and basement, brick and steel, Capitol St. S. D. Butterworth, Tussing Bldg., archt.

Mich., Lansing—Y. M. C. A. having preliminary plans prepared by N. McMillan, archt., 347 Madison Ave., New York, 5 story, 50 x 120 ft. rein.-con. and brick, West Allegan St. $400,000. J. Wilson, secy.

Ill., Chicago—Church—K. M. Vitzthum & Co., archts., 605 North Michigan Ave., preparing plans 2 story and basement, 80 x 160 ft., rein.-con., brick and steel, Washington and Laramie Sts., for St. Thomas Aquinas Catholic Congregation c/o architects. $250,000.

Ill., Chicago — High School — Bd. Educ., 646 South Clark St., having plans prepared by J. C. Christensen, archt., 646 South Clark St., rein.-con., brick and steel addition, Morgan Park. $1,000,000.

Ill., Chicago — High School — Bd. Educ., 646 South Clark St., having plans prepared by J. C. Christensen, archt., 646 South Clark St., rein.-con., brick and steel, Wilson and Kimball Aves. $3,000,000.

Ill., Chicago—High School—St. Catharines Parish c/o A. Foster, archt., 56 East Randolph St., having plans prepared 3 story, 150 x 170 ft., high school, Washington Blvd. near Central Ave. $180,000.

Ill., Chicago—Office—Orkin & Polenske c/o Berlin, Swern & Randal, archts., 19 South La Salle St., having plans prepared 6 story, 80 x 150 ft., rein.-con., brick and steel, Ontario St., near Fairbanks Court. $200,000.

Ill., Chicago—Store and Office—K. R. Beak & Co., 190 North Clark St., plans 3 story, 120 x 125 ft., rein.-con., brick and steel, 61st and Halsted Sts. $250,000. H. B. Aarens, 127 North Dearborn St., archt.

Ill., Evanston—Apartment—Eight Hundred Michigan Ave. Building Corp. c/o R. S. Degolyer, archt., 7 South Dearborn St., Chicago, having plans prepared, 3 story, 150 x 150 ft., Michigan Ave. and Kedzie St., here. $300,000.

Ill., Wilmette—School—Bd. Educ. having plans prepared by Perkins, Fellows & Hamilton, archts., 814 Tower Court, Chicago, 2 story, school, 17th near Washington St., here. $150,000.

Wis., Hartland—High School—Bd. Educ., c/o F. Chapman, clk., plans 2 story, 75 x 150 ft., brick, rein.-con., and steel, plain foundation. $150,000. Architect not selected.

Wis., La Crosse—Schools—Bd. Educ. had plans prepared by Parkinson & Dockendorff, archts., Linker Bldg., Junior High School, $250,000, and Vocational School, $150,000, each 2 story and basement, rein.-con., brick, tile and stone.

Wis., Milwaukee — Exhibit—Agricultural Com., Capitol Bldg., Madison, plans 100 x 300 ft., brick and steel, plain foundation, on State Fair Grounds, here. $500,000. C. P. Noyard, chn. Architect not selected.

Wis., Milwaukee—School—Bd. Industrial Educ., 7th and Prairie Sts., having plans prepared by Van Ryan & De Gelleke, archts., 114 Grande Ave., 6 story and basement, 147 x 270 ft., continuation school (third unit), rein.-con. and brick, plain and concrete pile foundation, 6th St. near Prairie St. $800,000 to $1,000,000.

Wis., Rhinelander — High School — Bd. Educ. plans 2 story, 75 x 155 ft., brick, rein.-con. and steel, plain foundation. $150,000. A. Moe, clk. Architect not selected.

Wis., Sheboygan—Store—J. and W. Jung, 720 North 8th St., having plans prepared by W. C. Weeks, archt., 720 Ontario Ave., 3 story, 150 x 150 ft., brick, rein.-con. and steel, plain foundation. $150,000.

Ia., Sioux City — Hospital — Methodist Episcopal Hospital, 14th and Jones Sts., plans 4 story and basement, rein.-con., brick, tile and stone. $250,000. G. T. Notson, supt. Architect not announced.

Mo., St. Louis—High School—Bd. Educ. takes bids about Oct. 15, 3 story, 130 x 140 ft., rein.-con. and brick, plain foundation, Kingshighway. $160,000. W. B. Ittner, 911 Locust St., archt.

Tex., San Antonio—College—Westmoreland College, Methodist Episcopal Church South, 726 West Waco Ave., receiving competitive sketches for college on North Side. $250,000.

Colo., Denver — Office — See "Industrial Works."

Calif., San Francisco — Synagogue — Congregation Emanu-El, Sutter and Powell Sts., plan synagogue, on 240 x 288 ft site, 1st Ave. and Lake St. To exceed $500,000.

Calif., Stockton—Courthouse—San Joaquin Co. plans election to decide whether to sell present courthouse and site and erect new structure at another location, or to retain present building and construct additions, costing approximately $700,000. E. D. Graham, co. clk.

Que., Montreal — Church — Westmount Baptist Church, Western Ave., plan church on Sherbrooke St. and Roslyn Ave. $175,000. Address F. H. Devine, pastor.

Ont., London—Exhibition—Western Fair Bd. plans 2 story exhibition building on fair grounds. $150,000. E. S. Little, chn. building com. Architect not selected.

Ont., Windsor — School — School Com. plans 14 room school. $200,000. Address E. Winter, mayor.

BIDS DESIRED

Conn., East Haddam—School—Oct. 20, by A. E. Purple, chn. of town, 2 story, 12 room, brick and steel, plain foundation, in Moodus. $150,000. W. H. McLean, 88 Tremont St., Boston, archt.

Conn., Hartford—Business—S. S. Nelson, 290 Trumbull St., taking bids 6 story, 100 x 130 ft., rein.-con. and brick, plain foundation, Church St. $200,000. **F. C. Walz**, 407 Trumbull St., archt. Noted Sept. 28.

N. Y., Brooklyn — Office — Oct. 18, by Brooklyn Edison Co., 360 Pearl St., 12 story, brick, steel and stone, plain foundation, Willoughby and Pearl Sts. $1,000,000. McKenzie, Voorhies & Gmelin, 342 Madison Ave., New York, archts. and engrs. Noted Aug. 3.

N. Y., Rochester—Hotel—Seneca Operating Co. taking bids 15 story, rein.-con. and steel, South Clinton St. $420,000. Esewein & Johnson, 781 Ellicott Sq., Buffalo, archts.

N. J., Irvington—Hospital—Nov. 1, by Bd. Town Comrs., Town Hall, for hospital on Chancellor Ave. and Park Pl. J. B. Allen, 1091 Sanford Ave., archt. Runyon & Carey 843 Broad St., Newark, engrs.

N. J., Newark—Apartments—C. W. S. Corp., c/o N. Meyers, archt, and engr., 7 Nelson Pl., ten 4 story, brick, steel and stone, plain foundations, Belleville Ave. $150,000 each. Work will be done by separate contracts under supervision of architect. L. Curtis, pres.

N. J., South Orange—School—Oct. 16, by Bd. Educ. brick, steel and stone, plain foundation. $250,000. Guilbert & Bettelle, 2 Lombardy St., Newark, archts. and engrs.

Md., Baltimore—High School—Oct. 18, by Bd. of Awards, junior high school, Clifton Park. W. F. Broening, pres. Noted Sept. 14.

Buildings (Continued)

Md., Baltimore—Memorial—Oct. 31, by joint comn. representing State of Maryland and City of Baltimore, for war memorial. E. B. Lee, and H. C. Jones, presidents. L. H. Fowler, 347 North Charles St., Baltimore, archt. Noted Sept. 21.

D. C., Wash.—Office and Church—Oct. 20, by Ballinger & Co., archts. and engrs., 47 West 34th St., New York City, 5 story and basement, 129 x 152 ft., rein.-con., brick, steel and cut stone, plain foundation, Maryland Ave., here, for Bd. Temperance, Probition and Public Morals of Methodist Episcopal Church. $500,000. Noted Oct. 5.

D. C., Wash.—Study Hall—Oct. 16 by Roman Catholic Order of Minor Conventuales, Syracuse, N. Y. (street address not available) study hall, Michigan Ave. and Monroe St., N. W., here. $150,000. Ogden & Gander, 17 Steuben St., Albany, N. Y., archts.

N. C., Greensboro—Schools—Oct. 23, by Bd. Educ., two grammar schools, one on West Lee St. and other on Ashboro St. $200,000 each. J. N. Wiles, chn. Starrett & Van Vleck, 8 West 40th St., New York City, archts.

O., Centerville—School—Nov. 1, by Bd. Educ. of Washington Twp. School Dist., 2 story and basement, 60 x 110 ft., rein.-con. and brick. $200,000. Walker & Norwick, 1301 Amer. Bldg., Dayton, archts.

Ill., Chicago—Theatre, Store and Office—W. W. Ahlschlager, archt., 65 East Huron St., receiving bids 3 story, 200 x 260 ft., rein.-con., brick and steel, Belmont St. and Lincoln Ave. $1,750,000. Owners name withheld.

Wis., Oshkosh—School—Oct. 30, by Bd. Pub. Wks., City Hall, for Punhoqua Grade School, 2 story part basement, brick and tile, plain foundation. $150,000-$200,000. Auler & Jensen, F. R. A. Bldg., archts.

Ia., Lake City—High School—Oct. 16, by Bd. Educ., 2 story and basement, rein.-con., brick, tile and stone. $150,000. J. M. Fickle, secy. W. Gordon, 319 Hubbell Bldg., Des Moines, archt.

Calif., Oakland—School and Convent—G. E. McCrea, archt., 369 Pine St., San Francisco, receiving bids 3 story and basement, (1st unit of church buildings) rein.-con., Lakeshore and Prospect Aves., for Church of Our Lady of Lourdes. Will exceed $150,000. P. Zucco, 166 Geary St., San Francisco, engr.

Calif., San Francisco—Store and Club—O'Brien Bros. Inc., archts., 240 Montgomery St., receiving bids 2 story, brick, Market St. near 12th St., for Loyal Order of Moose, Lodge 26, 105 Jones St. $150,000. Noted Sept. 14.

Ont., Sandwich — School — A. Beeman, secy. Bd. Educ. taking bids 2 story and basement, 10 room, concrete, brick, steel and stone. $205,000. A. J. Riddell, 355 Sandwich St., archt. Noted Sept. 7.

Ont., Windsor — Office — A. H. McPhail, archts., McGregor Blk., taking bids 3 story and basement, concrete, brick and steel, for Border Cities Star, 104 Sandwich St. W. $200,000.

BIDS RECEIVED

Conn., West Hartford—High School—B. I. Miller, town mgr., opened bids Oct. 2, 2 story and basement, 200 x 210 ft., brick, rein.-con. and steel, plain foundation, South Main St., from Johnson-Webster Co., 167 Washington St., Hartford, $429,162; Eastern Eng. and Constr. Co., Liberty Bldg., Bridgeport, $438,000; D. O'Brien & Sons, 118 Asylum St., Hartford, $439,000. Archts. est. $450,000. Noted Sept. 28.

O., Brookville—High School—Bd. Educ. of Brookville Village School Dist., opened bids Oct. 6, 2 story and baseemnt, 95 x 218 ft., rein.-con. and brick, plain foundation, from Leatherman & Bros., Dayton, (street address not available), $175,549; L. Colvin, 16th and Meridian Sts., Indianapolis, Ind., $183,184; H. R. Blagg Co., 1229 East 3rd St., Dayton, $187,442. Noted Sept. 14.

Ia., Des Moines — Schools — Bd. Educ. opened bids Sept. 29, general contract (1) Wallace School, East 13th and Cleveland Sts., (2) Elmwood School, 31st and Brattleboro Sts., from Western Constr. Co., 611 Flynn Bldg., (1) $67,000, (2) $66,500; Benson Constr. Co., 422 Valley Natl. Bank Bldg., (1) $65,000, (2) $67,000; Sugarman Constr. Co., 8th and Tuttle Sts., (1) $67,500, (2) $67,500. Noted Sept. 21.

Minn., St. Paul—School—H. W. Austin, city purch. agt., opened bids 3 story and basement, 150 x 250 ft. with 1 story, 48 x 90 ft. wing, rein.-con., brick and tile, Isabel and Congress Sts., from Gauger-Korsmo Constr. Co., 301 Endicott Bldg., $282,982; Olsen & Larsen, 145 North Concord St., $283,100; F. C. Norlander, 409 Metropolitan Bank Bldg., $319,000. Noted Sept. 28.

Que., Montreal—City Hall—Opened bids for steel work of new city hall, from Dominion Bridge Co., Lachine, $124,450; Phoenix Bridge Co., Young St., $126,655. Noted Sept. 21.

CONTRACTS AWARDED

Me., Portland—Store and Office—Clapp Estate, co D. W. Snow, Fidelity Bldg., 7 story, 75 x 100 ft., rein.-con. and brick, plain foundation, Congress St., to I. F. Woodbury & Sons, Inc., 185 Summer St., Boston, Mass. Archts. est. $225,000.

Mass., Boston — Apartment — G. N. Jacobs, 9 Hamilton Pl., will build 4 story, brick and concrete, plain foundation, Audubon Rd., by day labor. $200,000.

Mass., Boston—Apartment—Washington Heights Bldg. Corp., 1607 Commonwealth Ave., will build 3 story, brick, concrete, stone and steel, plain foundation, Commonwealth Ave., by day labor. $150,000. Private plans.

Mass., Mattapan (Boston P. O.)—Store and Theatre—V. Kauffman, 18 Tremont St., Boston, will build 2 story, 100 x 140 x 245 ft., brick, concrete and steel, plain foundation, Blue Hills Ave., by day labor. $200,000. F. A. Norcross, 46 Cornhill, Boston, archt.

Mass., Newton—School—Our Lady Help of Christians Roman Catholic Parish c/o L. W. Slattery, pastor, 573 Washington St., 2 story and basement, 150 x 200 ft., brick, concrete and steel, plain foundation, Washington St., to T. Stuart & Sons Co., 222 Pearl St. Archts. est. $200,000.

Mass., Pittsfield—School—School Bd., 2 story, 85 x 150 ft., brick, Tennyson Ave. and Newell St., to G. D. Kelly, Yonkers, N. Y., $172,298. Archts. est. $175,000. Noted Sept. 28.

Mass., Springfield — Home — Springfield Hospital, Chestnut St., 4 story, 34 x 159 ft. addition to nurses' home, Chestnut St., to E. J. Pinney, 374 Main St., $110,000. Archt. est. $150,000.

R. I., Pawtucket—School and Convent—St. Edwards Roman Catholic Church, Hope and Weeden Sts., 2 story and basement, 70 x 102 ft. school, brick, and 2 story and basement, 37 x 80 ft., brick and stucco convent, Hope and Weeden Sts., to A. F. Smiley, Oak Hall Bldg., Pawtucket. Archts. est. $150,000. Noted Sept. 28.

N. Y., New Rochelle—Hospital—New Rochelle Hospital, Guion Pl., brick, steel and stone, plain foundation, to G. Watson, 230 Huguenot St. Archts. est. $250,000.

Pa., Pittsburgh—Bank—Union Trust Co., 4th Ave., converting Union Arcade office building into bank, incl. remodeling portions of sub-basement, 1st, 2nd, 3rd and 4th stories, to Mellon-Stuart Co., Oliver Bldg. Archts. est. $1,000,000.

Pa., Wilkes-Barre—Church—Westminster Presbyterian Church, stone church, Westminster and Lockhart Sts., to Shepherd Constr. Co., Miners Bank Bldg. Archts. est. $150,000.

Del., Smyrna—High School—Bd. Educ., Du Pont Bldg., Wilmington, general contract 2 story, 80 x 150 ft., steel and brick, plain foundation, to A. L. Hudson, Smyrna, $139,375. Noted Sept. 21.

Md., Baltimore—Bank—Citizens Natl. Bank, Hanover St., 6 story, brick and steel, light and German Sts., to G. A. Fuller Co., 175 5th Ave., New York City. Archts. est. $200,000 Noted Sept. 14.

W. Va., Fairmont—Theatre—West Virginia Amusement Co., will build 1 story and basement, 45 x 200 ft., brick and steel, Main St. near Quinn St., by day labor. $200,000. Former contract rescinded. Noted April 27.

Ga., Atlanta — Market House — Capitol City Bldg. & Market Co., 603 Chandler Bldg., 1 story and basement, 143 x 245 ft., rein.-con., to Turner Constr. Co., 244 Madison Ave., New York City, under direction of L. W. Robert & Co., archts., Atlanta. Noted July 6.

Fla., Sanford—Bank—First Natl. Bank, 5 story, steel, brick and stone, plain foundation, to G. A. Fuller Co., 175 5th Ave., New York City. Archts. est. $350,000.

Ala., Birmingham—Store—L. Pizitz, 118-19th St., 6 to 8 story, 100 x 140 ft., brick, concrete and steel, 2nd Ave., to Smallman & Brice Constr. Co., 1115 Ave. E. Archts. est. $350,000.

La., New Orleans — School — Orleans Parish School Bd., Municipal Bldg., 2 story, and basement, 151 x 233 ft. rein.-con. and brick, Claude St. between Alva and Pauline Sts., to O. M. Gwinn Constr. Co., Canal Commercial Bldg. Cost complete $249,000. Noted Aug. 3.

O., Cleveland — Memorial — Cleveland Memorial Entombment Co., c/o W. H. Allen, Hickox Bldg., 1 story, 100 x 200 ft., marble, granite and steel, Euclid Ave. near Chardon Rd. ,to J. Gill & Sons, Citizens Bldg. Archts. est. $150,000. Noted Aug. 31.

O., Columbus—Dormitory—F. H. Olds, 12½ South High St., 4 story and basement, 50 x 150 ft., brick and concrete, Neil Ave., to Globe Bond & Mortgage Co., 153 North High St., $152,000.

Mich., Detroit—Church—Church of the Messiah, East Grand Blvd. and Lafayette Ave., 2 story and basement, 60 x 120 ft. rein.-con., brick, steel and stone, plain foundation, East Grand Blvd., to Corrick Bros., 507 Owen Bldg. Archts. est. $150,000

Mich., Detroit—Hotel—Tuller Hotel Co., Park and Adams Aves., 14 story, concrete, brick and steel to Van Blarcom Co., Plymouth Bldg., Cleveland, O. Archts. est. $1,000,000.

Minn., Eveleth—Lodge—Elks Lodge, c/o E. Hatch, 3 story and basement, rein.-con., brick and tile, Jones St., (basement and first floor), to Minnesota Utilities Co., 222 Grant Ave. Total cost $150,000. Noted Dec. 9, 1920.

S. D., Sioux Falls—Apartment—Blackstone Apartment Corp., general contract for 4 story and basement, 97 x 136 ft. rein.-con., brick, stone and tile, 12th and Dakota Sts., to Carlson & Snitkey, Sioux Falls. Total est. $200,000.

Calif., San Francisco — Apartment — Kiernan & O'Brien, 1756 Mission St., will build 6 story and basement, rein.-con. and steel, Geary St. near Taylor St., by day labor. $225,000. A. W Burgren, French Bank Bldg, archt. Noted Oct. 5.

Calif., San Francisco — Church and School—Roman Catholic Archbishop of San Francisco, 1100 Franklin St., 3 story, rein.-con. and steel, Filbert St., general contract to Grace & Bernieri, Claus Spreckels Bldg., $151,500. Noted Oct. 5.

Que., Montreal—Catholic School Comrs., St. Catherine St. W., 3 story, 60 x 160 ft. brick, on Christophe Colomb St., to A. Filion & Bros., 2419 St. Denis St. $191,900.

Federal Government Work

PROPOSED WORK

N. Y., Iona Island—Quarters—Spec. 4,743—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans 1 double set quarters, here.

Pa., Phila.—Dredging, etc.—Spec. 4,738—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans dredging, filling and constructing bulkheads, here.

Va., Norfolk—Power Houses, etc.—Constructing Quartermaster, Norfolk, plans 2 power houses with wells, fuel tanks, etc., at Ft. Story, here.

N. C., Moorhead City—Repairs—Spec. 4,739—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans repairs to radio buildings, here.

Wash., Keyport—Extension—Spec. 4,744—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans extension to torpedo storage building, here.

Calif., Mare Island—Extension to Shell House, etc.—Spec. 4,742—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans second extension to shell house and magazine, here.

Calif., San Diego—Coaling Plant, etc.—Spec. 4734—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans coaling plant and rebuilding Quarters C, here.

Calif., San Diego—Covering Railroad Track—Spec. 4737—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans covering railroad tracks, at Marine Barracks, here.

Calif., San Diego—Garage, Sewer, etc.—Spec. 4741—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans garage, sewer, pavement and fence, here.

H. T., Pearl Harbor—Refrigerating and Ice-Making Plant—Spec. 4,735—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans refrigerating and ice-making plant, here.

BIDS DESIRED

N. Y., Buffalo—Dump Scows—Nov. 6 at office U. S. Engineer, three 400 cu.yd. steel dump scows; adv. this issue.

N. Y., New York—Laundry—Nov. 1 by Treas. Dept. Wash., D. C., for construction incl. mechanical equipment, laundry building for U. S. Veterans' Hospital, Bronx, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

D. C., Wash.—Laboratory—Oct. 24 by Interior Dept., for laboratory building at St. Elizabeths Hospital, here.

CRANES—WILMINGTON, DEL.

Bids were opened Sept. 8, by Bd. Harbor Comrs., for furnishing locomotive and portal cranes for marine terminals. Following is list of bidders with their respective bids:

LOCOMOTIVE CRANES

Firm	Capacity 12 Ft. Lb.	Capacity 30 Ft. Lb.	Capacity 50 Ft. Lb.	Ballast	Rail Clamp	Weight	Speeds Propelling Fpm.	Speeds Sluing Rpm.	Speeds Single Line Hoisting Fpm.	Cylinder	Drums	Draw Bar, Lb.	Bid B1	Bid B2	Bid B3
Ohio Locomotive Crane Co., Bucyrus, O.	50,400	15,200	7,500	12T Furnished	Yes	128,600	—600	—5	200	10 x 10	2	9,000	$12,125	$12,275	$12,425
														F.o.b. Wilmington	
Link-Belt Co., Nicetown, Philadelphia, Pa.	50,000	15,600	8,000	12T Furnished	X	144,000	—600	5	200	8 x 10	1	6,000	11,550	11,675	12,800
														F.o.b. Wilmington	
	......	......	......	....	......	......	......	......	......	......	2	....	11,700	11,825	12,950
Orton & Steinbrenner Co., Chicago, Ill	50,000	13,400	7,100	Furnished	Yes	142,000	500	4½	240	9 x 10	1	X	10,080	10,161	10,242
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														F.o.b. Wilmington	
Brown Hoisting Machinery Co., Cleveland, O.	Y	15,600	8,300	X	Yes	123,100	635	3	200	7 x 9	1	7,650	11,030	11,220	11,280
													Z	Z	Z
The Browning Co., Cleveland, O.	U	14,500	7,000	Not furnished	Yes	134,200	535	4	247	8 x 10	2	9,000	10,838	10,958	11,078

X—Not specified. Y—17 ft. = 30,900 lb. Z—3 locomotive cranes + 2 portal cranes = $61,000. U—15 ft. = 35,700 lb.

PORTAL CRANES

Firm	Single Line Capacity	Speed Single Line	Speed Boom Hoist	Speed Travel	Speed Rotating	Rail Clamp	Mounting	Motors Hoisting	Motors Boom Hoist	Motors Travel	Motors Rotating	Working Radius	Bid C1	Bid C2
Lakeside Bridge & Steel Co., N. Milwaukee, Wis.	2½ T.	450 fpm.	50 fpm.	200 fpm.	3 rpm.	Yes	4–24 in. ϕ C1 Wheels	40 hp. 1,130 rpm.	20 hp. 1,130 rpm	2–10 hp. 800 rpm.	20 hp. 800 rpm.	50	$28,350	$50,900
Heyl & Patterson, Inc. 5 Water St., Pittsburgh, Pa.	2½ T.	225 fpm.	X	200 fpm.	4 rpm.	Yes	4–30 in. ϕ C1 Wheels	35 hp. 500 rpm. G. E.	15 hp. 600 rpm. G. E.	15 hp. 600 rpm. G. E.	15 hp. 600 rpm. G. E.	50	18,000	31,000
Dravo Cont. Co., Pittsburgh, Pa.	2½	225 fpm.	70	150–200	2–3	Yes	4–30 in. ϕ C1 Wheel	40 hp. X rpm.	15 hp. X rpm.	15 hp. X rpm.	15 hp. X rpm.	50	17,100	31,800
									G. E. or Westinghouse					
Wellman-Seaver-Morgan Co., 7000 Central Ave., Cleveland, O.	5,000 lb.	208	X	75–100	1½	Yes	4–2-Wheel 24 in. ϕ	35 hp. X rpm. G. E.	5 hp. X rpm. G. E.	10 hp. X rpm. G. E.	10 hp. X rpm. G. E.	50	20,000	35,000
	5,600 lb.	200	X Hand operated	X	2	Yes	4–24 in. ϕ C1	25 hp.	X Hand operated	7 hp.	10 hp.	40	16,875	31,750
Brown Hoisting Machinery Co., Cleveland, O.	6,400 lb.	250	X	200	4	Yes	4–28 in. ϕ C1	1–100 hp. 600 rpm. G. E.				55	16,000 Z	29,300 Z
The Browning Co., Cleveland, O.	2½ T.	225	X	350	4	X	4–26 in. ϕ'	87 hp. Westinghouse			27 hp.	52	14,677	29,354

X—Not specified. Z—2 portal cranes + 3 locomotive cranes = $61,000.00.

Federal Government Work (Continued)

O., Chillicothe—Hospital—Nov. 14 at office Quartermaster General, Munitions Bldg., Wash., D. C., construction U. S. Veterans Hospital, here. Noted Sept. 21.

Mich., Adrian—Extension—Oct. 26 by Treas. Dept., Wash., D. C, extension to workroom and driveway, here.

Ill., Chicago—Breakwater—Nov. 6 at office U. S. Engineer, 537 South Dearborn St., concrete caisson breakwater at Indiana Harbor, Ind.; adv. this issue.

Wis., Milwaukee—Pier, etc.—Nov. 6 at office U. S. Engineer, pile pier, removing old timber crib pier, and dredging at Racine Harbor; adv. this issue.

Colo., Fitzsimons—Alterations, etc.—Nov. 1 at office Constructing Quartermaster, Fitzsimons General Hospital, alterations and additions to professional services building, womens ward, etc.; adv. this issue.

BID RECEIVED

W. Va., Parkersburg—Extension—Treas. Dept., Wash., D. C., extension to U. S. Post Office, here, from Pearce Bros., Inc., 220 West 42nd St., New York City, $11,958; E. M. Enright, Parkersburg, $14,400; Devault & Dietrick, Canton, O. (street address not available) $14,505.

La., Alexandria—Extension, etc.—Treas. Dept., Wash., D. C., extension, remodeling, etc., U. S. Post Office and Court House, here, from W. MacDonald Constr. Co., Odd Fellows Bldg., St. Louis, Mo., $64,500; H. W. Bond & Bros., New Orleans, (street address not available) $64,600; Progressive Constr. Co., Alexandria, $66,675. Noted Sept. 7.

Utah, Eureka—Post Office—Treas. Dept., Wash., D. C., for U. S. Post Office, here, from G. A. Whitmeyer & Sons, 2,759 Grant Ave., Ogden, $35,200; Johnson Constr. Co., 64 Bway, Fargo, N. D., $37,997; Devault & Dietrick, Canton, O. (street address not available) $39,190. Noted Sept. 7.

CONTRACTS AWARDED

Md., Edgewood — Stables — Constructing Quartermaster, Aberdeen Proving Ground, 20 stable buildings, here, to Northeastern Constr. Co., Lexington Bldg., Baltimore, $24,035. Noted Sept. 21.

Miscellaneous

PROPOSED WORK

Lighting System—Lakewood (Cleveland, P. O.)—Plans installing new white way lighting system in Clifton Blvd., Detroit and Madison Aves. $200,000. E. H. Fischer, City hall, engr.

Transmission Line—Loretto, Mich.—See "Industrial Works."

Levees—Dallas, Tex.—Attorney Generals Dept., Austin approved $69,000 bonds issue for Levee Dist. 6 in Dallas Co. Address A. C. Allen, co. judge.

Track Electrification — Dallas, Tex. — Texas Interurban Ry. plans to electrify tracks of Missouri, Kansas & Texas R.R. between here and Denton, 30 mi.

Steam Road Roller—Guelph, Ont.—Plans to purchase new steam road roller. F. McArthur, city engr.

BIDS DESIRED

Foundation, etc. — New York, N. Y. — Oct. 20, by Transit Comn., 49 Lafayette St., foundation for 3rd addition to shops at Lenox Ave. and 148th St. Yard, also furnishing and erecting steel for above.

Equipment—Wash., D. C.—Oct. 24. 30, Nov. 13 and 21, by Dist. Comrs., 509 Dist. Bldg., Wash., D. C., equipment for New Eastern High School, C. H. Rudolph, J. F. Oyster and C. Keller, comrs.; adv. this issue.

Trucks, etc.—Cleveland, O.—R. H. Murdock, City Hall, taking bids two 10 ton trucks and 6 snow plows.

BIDS RECEIVED

Parking Space—Coney Island (Brooklyn, P. O.) N. Y.—Dept. Parks, Municipal Bldg., New York, opened bids Oct. 5, concrete parking space at Dreamland Park, here, from Boro Asphalt Co., 1301 Metropolitan Ave., Brooklyn, $28,091; C. Gallagher, 745 Dean St., Brooklyn, $32,218; G. M. Mandatio, 129 29th St., Brooklyn, $32,696.

Rolling Segment, etc.—New York, N. Y.—Bd. Purch., Municipal Bldg., opened Bids Oct. 6, furnishing and delivering rolling segment and track girders to Dept. Plant & Structures, from Vulcan Rail & Constr. Co., Maspeth, $26,442; Amer. Bridge Co., 30 Church St., $60,534.

Cement—Turlock, Calif.—Turlock Irrigation Dist., furnishing and delivering 50,000 to 75,000 bbl. cement, from Santa Cruz Portland Cement Co., Crocker Bldg., San Francisco, $3.94 per bbl., $0.10 each for returned sacks, 5% cash discount. Noted Sept. 21.

CONTRACTS AWARDED

Gas Line—Mt. Morris, N. Y.—Pavillion Natural Gas Co., will build 14 mi. gas pipe line between here and Dansville, by day labor. $60,000. Noted Aug. 10.

Coal Handling Plant—New York, N. Y.—Bd. Health, 505 Pearl St., altering and erecting coal handling plant at Riverside Hospital, North Brother Island, Bronx, to McHarg-Barton Co., 1328 Bway., $16,800. Engrs. est. $17,000. Noted Oct. 5.

Plumbing and Drainage Work, etc.—New York, N. Y.—Bd. Educ., 500 Park Ave., plumbing and drainage work in P. S. 139, to J. J. Kenny Sons, 236 West 20th St., $39,100; electric wiring and fittings in above school, to Jandous Electric Equipment Co., 109 West 31st St., $20,900. Noted Oct. 5.

Snow Plows, etc.—Rochester, N. Y.—Bd. Supervs. Monroe Co., furnishing 16 snow plows and other equipment for attachment to highway trucks also snow plows and equipment for clearing highways, for use on tractors, owned by county, to Good Roads Mchy. Co., New York, $3,650. Noted Sept. 14.

Heating Plant, etc.—Cleveland, O.—Bd. Educ., East 6th St. and Rockwell Ave., steam heating plant incl. 2 heating boilers, stokers and blowers in Collinwood High School, to Feldman Bros., 10,305 Barrett Ave., $235,585.

Cement — Detroit, Mich. — Dept. Pub. Wks., City Hall, furnishing 40,000 bbl. portland cement f.o.b. Detroit, to Aetna Portland Cement Co, 412 Union Trust Bldg., $3.23 per bbl. in cloth sacks, $2.98 per bbl. in paper sacks.

Transmission Line — Dane, Wis. — Wisconsin Light & Power Co., 900 Gay Bldg., Madison, will build 66,000 voltage transmission line from here to Fond du Lac, to carry energy for Prairie du Sac plant to Eastern Wisconsin distribution system. Work will be done by day labor. Private plans.

Levee — Locke, Wash. — Comrs. Locke Drainage Dist., Pend Oreille Co., levee, concrete culvert, pump, engine, housing and tile, steam shovel and scraper work, 80,000 cu.yd. dry earth excav., to Standard Asphalt Co., North 517 Lincoln St., Spokane, at $0.39 per cu.yd., total about $45,000. Noted Sept. 21 under "Excavation, Drainage, Irrigation."

Pier — Montreal, Que. — Harbor Comrs., 300 ft. extension to Jacques Cartier Pier, to Sterling Constr. Co., Montreal, (street address not available), $150,000. Noted Sept. 14.

Wharf—Montreal, Que.—Harbor Comrs., 500 ft. concrete extension to Imperial Oil Wharf, Longue Pointe, to Barrett-McQueen Ltd., 737 Canada Cement Bldg., $200,000.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: **Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.**

Rate:
40 Cents a Line an Insertion

Plans and Specifications **for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.**

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Oct. 31.

Building, Delivering and Erecting Steam Pumps

(HEMPHILL PUMPING STATION)

Atlanta, Ga.

Sealed proposals for building, delivering and erecting 15 and 30 M.G.D. Steam Turbine Driven Centrifugal Pumps and 15 M.G.D. Cross Compound Pumping Engines for the City of Atlanta, Georgia, will be received by the Purchasing Agent of the City of Atlanta at the City Hall until 2:30 p.m. on the 31st day of October, 1922.

The work will consist of building, delivering and erecting complete with all accessories, one or more Steam Pumps on foundations erected by the City of Atlanta in the Hemphill Pumping Station. The sizes and type of pumps will be determined after receiving bids.

Each proposal must be accompanied by a certified check payable to the City of Atlanta, in an amount equal to five (5) per cent of the bid, as a guarantee that the contract will be entered into if awarded. A bond of one hundred (100%) per cent of the contract price will be required.

Plans and specifications are on file at the office of the General Manager of the Atlanta Water Works, City Hall, Atlanta, Georgia. P. H. Norcross, Consulting Engineer, 1404 Candler Building, Atlanta, Georgia, and with the Engineering News-Record, New York City.

Bidders may obtain copies of the specifications from the Purchasing Agent by enclosing check for twenty-five dollars ($25.00) payable to the City of Atlanta, and to be held until return of specifications in good condition. The City reserves the right to reject any and all bids.

No proposal will be entertained unless made on the form, and sealed in the envelope furnished by the City of Atlanta.

Purchasing Agent, City of Atlanta, Ga.

Bids: Oct. 17.

Cast Iron Pipes

Canandaigua, N. Y.

Sealed proposals will be received by the Board of Public Works at its office in the City Hall, Canandaigua, N. Y., until eight o'clock P.M., October 17th, 1922, for the furnishing of eight hundred and sixty-five tons (865) of sixteen (16) inch Class C cast iron pipe and twenty-three (23) tons of twelve (12) inch Class C cast iron pipe and five (5) tons of cast iron specials. All pipes and specials to be manufactured in accordance with American Water Works Association specifications.

Proposals must be enclosed in plain sealed envelopes and marked "Proposal for Furnishing Cast Iron Pipe."

Copies of the specifications may be obtained at the office of the City Clerk, City Hall, Canandaigua, N. Y., or at the office of W. S. Lozier, Consulting Engineer, 321 Cutler Bldg., Rochester, N. Y.

Bids must be accompanied by a certified check for two thousand ($2,000) dollars payable to the Treasurer of the City of Canandaigua. In case of failure or neglect to enter into the contract or furnish the necessary bond within the time specified the certified check will be forfeited to the City of Canandaigua. A performance bond to the sum of fifty (50) per cent of the contract will be required.

The Board reserves the right to reject any and all bids or to accept any bid which it deems most favorable to the interests of the city.

BOARD OF PUBLIC WORKS.
H. A. BEEMAN,
WM. GARRATT,
ROY E. POOL.

OFFICIAL PROPOSALS

Bids: Oct. 31.

Building, Delivering and Erecting Steam Pumps

(CHATTAHOOCHEE RIVER PUMPING STATION)

Atlanta, Ga.

Sealed proposals for building, delivering and erecting 15 and 30 M.G.D. Steam Turbine Driven Centrifugal Pumps and 15 M.G.D. Cross Compound Pumping Engines for the City of Atlanta, Georgia, will be received by the Purchasing Agent of the City of Atlanta at the City Hall until 2:30 p.m. on the 31st day of October, 1922.

The work will consist of building, delivering and erecting complete with all accessories, one or more Steam Pumps on foundations erected by the City of Atlanta in the Chattahoochee River Pumping Station. The sizes and type of pumps will be determined after receiving bids.

Each proposal must be accompanied by a certified check payable to the City of Atlanta, in an amount equal to five (5) per cent of the bid, as a guarantee that the contract will be entered into if awarded. A bond of one hundred (100%) per cent of the contract price will be required.

Plans and specifications are on file at the office of the General Manager of the Atlanta Water Works, City Hall, Atlanta, Georgia, P. H. Norcross, Consulting Engineer, 1404 Candler Building, Atlanta, Georgia, and with the Engineering News-Record, New York City.

Bidders may obtain copies of the specifications from the Purchasing Agent by enclosing check for twenty-five dollars ($25.00) payable to the City of Atlanta, and to be held until return of specifications in good condition. The City reserves the right to reject any and all bids.

No proposal will be entertained unless made on the form, and sealed in the envelope furnished by the City of Atlanta.

Purchasing Agent, City of Atlanta, Ga.

Bids: Oct. 24.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P. M., on Tuesday the 24th day of October, 1922 for the improvement of highways in the following counties:

HAMILTON ....(one highway: 3.57)
ORANGE ....(one highway: 3.71)
SARATOGA ....(one highway: 2.67)
SUFFOLK ....(two highways: 2.41 & 0.09)

ALSO FOR THE RECONSTRUCTION OF THE FOLLOWING:

BROOME ....(one contract: 2.27)
CHEMUNG ....(one contract: 3.00)
CLINTON ....(one contract: 3.19)
OTSEGO ....(one contract: 2.00)
STEUBEN ....(one contract: 2.50)
SUFFOLK ....(one contract: 2.36)
WESTCHESTER .....(one contract: 2.67)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "Geueral Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON.
Commissioner.
State Commission of Highways.
J. C. FINCH, Secretary.

OFFICIAL PROPOSALS

Bids: Oct. 24.

Sewage Disposal Plant

Albuquerque, N. M.

Sealed proposals will be received at the office of the City Clerk of the City of Albuquerque, New Mexico, until 2:00 o'clock p.m. on Tuesday, the 24th day of October, 1922, for constructing a certain sewage disposal plant for the City of Albuquerque, New Mexico. Each bidder will be required to deposit with the City Clerk to the credit of the City of Albuquerque without endorsement a certified check of deposit in the sum of ten per cent of the total amount bid, as a guaranty that the bidder will enter into contract and execute all bonds and guaranty in the forms provided within ten days after the notice of award of contract to him.

Bidders are expected to inspect the site of the work and to inform themselves regarding all local conditions. Instructions to bidders, proposal and contract forms, plans and specifications are on file at the office of the City Engineer, City Hall, Albuquerque, New Mexico. Copies of plans and specifications may be secured from the city engineer on or after October 5th, 1922 upon deposit of $50.00, to be returned to contractor upon submission of a bona fide bid on the work with plans and specifications, or upon returning plans and specifications intact prior to the date of receiving bids. Otherwise the deposit will be forfeited to the City of Albuquerque.

The City of Albuquerque reserves the right to reject any or all bids.

B. H. CALKINS, City Manager.
FRANK KIMBALL, City Engineer.
IDA V. MALONE, City Clerk.

Bids: Oct. 24.

Concrete Water Reservoir

Albuquerque, N. M.

Sealed proposals will be received at the office of the City Clerk of the City of Albuquerque, New Mexico, until 2:00 o'clock p.m. on Tuesday, the 24th day of October, 1922, for constructing a certain reinforced concrete water reservoir for the City of Albuquerque, New Mexico. Each bidder will be required to deposit with the City Clerk to the credit of the City of Albuquerque without endorsement a certified check of deposit in the sum of ten per cent of the total amount bid, as a guaranty that the bidder will enter into contract and execute all bonds and guaranty in the forms provided within ten days after the notice of the award of the contract to him.

Instructions to bidders, proposal and contract forms, plans and specifications are on file at the office of the City Engineer, City Hall, Albuquerque, New Mexico. Copies of plans and specifications may be secured from the City Engineer on and after October 5th, 1922, upon deposit of $15.00, to be returned to the contractor upon submission of a bona fide bid on the work with plans and specifications, or upon returning plans and specifications intact prior to the date of receiving bids. Otherwise the deposit will be forfeited to the City of Albuquerque.

The City of Albuquerque reserves the right to reject any or all bids.

B. H. CALKINS, City Manager.
FRANK KIMBALL, City Engineer.
IDA V. MALONE, City Clerk.

OFFICIAL PROPOSALS

Bids: Nov. 1.

Construction of Power House

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Wednesday, November 1st, 1922, at which place and hour they will be publicly opened and read, for the development of canal water power pursuant to the provisions of Chapter 532 of the Laws of 1922, as follows:

CONTRACT B-3—VISCHER FERRY POWER HOUSE

For constructing a power house and work incidental thereto, at Vischer Ferry dam, County of Saratoga.

Sheets 1-15, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required, and other information for proposers, may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Eastern Division, Wedgeway Building,, Schenectady, N. Y.; at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division, at Rochester, N. Y.; at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bond, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposit of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE,
Superintendent of Public Works.
October 7th, 1922.

OFFICIAL PROPOSALS

Bids: Nov. 2.

Sewer Tunnel

Tulsa, Okla.

Sealed proposals will be received by the Board of Commissioners of the City of Tulsa, Oklahoma, until five o'clock P.M., November 2nd, 1922, for the construction of a Storm Sewer 5,700 feet long, 5,100 feet of which will be in tunnel cut. Approximate size 14½ x 15½ feet. Bond issue $900,000. Estimates payable in cash. Certified bidding check five per cent.

Plans and profiles, etc., may be secured from City Engineer, upon deposit of $25, which will be refunded to all parties submitting a bona fide bid.

CHARLES SCHULTZ,
City Engineer.

W. W. HORNER,
Consulting Engineer,
St. Louis, Mo.

South Nyack,
New York
Saved $2,642.20

Through advertising for bids on a paving contract in *Engineering News-Record.*

This publicity in these Official Proposal Columns is a mighty profitable investment for any community.

It Costs so little, too.

Bids: Oct. 21.

Stone Jetties, Seawalls, etc.

Longport, N. J.

Sealed proposals for the construction or extension of stone or slag jetties or stone sea walls; the placing of stone along the toe of the seawall; the furnishing of stone or slag and placing same in floats and placing floats in position; and the construction of a bulkhead, or any or all of them, on the Atlantic Ocean, in the Borough of Longport, County of Atlantic, State of New Jersey, will be received by the Board of Commissioners of the Borough of Longport, at 3:00 o'clock in the afternoon, October 21, 1922, during a regular meeting of said Board of Commissioners, at the Commission Chamber, Borough Hall, Longport, N. J.; said bids to be opened and read in public at the aforesaid time and place.

Plans, specifications and form of bid, certificate of surety, contract and bond, covering proposed work, are on file in the office of the Borough Clerk, at Borough Hall, Longport, N. J., where they may be inspected during business hours. Any prospective bidder will be furnished with a complete set of the plans and specifications of the proposed work in consideration of a deposit of $10.00 and such deposit will be refunded if both plans and specifications are returned in good condition on or before October 21, 1922. Each bid must be made on the standard proposal form in the manner required by the specifications, must be enclosed in a sealed envelope marked "Proposals for Construction of Stone Jetties or Stone Seawalls, etc., or any or all of them, at Longport, N. J., to be opened at 3:00 P.M., October 21, 1922, and with the certificate of surety properly filled in, and shall be enclosed in another envelope addressed to William S. Gilmore, Borough Clerk, Borough Hall, Longport, N. J. These envelopes must not be marked in any other manner. Each bid must be accompanied by a certified check payable to the Director of Revenue and Finance, or cash, in the amount of $1,000.00 and no bid will be received after the hour fixed for receipt of bids.

A contract will be awarded, if awarded at all, within one month of the date of receiving bids.

The right is reserved to reject any or all bids.

By order of the Board of Commissioners of the Borough of Longport, N. J.

WILLIAM S. GILMORE,
Borough Clerk.

OFFICIAL PROPOSALS

Bids: Oct. 31.

Barge Canal Terminals

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, October 31st, 1922, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and amendatory laws, and Chapter 402 of the Laws of 1920, as follows:

TERMINAL CONTRACT NO. 91.

For paving a portion of the terminal site at Hallets Cove, New York City.

Contract plans, sheets 1 to 3 inclusive.

Plans may be seen and detailed specifications, engineers' estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE,
Superintendent of Public Works.

September 28, 1922.

OFFICIAL PROPOSALS

Bids: Oct. 24.

Road Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the construction of the followin:

Route No. 4, Section No. 7-A, New Gretna Alternate, Burlington County; estimated amount of gravel surface eight (8) inches thick is 13,618 square yards.

Bids will be received at the office of the State Highway Commission at the Broad Street Bank Building, Trenton, New Jersey, on Tuesday, October 24, 1922, at 11:00 A.M. and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars ($10.00) upon application to the State Highway Department, 9th floor, Broad Street Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated therein and as required by the 1922 specifications, same to be enclosed in sealed special addressed envelopes bearing the name and address of bidder and the name and section of the Route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that said certified check shall not be less than $500.00 or more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelopes will be furnished on application. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: Oct. 25.

Highway Work

Raleigh, N. C.

Sealed bids for the construction of the following Projects will be received by the North Carolina State Highway Commission at Raleigh, N. C., until 10.00 a.m., on the 25th day of October, 1922, when they will be opened and read:

Hard surface (Concrete or Asphaltic Paving Projects), including grading, reinforced concrete or cast iron pipe, structures, etc.

Project No.	County	Length (Miles)
101	Beaufort	4.23
105-A	Beaufort	2.00
105-B	Beaufort	5.04
113-B	Chowan	9.89
220 & 282	Duplin-Wayne	28.75
901	Buncombe	7.52

Topsoil, Sand Clay, or Gravel Projects, including grading, drainage pipe, structures, etc.

133	Gates-Pasquotank	14.09
152	Hyde	10.89
	BRIDGE PROJECT	
254	Lenoir-Pitt	1 70 ft. low steel truss, 1 78 ft. Strauss Bascule and 5 40 ft. R. C. Deck Girder approach spans.

Specifications, proposal forms, etc., may be obtained from the State Highway Commission at Raleigh, N. C.

Plans may be seen in the Raleigh office, or in the offices of the District Engineers.

Bridge plans may be obtained from the State Highway Commission at Raleigh, N. C., upon payment of five ($5.00) dollars per set.

The right is reserved to reject any or all bids.

By order of the North Carolina State Highway Commission.

OFFICIAL PROPOSALS

Bids: Dec. 11.

Labor-Material Percentage Contract

New Orleans, La.

Sealed proposals will be received at the Sewerage and Water Board, Room 401, No. 526 Carondelet Street, New Orleans, La., up to 12 o'clock noon of Monday, December 11th, 1922, on Labor-Material Percentage Contract for year 1923.

Specifications and blank forms of proposal may be obtained at the office of the Board.

The right is reserved to reject any or all bids.

October 12th, 1922.

A. G. MOFFAT,
Secretary.

GEO. G. EARL,
General Superintendent.

A Bonding Company's Suggestion to Official Proposal Advertisers

"A large part of our contract bond business is submitted to us by wire, and I am a constant reader of the Official Proposals in order to find out the size and nature of the work that is referred to in the bond application. Very frequently I am unable to get any clear idea of what the advertisers are asking bids on, and of course the prospective bidder or contractor is also at a loss to know what kind of a job is being advertised.

"Traveling expenses are heavy at the present time, and contractors pay out considerable sums during the course of a year in investigating prospective contracts. This of course is a large charge that the owners eventually pay, and anything that will reduce the general overhead of contract work will eventually be to the advantage of the owner.

"One way to reduce this overhead is to word the advertisement so that the contractor sitting in his office will know whether or not he should investigate and prepare a bid on the proposed work."

Bids: Oct. 17.

Highway Work

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at the State Capitol until 10 a.m., October 17, 1922, when bids will be publicly opened and scheduled and contract awarded as soon thereafter as possible for the reconstruction of 30 miles of Reinforced Concrete, 18 miles of either Bituminous on a Concrete Foundation or Reinforced Concrete and 1 mile of Bituminous Macadam Pavement; also for the erection of a Reinforced Concrete Bridge. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 119 Federal Street, N. S., Pittsburgh, Pa. GEORGE H. BILES, Assistant State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: Oct. 31.

Hospital Construction

New York, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work, for Central Heating and Lighting Plant, Kitchen and Dining Room Building and Buildings for Chronic Patients (North and South), and Construction of Tunnels at the Creedmoor Division, Brooklyn State Hospital, Creedmoor, Borough of Queens, Long Island, N. Y., will be received by the State Hospital Commission, Room 1046, 25 Broadway, New York City, N. Y., until 12 o'clock noon (Standard Time), on Tuesday, October 31st, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contracts within thirty (30) days after official notice of award of contracts and in accordance with the terms of Specifications Nos. 3979, 3980, 3981, 3982, 3983, 3984, 3985, 3986, 3987, 3988, 3989, 3990 and 3995. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Brooklyn State Hospital, Brooklyn, N. Y., at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon the deposit of a certified check in the sum of $25.00 made payable to the State of New York for each set of plans and specifications, which check will be returned if plans and specifications are returned in good condition to the State Architect, L. F. Pilcher, Capitol, Albany N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.

Dated: September 21, 1922.

Bids: Oct. 24.

Bridge Repairs

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the following:—

For repairs to bridge over Barnegat Bay from Seaside Heights to Island Heights, in the Municipality of Dover, County of Ocean.

Bids for the above will be received at the office of the State Highway Commission, Broad St. Bank Building, Trenton, N. J., on October 24th, 1922, at 11:00 A.M., and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond form for the proposed work are on file in the office of Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J., and may be inspected by prospective bidders. Plans will be furnished on deposit of ten ($10.00) dollars, for doing this work upon application to Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J. Bids must be made on the standard proposal form in the manner designated therein and as required by the specifications for this work; same to be enclosed in sealed special addressed envelopes, bearing the name and address of bidder and the work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the State Treasurer for not less than ten (10%) per cent of the amount of the bid, provided the said certified check shall not be less than $500.00 nor more than $20,000 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelope will be furnished on application to Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a Surety Company duly authorized to do business in this State, stating that such Surety Company will provide said bidder with a bond in such sum as is required in and in accordance with the specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

OFFICIAL PROPOSALS

Bids: Oct. 31.

Sewage Disposal Plant

Indianapolis, Ind.

Sealed proposals will be received by the Board of Sanitary Commissioners, Sanitary District of Indianapolis, at its office in the City Hall, Indianapolis, Indiana, until 10 A.M., October 31st, 1922, at which time bids will be publicly opened and scheduled and awards made as soon thereafter as practicable, for the construction of Section 3, Division III, and furnishing and erecting mechanical equipment for the Sewage Disposal Plant of the Sanitary District of Indianapolis, in accordance with plans and specifications on file at the office of the Board. This construction and equipment consists of the following items:—

1. *Activated Sludge Plant:*
   a. Aeration and Settling Tanks, including Pipe Gallery and Connecting Conduits.
   b. Air Mains, Air Distribution System; Sewage, Sludge and Drain Piping.
   c. Sluice Gates and Gate Valves.
   d. Air Control and Drain Valves.
   e. Diffuser Plates.
   f. Air and Sewage Meters and Recorders.
   g. Sludge Removal Equipment, Erected.
2. *Power Plant Auxiliary Equipment:*
   a. Boiler Settings and Breeching.
   b. Coal Storage Bunker.
   c. Coal Handling Equipment.
   d. Power Plant Piping.
   e. Boiler Feed Pumps and Regulators.
   f. Feed Water Heaters and Softening System.

Each bidder shall be required to deposit with his bid a certified check in the amount as provided in said specifications and information to bidders, to secure the execution of the contract for which bid is made.

Copies of plans and specifications and general information may be obtained at the office of Charles H. Hurd, 1405 Merchants Bank Building, Indianapolis, Indiana.

The Board reserves the right to reject any and all bids.

BOARD OF SANITARY COMMISSIONERS.
JAY A. CRAVEN, President.
JOHN L. ELLIOTT, Vice-Pres.
LUCIUS B. SWIFT.

Bids: Oct. 17.

Air Compressor and Tools

Memphis, Tenn.

The Memphis Artesian Water Department will receive bids at its offices, 105-107 North Second Street, Memphis, Tennessee, up until 1 P.M., Tuesday, October 17th, 1922, for furnishing delivered f. o. b. Memphis, Tennessee, one Portable Gasoline Engine Driven Air Compressor mounted on trucks of steel construction, together with tools, etc. Bids will be submitted on machines of sizes listed below:

Portable Air Compressor Piston Displacement approximately 80 cubic feet of air per minute.

Portable Air Compressor Piston Displacement 100 to 120 cubic feet of air per minute.

Portable Air Compressor Piston Displacement 160 to 210 cubic feet of air per minute.

Only one machine will be purchased, the Commissioners reserving the right to determine the size of such machine after bids are opened. Bidders to submit prices based on machines constructed in accordance with their standard specifications, copy of such specifications, together with full information regarding the operation of machines, to accompany bids.

TOOLS—SUBMIT UNIT PRICES.

4 Pneumatic Hammers, 2 inch stroke;
4 Sets Lead Corking Tools, for use with above hammers;
8 Diamond Point Chisels, for use with above hammers;
4 50 ft. sections plain and wire wrapped hose of necessary size for use with above tools, each length coupled complete;
3 Reamers for tamping back fill in pipe trenches;
4 50 ft. sections of plain and wire wrapped hose of necessary size for use with above tools, each length coupled complete.

The right is reserved to accept the machine best adapted to local conditions, regardless of price. Time of delivery will be given due consideration. All bids may be rejected at the pleasure of the Commission.

Address proposals to Board of Water Commissioners, Memphis Artesian Water Department, Memphis, Tennessee; mark "Bid on Air Compressor."

JAMES SHEAHAN,
Acting General Superintendent.

OFFICIAL PROPOSALS

Bids: Nov. 29.

Filtration Plant and Reservoir

San Juan, Porto Rico.

Sealed proposals for the furnishing of all labor and material for the construction of a 8,000,000 gals. filtration plant and a 10,500,000 gals. filtered water concrete reservoir for the City of San Juan will be received in the office of the Commissioner of Public Service until November 29, 1922, at 10 A.M.

All plans, specifications, instruction to bidders, blanks, forms for proposals and all other information may be obtained at the office of the City Commissioner of Public Works at San Juan, Porto Rico.

The right is reserved to reject any and all bids.

MARTIN TRAVIESO,
Commissioner of Public Service.

Thank You,
Mr. Ferguson

"We just let contracts for approximately 25 miles of road construction yesterday and I attribute to a great extent the large number of bidders we had to the Publicity we received through the *News-Record.*"

Very truly yours,
Angus Ferguson, Ch. Engr.,
Traylor County Road Department
Grafton, W. Va.

Bids: Oct. 21.

Water System

Mayfield, N. Y.

Sealed proposals for furnishing all labor and materials for the construction of water system for the Village of Mayfield, New York, will be received the 21st day of October, 1922, at the office of the Village Clerk of such village, until two o'clock P.M. of that day, at which time and place, all proposals will be opened and read.

The work includes the following approximate quantities:

17,000 lin.ft. trench excavation and backfill.
3 miles water pipe.
5 tons C. I. specials.
34 hydrants.
18 gate valves.
125 cu.yd. concrete.
1,750 ft. vitrified pipe.
Pump house superstructure.

Each proposal shall be accompanied by a certified check or New York draft, payable to the Village Treasurer, for the sum of $2,500.00, and the successful contractor for the construction of the work, will be required to give a bond with some satisfactory surety company authorized to do business in the state of New York, as surety, in the penalty of fifty per cent of the amount of the bid, both the form of the bond and surety to be satisfactory to the Board of Trustees.

Plans and specifications, approximate quantities and proposal forms upon which the bids must be submitted, may be seen at the office of the Board of Trustees. Copies of the specifications and proposal forms may be had upon application to the Engineer.

A charge of five dollars ($5.00) will be made for a set of plans and specifications which may be obtained from the Engineer. This amount to be returned upon receipt of plans in good condition.

The Board of Trustees reserves the right to reject any or all bids.

All proposals shall be addressed "Board of Trustees," Mayfield, New York, and shall be endorsed with the name and address of the bidder, and marked "Proposal for Water System."

No proposal will be allowed to be withdrawn after it has been deposited with or received by the Board of Trustees.

For all information, address the Clerk of the Board of Trustees, or the Engineer.

MORRELL VROOMAN, Engineer,
Gloversville, New York.
FRED J. WARNER, Clerk.

OFFICIAL PROPOSALS

Bids: Oct. 16.

Paving and Resurfacing Streets

Syracuse, N. Y.

Sealed proposals will be received at the Board of Contract & Supply until Monday, October 16th, 1922, at 9.30 a.m., for furnishing materials and Paving and Resurfacing the following streets.

NEW PAVEMENTS

Kellogg St., Slocum Ave., to Delaware St.
Shuart Ave., Sedgwick St., to Teall Ave.
Shotwell Park (W. Dr.), End of Pres. Pav't. at Melrose to S. L. lot 80.
Shotwell Park (E. Dr.), End of Pres. Pav't. at Melrose to S. I. lot 80 produced.
S. Alvord St., Butternut to Highland St.
Beecher St., Graves St. to Jasper St.
Highland St., Highland Ave., to Park St.
Jasper St., Highland St., to End of Street.
Jasper Pl., Seward St., to Highland St.
Schneider St., Butternut St., to Jasper Place.
Coleridge Ave., Wilbur Ave., to Whittier Ave.
Grand Ave., Delaware St., to City Line.
Seward St., Alvord St., to N. L. Graves St.
Graves St., Seward St., to W. L. Highland St. E. L. Highland St., to . L. Beecher St.
E. Castle St., S. State St., to Renwick Ave.
Teall Ave., James St., to Peck Ave.
Merriman Ave., Center Line Massena St., to Geddes St.
Grand Ave., Delaware St., to Geddes St.
S. Geddes St., Stolp Ave., to S. L. Crossett St.
Rugby Road, Teall Ave., to W. L. of Lots 54 & 55.
Holland St., Solcum Ave., to Oswego St.

RESURFACING

Merriman Ave., Oswego St. to Center line Massena St.
Sabine St., Merriman Ave., to Messena St.
Walnut Ave., N. L. Harrison to University Pl. (including Adams St., Marshall St., & Waverly Ave. from Walnut Ave., to Walnut Place).
S. Crouse Ave., E. Fayette St., to University Place.
Holland St., Center line Oswego St., to Delaware St.
S. Milton Ave., Tompkins St., to Coleridge Ave.
Setting back the curb 2 feet on each side of Harrison St., Warren St., to Salina St.

in the City of Syracuse, N. Y., in accordance with the plans and Specifications on file in the office of the Board of Contract and Supply.

A certified check for 5% of the total amount of each proposal, payable to the order of F. C. Sembach, City Treasurer, must accompany each proposal, the same to be forfeited upon failure to enter into contract within five days after notice of award from the Secretary of this Board.

BOARD OF CONTRACT & SUPPLY,
F. E. BARRY, Secretary.

Bids: Nov. 30.

Cast Iron Pipe and Castings

San Juan, Porto Rico.

Sealed proposals for the furnishing of about 20,020 tons of cast iron pipe and of 250 tons of special castings, or its equivalent in steel pipe and specials, delivered at San Juan, Porto Rico, for the City of San Juan, will be received in the office of the Commissioner of Public Service until November 30, 1922, at 10 A.M.

All plans, specifications, instruction to bidders, blanks, forms for proposals and all other information may be obtained at the office of the City Commissioner of Public Works at San Juan, Porto Rico.

The right is reserved to reject any and all bids.

MARTIN TRAVIESO,
Commissioner of Public Service.

Intelligent Service that Brings Unusual Results.
SWART
Contract Bonds
Compensation Insurance
92 William St., New York

Why?

WHY do Government regulations specify that contracts for construction, equipment and supplies over a certain minimum amount **must** be advertised?

WHY do the laws of most States and Municipalities specify the same thing?

WHY do so many private corporations advertise **their** big contracts?

WHY do Consulting Engineers, Architects, and others recommend and endorse the advertising of Contracts To Be Let?

And—

WHY are 90% of the advertisements on which **real national competition** is desired published in ENGINEERING NEWS-RECORD?

In the answers to the foregoing questions you will find unquestionable proof that

1—**Advertised Contracts** are the accepted form of public letting to insure the awarding of contracts free of prejudice.

2—**Advertised Contracts** guarantee the greatest possible saving through maximum competition and that—

3—ENGINEERING NEWS-RECORD is universally recognized as the **one** dominant medium of **national** circulation for advertising Contracts To Be Let.

Are your contracts advertised?
Are they advertised in Engineering News-Record?
If not—WHY?

0083

OFFICIAL PROPOSALS

Bids: Oct. 31.

Construction of Viaduct

Trenton, N. J.

On Tuesday, the 31st day of October, 1922, at 2:30 o'clock in the afternoon, at its regular place of meeting, in the Court House, Trenton, New Jersey, the Board of Chosen Freeholders of the County of Mercer will receive proposals:

For performing all work and labor and furnishing all the materials, tools and equipment necessary or incident to the construction and completion of a through plate girder viaduct containing a vertical lift span of the wire-rope type, over the Delaware and Raritan Canal and the Pennsylvania Railroad at Olden Avenue in Trenton, Mercer County, New Jersey, to be known as the "Olden Avenue Viaduct," in accordance with plans and specifications prepared by J. A. L. Waddell, and on file in his office, 35 Nassau Street, New York City, or in the office of the Mercer County Engineer at the Court House, Trenton, New Jersey, to which bidders are particularly referred for detailed information and for necessary proposal forms. Copies of plans and specifications may be obtained at either of the above named offices upon deposit of Ten Dollars ($10.00).

The length of steel viaduct is 400 feet including the lift span of 75 feet. Revision of the approaches brought about by a slight raise of grade, includes a small amount of embankment, pavement, sidewalk, and concrete railing. The total length of approaches is 400 feet.

The approximate quantities of the principal items are as follows:

600 tons of structural steel.
50 tons of reinforcing rods.
2,000 cu.yds. of excavation.
2,000 cu.yds. of all classes of concrete.
75,000 lbs. of machinery, cables, sheaves, etc.

Bidders' attention is called particularly to the fact that the specifications provide for a bonus of Twenty Dollars ($20.00) for each any every day that the work is completed in advance of the specified time of completion, and a penalty of the same amount per day for delay in completing the work. The entire work is to be completed within eleven (11) months after the execution of the contract.

Each bid must be accompanied by the written proposal of a surety company fulfilling the requirements of section 507, chapter, 185, laws of 1918, and the form of bond required will be substantially as described in chapter 75 of the laws of 1918. The amount of the bond required will be the full amount of the contract price. Each proposal must also be accompanied by cash or a certified check, in the amount of Ten Thousand Dollars ($10,000.00) payable to the order of Edgar G. Weart, County Treasurer, and deposited upon condition that as against the successful bidder the same will be retained by the county as liquidated damages should he fail to execute a valid contract and furnish an acceptable surety company bond within seven days from the awarding of the contract.

The right is reserved to reject any or all bids and to waive any immaterial defect or informality in any bid should it be deemed to the interest of the county to do so.

CHARLES H. REICHERT,
Director of Dept. of Bridges.

Bids: Oct. 23.

Cleaning Out, Repair and Extension of Drainage Ditches

Terre Haute, Ind.

Notice is hereby given that the undersigned, Construction Commissioner, by virtue of an order of the Superior Court of Vigo County, Indiana, made and entered in cause number 19951 on the docket of said Court entitled "In the matter of the Cleaning Out, Repair and Extension of Cox Ditch Number Two (2) in Nevins and Otter Creek Townships, Vigo County, Indiana, and the Swope Ditch in Otter Creek Township, Vigo County, Indiana," will, on the 23rd day of October, 1922, at the office of said Construction Commissioner, Room 19 National Block, 6th and Wabash Avenue, Terre Haute, Indiana, receive sealed bids for the construction of the work described in the report of the Drainage Commissioners in said cause. Said bids will be accepted at any time prior to three o'clock P.M. on said 23rd day of October, 1922.

Said work is situated in Nevins and Otter Creek Townships of Vigo County, Indiana, and consist of the widening and deepening of said Cox Ditch Number Two (2) and widening and deepening of said The Swope Ditch, and the extension of same to their outlet at Otter Creek in said Vigo County. Said work must be completed in strict accordance with the plans, specifications and profiles for same included in the Report of the Drainage Commissioners in said cause and now on file in the office of the Clerk of the Superior Court of Vigo County, Indiana, and also on file in the office of the Construction Commissioner, open to the inspection of prospective bidders.

The excavation required by said plans and specifications is 52,700 feet in length, containing 139,075 cubic yards of material to be excavated. Said work must be done by machines capable of traveling along and operating from the sides of the ditch, but not entering same, preferabfly a Caterpillar Drag Line. Work must be begun within ten (10) days after the sale of the bonds for raising the necessary funds for the construction of said work, and must be completed within 250 days from the date of commencement of said work.

Bidders will be required to file with their bids a bond payable to the State of Indiana with surety to be approved by said Construction Commissioner, in a sum equal to the amount of the bid, conditioned for the faithful performance and execution of the said work and the payment of labor and material used in said work and the payment of all damages occasioned by his nonfulfillment of said contract, as provided by law.

The contract for said work will be awarded to the lowest and best bidder therefor.

The Construction Commissioner reserves the right to reject any bid where the bidder is unable to show to said Construction Commissioner that he has the necessary equipment, in good mechanical condition, to perform the work in the manner required by the plans and specifications therefor; and to reject any or all bids.

FRED RUSH,
Construction Commissioner.

October 6, 1922.

U. S. GOVERNMENT

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., Oct. 6, 1922.—Sealed proposals will be opened in this office at 3 P.M., Nov. 1, 1922, for construction (including Mechanical Equipment) of a one story laundry building covering 5,130 square feet, for the United States Veterans' Hospital at the Bronx, New York, N. Y., to be completed within four months from award of contract. Drawings and specifications may be obtained at this office in the discretion of the Supervising Architect. Proposals will be considered only from individuals, firms, or corporations possessing satisfactory financial and technical ability, equipment, and organization to insure speedy completion of the contract, and who have established a record for expedition on contracts of similar character and magnitude. Before drawings and specifications are forwarded to prospective bidders, applicants must cite at least one specific instance where a record for speed has been established on a job of equivalent magnitude, giving date of award of contract, amount of contract, specified time for completion and date of actual completion. The fact that any concern obtains a set of the plans and specifications from any source whatever and submits a bid shall not constitute a waiver of the foregoing stipulations. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, MILWAUKEE, WIS., Sept. 30, 1922. Sealed proposals will be received here until 2 p.m., Nov. 6, 1922, and then opened, for constructing pile pier, removing old timber-crib pier, and dredging at Racine Harbor, Wis. Further information on application.

U. S. ENGINEER OFFICE, BUFFALO, N. Y.—Sealed proposals will be received here until 11 a.m., November 6, 1922, and then opened, for construction of three 400-cu.yd. steel dump scows. Further information on application.

U. S. ENGINEER OFFICE, PROVIDENCE, R. I. Sealed proposals will be received here until 12 o'clock noon, Oct. 23, 1922, and then opened, for dredging in New Haven Harbor, Conn. Further information on application.

U. S. GOVERNMENT

COMMISSIONERS, D. C., Washington, October 9, 1922. Sealed proposals for furnishing and installing the following equipment in the new Eastern High School, Washington, D. C., will be received at Room 509, District Building, until 2 P.M., Oct. 24, Oct. 30, Nov. 13 and Nov. 21, 1922. Chemistry, physics, biology and general science laboratories equipment; pupils' desks, chairs, window shades, flags, lantern screens, paper-baler, typewriters, calculators, bookkeeping and changing machines, lanterns, maps, phonographs, pianos, safe, fire extinguishers, moving picture machine, motor generator set, pressure and vacuum pump, lawn mowers, equipment and supplies for sick room, art metal room, conservatory and janitor's rooms; specifications now available. Wood working shop equipment; cabinet work, miscellaneous class rooms, office and library furniture; furniture and equipment for domestic science, art and art metal departments; lockers; specifications available October 16, 1922. Gymnasium, laundry, lunch room and kitchen, and print shop equipment; specifications available October 30, 1922. Stage, auditorium, rifle range and miscellaneous equipment; specifications available November 8, 1922. A deposit of $10.00 required to insure the return of both plans and specifications and a deposit of $5.00 for specifications only. For detailed information apply at Room 427, District Building. CUNO H. RUDOLPH, JAMES F. OYSTER, CHARLES KELLER, Commissioners, D. C.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., Sept. 29, 1922.—Sealed proposals will be opened in this office at 3 p.m., Oct. 27, 1922, for extension to workroom, mailing vestibule, etc., United States Post Office, Rochester, Minn. Drawings and specification may be obtained from the Custodian at the building, or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, NASHVILLE, TENN.—Sealed proposals will be received here until 11 a.m., Oct. 23, 1922, and then opened, for 3 steel dump scows. Further information on application.

PROPOSAL FOR PIER REMOVAL, ETC.—U. S. Engineer Office, Room 1201, 537 South Dearborn Street, Chicago, Illinois. Sealed proposals for pier removal, dredging, etc., in Calumet Harbor, Illinois, will be received here until 10 a.m., October 24, 1922, and then opened. Further information on application.

U. S. ENGINEER OFFICE, BUFFALO, N. Y.—Sealed proposals will be received here until 11 a.m., October 30, 1922, and then opened for constructing stone-concrete superstructure on breakwater, Buffalo Harbor, N. Y. Further information on application.

U. S. ENGINEER OFFICE, PROVIDENCE, R. I. Sealed proposals will be received here until 12 o'clock, noon, Oct. 30, 1922, and then opened for maintenance dredging in Milford Harbor, Conn. Further information on application.

PROPOSALS FOR CONSTRUCTION.—Office of Constructing Quartermaster, Fitzsimons General Hospital, Fitzsimons, Colo. Sealed proposals will be received here until 10 A.M., Nov. 1, 1922, and then opened for Alterations and Additions to Professional Services Bldg., Women's Ward, Female Help Dormitory and the Construction of Bachelor Officers' Quarters, Nurses' Quarters, Heliotherapy Platforms and all necessary utilities. Plans and specifications can be obtained at this office upon deposit of $25.00.

PROPOSALS FOR CONCRETE CAISSON BREAKWATER. — U. S. Engineer Office, Room 1201, 537 South Dearborn Street, Chicago, Illinois.—Sealed proposals for constructing concrete caisson breakwater at Indiana Harbor, Indiana, will be received here until 10 a.m., November 6, 1922, and then opened. Further information on application.

SEARCHLIGHT SECTION

EMPLOYMENT—BUSINESS OPPORTUNITIES

Positions Wanted, 4 cents a word, minimum charge 75 cents an insertion.
Positions Vacant and all other classifications, 8 cents a word, minimum $2.

Box Numbers in care of any of our offices count as 5 words in addition to advertising copy.

Replies are forwarded each day as received at all of our offices without additional charge.

Discount of 10% is allowed if one payment is made in advance for 4 consecutive insertions.

THE ABOVE RATES ARE FOR ADVERTISEMENTS SET UNDISPLAYED. FOR DISPLAY RATES SEE "EQUIPMENT" HEADING.

E. N. R.

POSITIONS VACANT

CARPENTER foreman, having had experience on reinforced concrete forms, also able to handle trim job if necessary, also ordinary construction. State age, experience and salary desired; location Middle West. P-86, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

CONSTRUCTION superintendent who has had experience on schools, banks and factory buildings. State age, experience; salary desired; location Middle West. P-85, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

DRAFTSMEN, thoroughly experienced in making and checking shop drawings for structural shop. Positions permanent to competent men. Apply, giving full information, Whitehead and Kales Company, 2361 Beecher Avenue, Detroit, Mich.

DRAFTSMAN on ornamental iron work. State age, salary and experience or application will not be considered. P-81, Eng. News-Record.

DRAFTSMEN, experienced, wanted for structural steel buildings; apply by mail only, giving age, nationality, education, experience and salary expected. Post & McCord, 101 Park Ave., New York.

DRAFTSMEN, experienced on bridge, structural or reinforced concrete. give details, experience, education and salary desired. P-111, Eng. News-Record.

ESTIMATOR, structural steel, a man familiar with taking off quantities and figuring costs for structural steel fabricating shop; must be rapid and accurate and thoroughly experienced in the business; ability to design desirable but not essential. P-102, Eng. News-Record.

EXPERIENCED graduate engineer on reinforced concrete design with bar company; position permanent; location Chicago; salary $175. P-104, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

EXPERIENCED structural steel draftsmen for New England plant wanted. Write, giving age, nationality, experience and salary expected. P-67, Eng. News-Record.

ORNAMENTAL iron draftsman, familiar with the designing and detailing of all kinds of ornamental and miscellaneous iron work for buildings. Apply by letter, stating experience, references and salary desired, to James McKinney & Son, 925 Broadway, Albany, N. Y.

Construction Men

Learn "Line" and "Grade" by Actual Practice.

Level, Transit, and Plane Table Work.
"Running" of Farm, Stadia, Highway and Railroad Surveys.

Estimating

Day and evening courses. Booklet.

The Pan-American Engineering School
39 West 17th St., New York City

In Replying to "Blind" Ads

be careful to put on envelope the key number in the ad and also local address of office to which reply is sent.

10th Ave. at 36th St., New York.
509 Real Estate Trust Bldg., Phila.
533 Leader-News Bldg., Cleveland.
1570 Old Colony Bldg., Chicago.
531 Rialto Bldg., San Francisco.

Important

Original letters of recommendation or other papers of value should not be enclosed to unknown correspondents — send copies.

POSITIONS VACANT

SALES engineer to handle reinforcing steel and allied products in the state of Connecticut; must be able to estimate; man now residing in Connecticut preferred. State age, experience and salary expected. P-95, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

POSITIONS VACANT

STRUCTURAL steel draftsmen, beginners and men for advanced positions wanted. Worden Allen Company, P. O. Box 1595, Milwaukee, Wisconsin.

SQUAD leaders and checkers wanted for office building; experienced men on fabricated shop drawings only. P-84, Eng. News-Record.

WANTED several good draftsmen familiar with cement plant work, also men experienced in steel and reinforced concrete design. Apply, stating experience and salary desired, Richard K. Meade & Co., 11 E. Fayette St., Baltimore, Md.

WANTED—Structural steel detailers for bridges and buildings; permanent positions. St. Louis Structural Steel Co., St. Louis, Mo.

WANTED detailers and checkers of structural steel for buildings. Apply Richmond Structural Steel Co., Richmond, Va.

WANTED—Good structural detailers and checkers accustomed to light building and transmission tower work. Address Bancroft-Jones Corporation, 11 Hubbard Street, Buffalo, N. Y.

EMPLOYMENT AGENCIES

NOTICE, state road contractors: Fifty or more Italian laborers, all with long experience on state road work. They are willing to go to work in the South for the winter time; pay their own fares. For further information write to Dominick Labor Agency, Syracuse, N. Y.

LEARN TO STAND ALONE
CONFIDENCE IS THE RESULT OF KNOWLEDGE

There is plenty of room at the top of the field for highly trained men with vision, and the ability to successfully execute important work. There have never been too many men of high calibre available.

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CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Oct. 21	Mayfield, N. Y. Adv. Oct. 12 and 19.	Oct. 12
Oct. 24	Albuquerque, N. M. Adv. Oct. 5 to 19.	Oct. 5
Oct. 24	Ecorse, Mich.	Oct. 19
Oct. 31	Warren, O.	Oct. 19
Nov. 1	Bay Saint Louis, Miss.	Oct. 5
Nov. 1	Marlin, Tex.	Oct 19
Nov. 2	Auburn, Ind.	Oct. 19
Nov. 2	Nokomis, Ill. Adv. Oct. 19.	Oct. 19
Nov. 9	Marshall, Ill.	Oct. 19
Nov. 14	Newport, Ky.	Oct. 5
Nov. 29	San Juan, Porto Rico Adv. Oct. 12 and 19.	Oct. 19
Dec. 1	San Juan, Porto Rico Adv. Oct. 19.	Oct. 19

SEWERS

Oct. 23	Long Island City, N. Y.	Oct. 19
Oct. 23	Dubuque, Ia.	Oct. 19
Oct. 24	Albuquerque, N. M. Adv. Oct. 5 to 19.	Oct. 5
Oct. 24	New York, N. Y.	Oct. 19
Oct. 24	Alfred, Ont.	Oct. 19
Oct. 25	Hamilton, Ont.	Oct. 12
Oct. 25	Fargo, N. D.	Oct. 19
Oct. 30	Dover, N. J.	Oct. 5
Oct. 30	Owosso, Mich. Adv. Oct. 19.	Oct. 19
Oct. 31	Indianapolis, Ind. Adv. Oct. 12 and 19.	Oct. 12
Nov. 2	Tulsa, Okla. Adv. Oct. 12 and 19.	Oct. 12
Nov. 6	Amboy, Minn.	Oct. 19
Nov. 7	Miami, Fla. Adv. Oct. 19.	Oct. 19
Dec. 11	New Orleans, La. Adv. Oct. 12 and 19.	Oct. 12

BRIDGES

Oct. 24	Dover, N. J. Adv. Oct. 12 and 19.	Oct. 12
Oct. 25	North Carolina	Oct. 12
Oct. 26	Wyoming	Oct. 19
Oct. 27	Tennessee	Oct. 12
Oct. 27	Belt, Mont.	Oct. 19
Oct. 30	Houston, Tex.	Oct. 5
Oct. 31	Sydney, Australia	Jan. 12
Oct. 31	Trenton, N. J. Adv. Oct. 12 and 19.	Oct. 19
Oct. 31	Illinois	Oct. 19
Nov. 1	Georgia	Oct. 19
Nov. 7	Vaudreuil, Que.	Oct. 19
Nov. 7	Vicksburg, Miss. Adv. Oct. 19.	Oct. 19
Nov. 14	Milton, Fla. Adv. Oct. 19.	Oct. 19
Jan. 23	Spokane, Wash	Sept. 21
Sept. 1, 1923,	Sydney, New South Wales, Australia	Aug. 3

RAILWAYS

Oct. 26	New York	Oct. 19

EXCAVATION, DRAINAGE IRRIGATION

Oct. 23	Terre Haute, Ind.	Oct. 12
Oct. 23	Hershey, Neb.	Sept. 28
Oct. 26	Carrollton, Ill. Adv. Oct. 19.	Oct. 19
Oct. 27	Minneapolis, Minn.	Sept. 21
Oct. 30	Tunica, Miss.	Oct. 19
Nov. 1	Greenville, Ky.	Oct. 19
Nov. 2	Cleveland, Miss.	Oct. 19
Nov. 3	Tracy, Calif.	Oct. 19
Nov. 4	Bolton, N. C. Adv. Oct. 19.	Oct. 19

STREETS AND ROADS

Bids Close		See Eng. News-Record
Oct. 23	Missouri	Oct. 12
Oct. 23	Mound City, Kan.	Oct. 12
Oct. 23	Long Island City, N. Y.	Oct. 19
Oct. 23	Wyoming	Oct. 19
Oct. 23	Montreal, Que.	Oct. 19
Oct. 24	New Jersey Adv. Oct. 12 and 19.	Oct. 12
Oct. 24	St. Louis, Mo.	Sept. 28
Oct. 24	St. Louis, Mo.	Oct. 5
Oct. 24	New York Adv. Oct. 5 to 19.	Oct. 5
Oct. 24	Utah	Oct. 19
Oct. 24	New York, N. Y.	Oct. 19
Oct. 24	Toledo, Ia.	Oct. 19
Oct. 25	North Carolina Adv. Oct. 12 and 19.	Oct. 12
Oct. 25	Brooklyn, N. Y.	Oct. 19
Oct. 25	Utah	Oct. 19
Oct. 25	Shelbyville, Tenn.	Oct. 19
Oct. 25	Michigan	Oct. 19
Oct. 26	Baltimore, Md.	Oct. 12
Oct. 26	Tracy, Calif.	Oct. 19
Oct. 26	Ft. Worth, Tex.	Oct. 19
Oct. 26	Augusta, Ga. Adv. Oct. 19.	Oct. 19
Oct. 26	Grand Marais, Minn.	Oct. 19
Oct. 26	Ft. Worth, Tex.	Oct. 19
Oct. 27	Tennessee	Oct. 12
Oct. 27	Long Island City, N. Y.	Oct. 19
Oct. 27	Montana	Oct. 19
Oct. 27	Wash., D. C.	Oct. 19
Oct. 28	West Union, W. Va.	Oct. 19
Oct. 28	San Angelo, Tex.	Oct. 19
Oct. 30	Laurel, Miss. Adv. Oct. 19.	Oct. 19
Oct. 30	Sacramento, Calif.	Oct. 19
Oct. 30	Terre Haute, Ind.	Oct. 19
Oct. 31	Milwaukee, Wis.	Oct. 12
Oct. 31	New York, N. Y. Adv. Oct. 5 to 19.	Oct. 5
Oct. 31	Illinois	Oct. 19
Oct. 31	Maryland Adv. Oct. 19.	Oct. 19
Nov. 1	Rhode Island Adv. Oct. 19.	Oct. 19
Nov. 1	Georgia	Oct. 19
Nov. 2	Hopatcong, N. J. Adv. Oct. 19.	Oct. 19
Nov. 2	Michigan	Oct. 19
Nov. 3	Pennsylvania	Oct. 19
Nov. 4	Quebec	Oct. 19
Nov. 6	Ebensburg, Pa.	Oct. 19
Nov. 7	Marion, Ind.	Oct. 19
Nov. 8	Bridgeton, N. J.	Oct. 19
Nov. 9	Duluth, Minn.	Oct. 19
Nov. 9	Eldorado, Kan.	Oct. 19
Nov. 20	Goderich, Ont.	Oct. 19
Jan. 7	Duluth, Minn.	Sept. 28

INDUSTRIAL WORK

Nov. 1	Vischer Ferry, N. Y. Adv. Oct. 12 and 19.	Oct. 12
Nov. 1	Phila., Pa.	Oct. 19
Nov. 9	Marshall, Ill.	Oct. 19

BUILDINGS

Oct. 20	Boston, Mass.	Oct. 19
Oct. 23	Greensboro, N. C.	Oct. 12
Oct. 24	Morganton, N. C.	Oct. 19
Oct. 25	Buffalo, N. Y. Adv. Oct. 19.	Oct. 19
Oct. 26	Evansville, Ind	Oct. 5
Oct. 26	Dubuque, Ia.	Oct. 19
Oct. 27	Laporte, Ind.	Oct. 19
Oct. 31	Creedmoor (Jamaica P. O.), N. Y. Adv. Sept. 28 to Oct. 19.	Sept. 28
Oct. 31	Baltimore, Md.	Oct. 12
Nov. 1	Centerville, O.	Oct. 12
Nov. 1	Plant City, Fla.	Oct. 5
Nov. 1	Duluth, Minn.	Oct. 5
Nov. 1	Irvington, N. J. Adv. Oct. 5 to 19.	Oct. 12
Nov. 4	Patchogue, N. Y.	Oct. 19
Nov. 4	Carrick (Pittsburgh P. O.), Pa.	Oct. 19
Nov. 6	Detroit, Mich.	Oct. 19
Nov. 6	Cleveland, O.	Oct. 19
Nov. 7	Rapid City, S. D.	Oct. 19
Nov. 8	St. Louis, Mo.	Oct. 19
Nov. 15	Ocean City, N. J.	Oct. 5
Nov. 15	Beaumont, Tex.	Oct. 19
Nov. 18	Portland, Ore.	Oct. 19

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Oct. 23	Dredging — Providence, R. I. Adv. Sept. 28 to Oct. 19.	Sept. 28
Oct. 23	Dump Scows — Nashville, Tenn.	Sept. 21
Oct. 24	Pier Removal, etc. — Chicago, Ill. Adv. Sept. 28 to Oct. 19.	Sept. 28
Oct. 24	Laboratory—Wash., D. C.	Oct. 12
Oct. 25	Dredging — Puget Sound, Wash.	Oct. 5
Oct. 26	Extension—Adrian, Mich.	Oct. 12
Oct. 27	Extension to Workroom, etc. —Rochester, Minn.	Oct. 5
Oct. 30	Superstructure — Buffalo, N. Y. Adv. Oct. 5 to 19.	Oct. 5
Oct. 30	Dredging—Providence, R. I. Adv. Oct. 5 to 19.	Oct. 5
Oct. 30	Alterations, etc.—Richmond, Va.	Oct. 5
Oct. 31	Dredging—Honolulu, H. T.	Aug. 31
Oct. 31	Road—Nevada	Oct. 19
Nov. 1	Laundry — New York, N Y. Adv. Oct. 12 and 19.	Oct. 12
Nov. 1	Alterations, etc. — Fitzsimons, Colo. Adv. Oct. 12.	Oct. 12
Nov. 1	Deferrization Plant, etc.— Annapolis, Md.	Oct. 19
Nov. 1	Standpipe, etc. — Yorktown, Va.	Oct. 19
Nov. 6	Pier, etc. — Milwaukee, Wis. Adv. Oct. 12 and 19.	Oct. 12
Nov. 6	Breakwater—Chicago, Ill. Adv. Oct. 12 and 19.	Oct. 12
Nov. 6	Dump Scows — Buffalo, N. Y. Adv. Oct. 12 and 19.	Oct. 12
Nov. 6	Extension—Fargo, N. D.	Oct. 19
Nov. 7	Extension, etc.—San Jose, Calif. Adv. Oct. 19.	Oct. 19
Nov. 8	Gas Tank, etc.—Chollas Heights, Calif.	Oct. 19
Nov. 14	Hospital—Chillicothe, O. Adv. Oct. 19.	Oct. 12
Nov. 15	Radial Brick Stack—Tupper Lake, N. Y. Adv. Oct. 19.	Oct. 19
Nov. 15	Mechanical Equipment, etc. —Tupper Lake, N. Y. Adv. Oct. 19.	Oct. 19
Nov. 15	Water Tank—Tupper Lake, N. Y. Adv. Oct. 19.	Oct. 19
Nov. 15	Equipment, etc. — Tupper Lake, N. Y. Adv. Oct. 19.	Oct. 19
Nov. 15	Equipment — Tupper Lake, N. Y.	Oct. 19
Dec. 6	Pumping Units — Boise, Idaho Adv. Oct. 19.	Oct. 19

MISCELLANEOUS

Oct. 23	Dock System—Jacksonville, Fla.	Oct. 19
Oct. 23	Heating Plant — Winton, N. C.	Oct. 19
Oct. 23	Concrete Pipe — Delhi, Calif.	Oct. 19
Oct. 24	High School Equipment— Wash., D. C.	Oct. 12
Oct. 24	Trenching Machine — Memphis, Tenn. Adv. Oct. 19.	Oct. 19
Oct. 24	Stone—Cape May, N. J. Adv. Oct. 19.	Oct. 19
Oct. 25	Rip Rap, etc. — New York, N. Y.	Oct. 19
Oct. 26	Wire Mesh Fences—New York, N. Y.	Oct. 19
Oct. 26	Lumber—New Orleans, La.	Oct. 19
Oct. 30	High School Equipment— Wash., D. C.	Oct. 12
Oct. 30	Stone—Olympia, Wash.	Oct. 19
Oct. 31	Steam Pumps — Atlanta, Ga.	Oct. 5
Nov. 4	Transformers, etc. — Melbourne, Australia	Aug. 17
Nov. 9	Structural and Tank Steel— New Orleans, La. Adv. Oct. 19.	Oct. 19
Nov. 13	High School Equipment— Wash., D. C.	Oct. 12
Nov. 16	Hoist and Trailers — San Jose, Calif.	Oct. 19
Nov. 21	High School Equipment— Wash., D. C.	Oct. 12
Dec. 18	Coal Handling Plant — Melbourne, Victoria, Australia	Sept. 21

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. C., Wilmington—See "Streets and Roads."

Ill., Altamont—Making plans 5,280 ft. 6 in. and 21,120 ft., 4 in. c.i. mains, also 45 c.i. hydrants. $50,000. W. A. Fuller Co., 1917 Ry. Exch., St. Louis, Mo., engrs.

Ill., Elmwood Park (Chicago P. O.)—Takes bids about Feb. 1 for waterworks. $500,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ill., Western Springs—Takes bids about Jan. 11 for waterworks. $35,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

O., Bedford—See "Streets and Roads."

O., Cleveland—Plans reservoir, administration building, power plant, chemical, gate and pressure houses, at Baldwin site. $4,500,000. A. V. Ruggles, City Hall, engr.

O., Dayton—Plans to install new tanks and machinery for cooking and drying garbage in garbage reduction plant. $30,000. I. E. Houk, city engr.

O., Fairview—Nov. 7 to vote on $70,000 bonds c.i. mains in various sections. F. Lander, Blackstone Bldg., Cleveland, engr.

Wyo., Evansville—Evansville Water Co. plans complete water and sewerage system. $20,000. All material, including pipe, meters, etc., has been purchased. Engineer not announced.

Mo., St. Louis—Bd. Pub. Serv., City Hall, rejected bid opened Oct. 3, furnishing and delivering 2,387 ton 6-36 in. coated c.i. pipe. Will probably readvertise. Noted Oct. 12.

Tex., Panhandle—Attorney Generals Dept., Austin, approved $54,000 bond issue for extensive waterworks improvements and extensions. Address Mayor.

Tex., Santa Anna—Attorney Generals Dept., Austin, approved $25,000 bond issue for waterworks improvements. Address Mayor.

Tex., Texline—Attorney General's Dept., Austin, approved $25,000 bond issue for waterworks improvements. Address Mayor.

Idaho, Lewiston—Plans election to vote $150,000 bonds for complete waterworks. J. R. Turnbull, clk.

Wash., Everett—Election Nov. 7 to vote on $350,000 bonds constructing water storage reservoir, capacity 20,000,000 gal. R. B. Cutler, city engr. Noted Aug. 24.

Calif., Inglewood—Voted $157,000 bonds for new waterworks equipment and extension to lines. R. A. Cory, clk.

BIDS DESIRED

Miss., Tunica—Oct. 30, by McKinney Lake D. D. of Tunica Co., Contr. 1, 580,000 cu.yd. floating dredge excav., Contr. 2, 411,400 cu.yd. floating dredge excav., 38 acres Class B clearing, Contr 3, 197,250 cu.yd. dry land work excav.; Contr. 4, 214,000 cu.yd. dry land work excav.; Contr. 5, 167,000 cu.yd. dry land work excav.

O., Warren—Oct. 31, by Director Pub. Serv., 6 in. c.i. mains in 1,000 ft. Peerless Ave., 1,000 ft. Choctaw Ave., 515 ft. Pawnee Ave., 770 ft. Viola Ave., 550 ft Idlewild Ave., 500 ft. Arlington Ave., 1,020 ft. West Ave., 1,420 ft. River Ave., 1,250 ft. Watson Ave., 1,100 ft. Atkins Ave., 920 ft. Francis Ave., 700 ft. Edgewood Ave., 200 ft. East Atlantic St. extension, 1,100 ft. Quinby Ave., 1,050 ft. Delaware Ave., 1,100 ft. South Homewood Ave., 1,400 ft. South Main St., 1,300 ft. Albert St., 1,020 ft. McKinley Ave., 300 ft. West Oak St., 472 ft. Kinsman St.; 8 in. c.i. mains in 1,050 ft. South Park Ave. and 650 ft. Griswold Ave. W. S. Harvey, city engr. Noted Sept. 21.

Ind., Auburn—Nov. 2, by G. Potter, city clk., for purchase, installation and complete construction of machinery and general equipment for improvement of waterworks, electric light and power plant.

Mich., Ecorse—Oct. 24, by M. L. Brown & Son, engrs., 407 Capitol Bldg., Detroit, 11,000 ft. 4, 6 and 8 in. c.i. pipe, incl. valves, hydrants, etc. $75,000. Former bids rejected. Noted Oct. 5.

Ill., Nokomis—Nov. 2, by City Council, material and labor for 4 wells, 4,300 ft. 8 in. Class B c.i. mains, etc. Taylor & Woltmann, 428 Unity Bldg., Bloomington, engrs.; adv. this issue.

Tex., Marlin—Nov. 1, furnishing f.o.b. 562.5 ton coated 12 in. c.i. water pipe to conform with specifications adopted by American Waterworks Assn. in May, 1908, and to be of bell and spigot pattern, 13,703 lin.ft. of 12 in. bell and spigot pattern, Class B pipe, in 12 ft. lengths. Address Mayor or City Engineer.

Porto Rico, San Juan—Nov. 29, at office M. Travieso, comr. pub. service, 10,500,000 gal. filtration plant and 10,500,800 gal. filtered water concrete reservoir; adv. this issue.

Porto Rico, San Juan—Dec. 1 (change of date), at office M. Travieso, comr. pub. service, c.i. pipe and castings; adv. this issue.

CONTRACTS AWARDED

N. C., Greensboro—Filter plant for Reedy Fork waterworks development, to Pittsburg-Des Moines Steel Co., Richmond, Va., (street address not available) $107,016. Noted Sept. 14.

Fla., Haines City — Waterworks and sanitary sewerage systems, to J. B. McCrary Co., 3rd Natl. Bank Bldg., Atlanta, Ga., $60,500. Noted Sept. 7.

O., Cleveland—Cuyahoga Co. 18,460 lin. ft. 610 in. c.i. mains in Impvt. 16 of Co. Water Dist. at Parma, to T. P. Egan, Caxton Bldg., $78,853. Noted Oct. 5.

Minn., St. Paul—High service rein.-con. reservoir for new waterworks plant, 18,000,000 gal. capacity, inside dimensions 306 x 414 ft., 20 ft. deep, groined arch floor and flat slab roof, rein.-con. retaining walls, 14,000 cu.yd. concrete and 600 ton steel. $200,000. Work will be done by day labor. J. W. Kelsey, Supt. Water Dept.

Ore., Grants Pass—Grants Pass Irrigation Dist., 2 pumping plants, to De Laval Steam Turbine Co., L. C. Smith Bldg., Seattle, Wash., $7,570. Engrs. est. $8,000. Noted Set. 28.

Ont., Alvinston—Installing new electrically operated waterworks pumps, to Goldie & McCulloch, Galt. Engrs. est. $250,000.

Sewers

PROPOSED WORK

Conn., Hartford—Plans to extend interceptor sewerage system in Blue Hills Ave. $34,000. Cty Eng. Dept., c/o Public Wks. Bd., engrs.

Pa., Ambridge—Plans sewage disposal plant on Ohio River. To exceed $25,000.

Pa., Midland—Plans 1,860 ft. 48 in. sanitary sewer extension. $40,000. J. P. Stone, boro. secy. Engineer not announced.

W. Va., Bluefield—Having plans prepared sewerage system. M. Knowles, Inc., Jones Law Bldg., Pittsburgh, Pa., engrs.

Fla., St. Petersburg—Plans constructing sanitary sewerage system, $90,000; replacing sewers $45,000. C. C. Brown, acting dir. pub. wks.

O., Bedford—See "Streets and Roads."

O., Cleveland—Plans storm relief sewer in East 65th St. from Euclid to Central Aves. $125,000. R. Hoffman, City Hall, engr.

O., Westerville—Soon takes bids sewage treatment plant. $50,000. E. G. Bradbury, 406½ South High St., Columbus, and Jennings-Lawrence Co., Hartman Bldg., Columbus, engrs.

Mich., Detroit—Plans prepared 2,034 ft. Lateral 3737, Coplin St. Sewer in vicinity of Mack Ave., incl. 349 ft. 18 in., 756 ft. 15 in., 928 ft. 12 in. vitr. crock pipe, 1,916 ft. Lateral 3656 between Greenlawn and Elmhurst Aves., 860 ft. 8 in., 360 ft. 15 in., 696 ft. 12 in. vitr. crock pipe, Lateral 3753 between Devine and Knodell Aves., 360 ft. 12 in. vitr. crock pipe, also 2,629 ft. Southern Ave. Arm of Lonyo Rd. Sewer in Southern Ave. from Lonyo Rd. to city limits, 935 ft. 4 ft. 6 in., 1,035 ft. 4 ft., 593 ft. 3 ft. cylinder and 66 ft. 23 in. crock, 2,037 ft. Lawton Ave. Arm of Morrell St. Sewer in Lawton and Lathrop Aves. from Northwestern to LaSalle Sts., 1,168 ft. 5 ft. 6 in., 869 ft. 4 ft. 9 in. cylinder, brick vitr. crock, segment block or monolithic concrete. J. W. Reid, city engr.

Mich., Springwells—Had plans prepared 1,221 ft. Barclay Ave. trunk sewer extension, Sect. 16, concrete, 14 x 18 ft. arch sect.; 760 ft. Sect. 17 in Maple Rd., 36 and 42 in. brick; 2,263 ft. Sect. 18, in Dix Ave., 18 and 24 in. vitr. crock, 2,596 ft. Sect. 19 in Eagle and Ford Aves., 12 and 18 in. vitr. crock. A. Roth, 2348 Penobscot Bldg., Detroit, engr. C. W. Hubbell, 2348 Penobscot Bldg., Detroit, consult. engr.

Ill., Brookfield—Takes bids about Dec. 1 for mains. $55,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ill., Elmhurst—Takes bids about Feb. 1, sewerage system and disposal plant. $150,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ill., Elmwood Park (Chicago P. O.)—Takes bids about Dec. 1 sewerage system. $600,000. E. Hancock, 2047 Ogden Ave., Chicago, engr. Noted Feb. 2.

Ill., Villa Park—Making plans sewerage system. $150,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ill., Western Springs—Making plans and receives bids in about 90 days sewerage system. $40,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Minn., St. Paul—Nov. 7 to vote on $100,000 bond issue for trunk sewers. O. Clausen, city engr.

S. D., Yankton—Plans 19,577 lin. ft. of 12-18 in. pipe in 3rd Sewer Dist. $25,000. C. H. Conrick, city engr.

Wyo., Evansville—See "Waterworks."

Wash., Pullman—Plans sewer improvements throughout town. $50,000. Engineer not selected.

Calif., Madera — Having revised plans prepared sewage disposal plant. $39,600. F. Nikirk, Madera, engr.

Calif., San Francisco—City and San Francisco Co. having plans prepared rein.-con. sewers in Army St. from present termination at Kansas and Marin Sts. to Islais Creek Channel. To exceed $100,000. M. M. O'Shaughnessy, city engr.

Calif., Turlock — Having plans prepared 12,750 lin.ft. 24 in. concrete pipe, 1 regulating gate chamber, 10,000 cu.yd. excav., etc. H. Hall, city engr.

BIDS DESIRED

N. Y., Long Island City—Oct. 23, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., repairing outlet flume from Jamaica sewage disposal plant to creek flowing into Jamaica Bay; sewer in 137th and 25th Sts.

N. Y., New York—Oct. 24, by H. Bruckner, pres. Bronx Boro, Tremont and 3rd Aves., sewers in Waterbury Ave. between East Tremont and Puritan Aves., also in Odell and Laconia Sts., etc.

Fla., Miami—Nov. 7, furnishing 1 motor driven sewage screen, 2 motor driven centrifugal pumps, 2,400 ft. 16 in. c.i. pipe. F. H. Wharton, city mgr.; adv. this issue.

Mich., Owosso—Oct. 30, by B. K. Lucas, city clk., combination main drain and main house sewer. Hoad, Decker, Shoecraft & Drury, 302 South State St. Ann Arbor, consult. engrs.; adv. this issue.

Ia., Dubuque—Oct. 23 for 6,285 lin.ft. 24-66 in. sanitary sewers in Dist. 1, and 2,860 lin.ft. 24-27 in. Dist. 2. W. Cullen, city engr.

Minn., Amboy—Nov. 6, sanitary sewerage system and disposal plant. 14,200 lin.ft. 8-12 in. vitr. tile sewer, 40 manholes, one Imhoff tank, sludge bed and outlet. $25,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, engrs.

N. D., Fargo—Oct. 25, reconstructing 48 in. circular brick trunk sewer in 2nd Ave. S., between 4th St. and Red River. Job 2204. Dist. 3. $25,000. A. R. Watkins, city aud.

Que., Montreal—See 'Streets and Roads."

Ont., Alfred—Oct. 24, by J. H Methot, R.R. 2, Vankleek Hill, 23,370 ft. O'Brian Drain and branches in Caledonia and Alfred Twps. W. H. Magwood, Cornwall, ch. engr.

BIDS RECEIVED

N. Y., Brooklyn — E. Riegelman, boro pres., Boro Hall, opened bids Oct. 11, sewers in Gravesend Ave., from J. F. Cogan, 17th Ave. and 60th St., $417,000; Necaro Co., 97 Court St., $428,000; Marino Paino Co., $431,000. Noted Oct. 5.

Fla., Jacksonville — Laying sewers (1) Adams St. from Myrtle Ave. 300 ft. west, (a) 300 ft. 10 in. terra cotta pipe on concrete base, (2) Liberty St. from 20th to 21st Sts., 21st St. from Liberty to Terrace Ave., Terrace Ave. from 21st to 22nd Sts., (b) 830 ft. 8 in. terra cotta pipe on concrete base, (3) 15th St. from Hubbard to Walnut Sts., (c) 800 ft. 9 in. terra cotta pipe on concrete base, (d) 172 ft. 8 in. c.i. pipe, (e) 486 ft. 6 in. c.i. pipe, (4) Cedar St. from Adams to Monroe Sts., Monroe St. from Cedar to Hogan Sts., and Julia St. from Monroe to Duval Sts., (f) 250 ft. 36 in. rein.-con. pipe (g) 740 ft. 30 in. rein.-con. pipe (h) 270 ft. 24 in. rein.-con. pipe (i) 1,260 ft. 4 in. sub.-drain tile, (5) 6th St. from Main to Ionia Sts., (j) 980 ft. 24 in. rein.-con. pipe (k) 480 ft. 21 in. rein.-con. pipe (1) 923 ft. 18 in. rein.-con. pipe, (m) 295 ft. 15 in. rein.-con. pipe (n) 2,680 ft. 4 in. sub-drain tile, etc., from Adams-Evans & Co., Atlantic Bank Bldg., (1a) $2.50 (2b) $1.50 (3c)

Sewers (Continued)

$1.75 (3d) $0.50 (3e) $0.40 (4f) $3.50 (4g) $2.65 (4h) $2 (4i) $0.22 (5j) $2.25 (5k) $1.90 (5l) $1.65 (5m) $1.25 (5n) $0.22, total $13,989; Bryan & Co., Phelps St., (1a) $3.50, (2b) $2.50 (3c) $2.50 (3d) $0.75 (3e) $0.70 (4f) $7.50 (4g) $5.50 (4h) $3.75 (4i) $0.25 (5j) $3.50 (5k) $3.25 (5l) $2.60 (5m) $2.50 (5n) $0.30, total $23,298; I. C. Mishler, West Palm Beach, (1a) (1a) $3.33 (2b) $2.45 (3c) $2.45 (3d) $0.95 (3e) $0.85 (4f) $7.95 (4g) $6.95 (4h) $4.45 (4i) $0.35 (5j) $3.85 (5k) $3.45 (5l) $2.95 (5m) $2.55 (5n) $0.35, total $25,784. Noted Aug. 31.

CONTRACTS AWARDED

N. Y., Sag Harbor—See "Streets and Roads."

Pa., Altoona—S. B. Taylor, city comr., 14,000 ft. terra cotta and concrete sewer pipe, etc., to Bell-Bockel Co., Inc., Central Trust Bldg., $51,149. Noted Oct. 5.

Md., Baltimore—Storm water sewer in neighborhood of Calvert and 34th Sts., Contr. 46, 713 ft. 15 in. vitr. clay pipe, 61 lin.ft. brick masonry, 825 ft. 72 in. rein.-con., to Consolidated Eng. Co., Calvert Bldg., $26,264.

Fla., Haines City—See "Waterworks."

O., Lyndhurst (Cleveland, P. O.)—For 7,100 ft. 4-16 in. vitr. sewers in Richmond Rd., to A. Marra Co., Ulmer Bldg., Cleveland, $48,739.

Mich., Detroit—To J. Wagner, 2735 West Grand Blvd., Ryan Ave. Arm Seven Mile Rd. Sewer, $48,602; to R. D. Baker, 1631 Elmhurst Ave., Fenelon Ave. Arm of Seven Mile Rd. Sewer, $37,286; to Connelly Bros., 2269 Hamilton Ave., Edison Ave. Arm, $58,260, Westminster Ave. Arm, Bates St. Sewer, $49,690; to C. R. Lennane Co., 2631 Woodward Ave., Huston Ave. Arm of Gratiot Ave. Sewer, $41,264. Noted Oct. 12.

Mich., Detroit—T. W. Blanck & Co., 823 Ford Bldg., Lateral Sewer 3686 $7,370, Lateral 3738 $5,302, Lateral 3741 $2,500, Lateral 3743 $3,135, Lateral 3744 $5,570, Lateral 3747 $3,654, Lateral 3751 $4,354; to A. Rossi, 5307 Pennsylvania Ave., Lateral 3739 $2,760, Lateral 3748 $600; to J. Monti, 1424 St. Joseph St., Lateral 3742 $7,125; to G. Ponterelli, Wolverine Hotel, Lateral 3745 $7,953; to Western Constr. Co., 1208 Ford Bldg., Lateral 3746 $932; to Coolsaet Bros., 400 Penobscot Bldg., Lateral 3752 $9,800.

Mich., Ferndale—To Hammen & Co., 516 Garfield St., Detroit, vitr. crock sewer in Bermuda Ave., $12,537, Stafford Ave., $10,592, Allen Ave., $8,420, Rockwell-Oakridge Sewer, $14,013, Planavon Ave., $4,338; to Halpin & Reilly, 304 Bancroft St., Toledo, O., Lewiston Ave. $12,062, Paxton Ave. $4,183. Noted Oct. 5.

Wis., Brillion — Furnishing and laying storm and sanitary sewers in Main St., to Cornilessen & Tatenhone Co., 2436 North 6th St., Sheboygan. Engrs. est. $25,000.

Wis., Milwaukee—House drains and water service connections in 44th, 45th, 46th, 47th, 48th and 49th Sts., all from Center St. to city limits, to Dean Constr. Co., 382 East North Ave., $48,056; 50th St. from Center St. to City limits to A. Kehrein, 918 24th St., $7,831; 51st St. from Center to Locust to F. A. Goll, 223 18th St., $5,765.

Wis., Milwaukee—Sewer in Keefe Ave., etc., to L. G. Zimmermann, 2826 State St., 1,630 lin.ft. 60 in. concrete sewer $26, 1,529 lin.ft. 72 in. concrete sewer, $29, 655 lin.ft. 48 x 84 in. rein.-con. sewer $28, 1 overflow chamber $2,800, 2 sewer gauging manhole chambers complete $300, 12 storm sewer manholes complete $79, total $109,409. Noted Oct. 12.

Mo., Cape Girardeau—City Council, combined sanitary and storm sewerage system in Sewer Dist. 5, 25,400 cu.yd. common brick masonry, 64,290 lin.ft. 8-24 in. concrete pipe, 14,539 lin.ft. 27-102 in. rein.-con. pipe, 139,660 lb. cast iron, $16,000 lb. wrought iron, 148,000 ft. lumber left in trenches, removing and replacing 39,250 sq.ft. macadam and 2,520 sq.ft. concrete pavement, removing and replacing 3,850 sq.ft. concrete sidewalks, etc., to J. J. Dunegan, Shenandoah, Ia., $330,866. Engrs. est. $330,924. Noted Sept. 21.

Calif., San Anselmo—Constructing sewage disposal plant, including sewage treatment tanks, pump house, chlorinator house, sludge beds and outfall sewer line, to Rocca & Calletti, 906 C St., San Francisco, $34,980. Noted Oct. 5.

Ont., Simcoe—See "Streets and Roads."

Waste Disposal

CONTRACTS AWARDED

Pa., Phila.—Waste disposal plant 280 ton capacity, to C. O. Bartlett & Snow Co., French and Winter Sts., Cleveland, O., $145,200.

Bridges

PROPOSED WORK

N. J., Riveredge—Bergen Co. (Hackensack) plans 62 ft. bascule span and two 31 ft. 6 in. approach plate girder spans, pile foundations, concrete abutments and piers, here. $60,000. R. P. McClave, co. engr. A. W. Gill, asst. co. engr.

Pa., Wilkes-Barre—Having plans and specifications prepared for new steel bridge on South Ave. $500,000. J. E. Greiner & Co., Fidelity Bldg., Baltimore, Md., consult. engrs.

Pa., Youngsville — Pennsylvania R.R., Broad St. Sta., Phila., and New York Central R.R., Grand Central Terminal, New York, plan concrete and steel superstructure of bridge over Pennsylvania and New York Central R.R. at this point, $28,597. State Hy. Dept. and Warren Co. will construct necessary approaches, pavement, etc., $66,330. A. C. Shand, ch. engr. Pennsylvania R.R. and G. W. Kittredge, ch. engr. of New York Central R.R.

La., New Orleans—J. Bose, supt. New Orleans Dist. of Louisville & Nashville R.R., having surveys made for replacing wooden cresoted bridge over Rigolets Bayou with new steel bridge. Structure will be 4,595 ft. in length proper, 10,060 ft. long with approaches, 8 steel truss span, and 1 draw span, 414 ft. long, piers supporting steel bridge work will be constructed of heavy rein.-con., 34 ft. in diam., placed 70 ft. above bottom of Rigolets Pass, 16,870,000 lb. steel. $3,128,000. W. H. Courtenay, Louisville, Ky., ch. engr.

O., Cleveland—Cuyahoga Co. to vote on $400,000 bonds Nov. 7, for steel and concrete bridge at Whitehouse Crossing and Bway. F. Lander, Court House, engr.

South Dakota—See "Streets and Roads."

Missouri—State Hy. Dept., Jefferson City, preparing plans one 344 ft. and three 316 ft. through steel truss, one 250 ft., thirty-nine 22 ft. and five 23.5 ft. deck steel girder spans, 6 rein.-con. piers, wood flooring, etc., on Natl. Old Trails Rd., near Glasgow, Howard and Saline Counties. B. H. Piepmeier, Jefferson City, ch. engr. F. W. Adgate, Rookery Bldg., Chicago, consult. engr.

Missouri—State Hy. Dept., Jefferson City, preparing plans two 42 ft., three 250 ft., one 100 ft. and one 125 ft. steel spans, 6 rein.-con. piers, concrete flooring, over Missouri River, on Federal Aid Project 220, Carroll and Lafayette Counties. B. H. Piepmeier, Jefferson City, ch. engr. Harrington, Howard & Ash, Orear-Leslie Bldg., Kansas City, consult. engrs.

Missouri—State Hy. Dept., Jefferson City, preparing plans three 410 ft. through steel truss, three 250 ft., two 190 ft. and two 100 ft. deck steel truss, six 50 ft., two 25 ft., three 24 ft. and two 45 ft. steel deck girder spans, 11 piers, 20 ft. roadway, concrete flooring, near Lexington, in Lafayette and Ray Counties; one 200 ft. and three 95 ft. steel, two 35 ft. I-Beam and three deck plate girder spans, 5 rein.-con. piers, 20 ft. roadway, concrete flooring, over Gasconade River, near Mt. Sterling-Jefferson City-St. Louis Rd., Federal Aid Project 219, Gasconade Co. B. H. Piepmeier, Jefferson City, ch. engr. Waddell & Son, 800 Graphic Arts Bldg., Kansas City, consult. engrs.

Tex., Beaumont—Jefferson Co. making plans 0.098 mi. steel and concrete bridge over Neches River, movable span with concrete approaches. $324,000. A. C. Love, co. engr.

Tex., Orange—Orange Co. making plans 496 ft. steel, concrete and timber trestle over Sabine River, double leaf bascule, deck girder, 150 ft. steel movable span in center, 990 ft. overall length. $200,000. J. E. Johnson, co. engr.

Tex., Sanderson — See "Streets and Roads."

Wash., Seattle—King Co. plans Bridge 1811 A, 200 ft. steel span across Snoqualmie River, $25,000; Carr Bridge 827 A, 170 ft. steel span across Cedar River, $20,000; Brooks Bridge 325 A, 150 ft. steel span across Green River, $10,000.

BIDS DESIRED

N. J., Trenton—Oct. 31, by Mercer Co., through plate girder viaduct over Delaware and Raritan Canal and tracks of Pennsylvania R.R. at Olden Ave. J. A. L. Waddell, 35 Nassau St., New York City, engr. Noted Aug. 31.

Georgia—Nov. 1, by State Hy. Dept., Atlanta, 528 ft. rein.-con. bridge on Quitman-Madison Rd., Quitman Co., incl. removal of old bridge. H. L. Furlow, Tipton, engr.

Fla., Milton—Nov. 14, by Bd. Comrs. Santa Rosa Co., Yellow River Bridge on Milton-Camp Walton Rd., 8 mi. southeast of here. C. H. Overman, co. engr.; adv. this issue.

Miss., Vicksburg—Nov. 7, by Bd. Supervs. Warren Co., at office of J. G. Sherard, chancery clk., bridge over Big Black River on South Scenic Highway; adv. this issue.

Illinois—Oct. 31, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, following bridges, 4 concrete approach spans, Route 2, Sect. 52-B, Clinton Co., 1 steel superstructure, Route 2, Sect. 52-C, 1 combination concrete and steel Route 2, Combination O, Clinton Co., 5 concrete Route 3, 9-B, Rock Island Co., 1 concrete, 6 concrete approach spans, 1 substructure for steel, Route 12, Sect. 24-B, Clinton Co., 1 superstructure for steel span, Route 12, Sect. 24-C, Clinton Co., 1 concrete and 1 combination, Route 12, Combination P, Clinton Co. C. H. Older, ch. highway engr.

Wyoming—Oct. 26, by Comrs. State Hy. Dept., Cheyenne, 3 concrete girder bridges, 104 ft. long, southwest of Clearmont, on Federal Aid Project 116-A, Sheridan Co. $30,000. C. R. Wood, Sheridan, engr.

Mont., Belt—Oct. 27, by State Hy. Comn., Helena, one 90 ft. steel truss span, concrete floor and abutments, wooden piling, here, on Federal Aid Project 72, Cascade Co., $25,000, Cascade Co. and Federal Government owners; two 105 ft. steel pony trusses, on concrete abutments, between here and Riceville on Federal Aid Project 73, Proposal B, Cascade Co., $35,000, County and State owners. J. N. Edy, Helena, ch. engr.

Colorado—See "Streets and Roads."

Que., Vaudreuil—Nov. 7, by Provincial Government, at office J. L. Boulanger, deputy minister of highways, Quebec, 1,395 ft. steel bridge from here to Illes Perrots, 20 ft. roadway, 4 ft. sidewalks, rein.-con. floor. C. V. Denis, engr. in charge. Noted Aug. 3.

BIDS RECEIVED

New Jersey—Joint Comn. for Elimination of Toll Bridges over Delaware River, between New Jersey and Pennsylvania, at State House, Trenton, opened bids Oct. 7, repairs to bridge over Delaware River between Montague Twp., Sussex Co., N. J., and Milford, Pike Co., Pa., from W. S. Rae, Oliver Bldg., Pittsburgh, Pa., $19,600. Noted Sept. 28.

N. J., Washington's Crossing (Taylorsville, Pa., P. O.)—Joint Comn. for Elimination of Toll Bridges over Delaware River between New Jersey and Pennsylvania, State House, Trenton, opened bids Sept. 30, repairing bridge over Delaware River, here, from Dover Boiler Wks., Dover, $28,824. Noted Sept. 21.

Alabama—See "Streets and Roads."

Tenn., Nashville — Rein.-con. viaduct on Meridian St., from Foster-Creighton Co., Fourth and First Natl. Bank Bldg., $206,244; east and west approaches to Church St. viaduct, from Gould Contg. Co., Independent Life Bldg., $186,193. Noted Aug. 3.

Mich., Lansing—J. A. Parsons, city clk., opened bids 565 ft. rein.-con. bridge incl. 7 concrete girders and 3 concrete arches, from Koss Constr. Co., 2818 5th Ave., Des Moines, Ia., $139,000, J. R. Rusche, Grand Rapids, $159,800, Baer Constr. Co., Gildner Hotel, Grand Haven, $161,000. Noted Sept. 28.

Ia., Centerville—Appanoose Co. opened bids for one 110 ft. and one 120 ft. high truss steel span bridge, 30 rein.-con. box culverts, from Alexander & Higbie, 2733 6th Ave., Des Moines, all work, $48,918; F. E. Marsh & Co., Jefferson, trusses only, $31,900; Iowa Bridge Co., 1263 East 19th St., Des Moines, $49,800. Engrs. est. $50,000.

Ia., Washington—Supervs. Washington Co., opened bids 322 ft. structural steel deck truss bridge, one 100 ft. and two 70 ft. main spans, two 40 ft. approach spans, over English River near Kalona, from Iowa Bridge Co., 1263 East 19th St., Des Moines, $29,999; F. E. Marsh & Co., Jefferson, $32,329; Ritzinger Constr. Co., Sigourney, $32,800. Engrs. est. $30,000.

Bridges (Continued)

CONTRACTS AWARDED

Mass., Cambridge—City, 68 ft. rein.-con. bridge, 58 ft. wide, over Broad Canal, to W. L. Miller Co., 171 Alford St., Charlestown, $37,222.

N. Y., White Plains — Westchester Co., Court House, rein.-con. arch bridge over Croton River at site of present Van Cortlandt Bridge, on Albany Post Rd. between towns of Cortlandt and Ossining, to O. B. S. Co., 5623 Kingsessing Ave., Phila., $159,462. Noted Sept. 21.

Fla., Ft. Lauderdale — Comrs. Broward Co., steel swing drawbridge, Warren girder, short arm draw, 550 ft. clear channel width, near Dania, 1,200 cu.yd. earth approach and fill, 400 lin.ft. creosoted timber retaining wall, to Champion Bridge Co., Wilmington, O., $17,981. Noted Aug. 17.

Alabama—State Hy. Dept., Montgomery concrete bridges, girder type, on Huntsville-Guntersville Rd., Madison Co., to Stanley & Singer Constr. Co., Lafayette, $54,618. Noted Oct. 5.

O., Toledo—W. T. Jackson, dir. Pub. Serv., bridge over Swan Creek in line of Hawley St., to A. Bentley & Sons Co., 201 Belmont Ave., $59,720. Noted Sept. 7.

Ia., Cherokee—Supervs. Cherokee Co., to G. Gardner, Sheldon, 4 box culverts $1,416; Deloit Bridge Co., Denison, one I-beam span and one high truss bridge, consisting of three 100 ft. spans, $40,000

Idaho, Lucile—State Hy. Dept., 202 Pioneer Bldg., Lewiston, steel truss bridge, three 60 ft. spans, here, to Beacon Constr. Co., Ogden, Utah, (street address not available) $24,909.

Idaho, Spaulding—Director Bureau Highways, Boise, 500 ft. bridge, two 50 ft. and two 200 ft. spans, on Federal Aid Project 57, here, 492,000 lb. steel, 21,000 lb. reinforcing steel, 580 cu.yd. concrete, etc., to Security Bridge Co., 502 North 32nd St., Billings, Mont., $69,800.

Calif., Stockton—Constructing bridge on Center St. over Mormon Channel, (complete, allowing railroad companies to keep traffic in continuous operation), to Davis-Heller-Pearce, Delta Bldg., $45,500. Noted Oct. 12.

Dams

PROPOSED WORK

Wis., St. Croix Falls—St. Croix Falls Impvt. Co. making plans 2 rein.-con. and steel dams, with gate hoists, across St. Croix River. $25,000. Private plans.

Railways

PROPOSED WORK

Florida—Florida East Coast Ry., St. Augustine, plans 120 mi. road through everglades from Miami to Okeechobee. H. N. Rodenbaugh, St. Augustine, ch. engr.

Tennessee—See "Industrial Works" under Memphis.

Wisconsin — Madison Street Ry. Co., 1301 Williamson St., Madison, plans extending street car track on Monroe and East Johnson Sts. $25,000. D. Montgomery, mgr.

Washington — See "Industrial Works" under Yakima.

California—Atchison, Topeka & Santa Fe R.R. Co., Railway Exch. Bldg., Chicago, plans 13 mi. standard gauge line from El Segundo on Rodondo Branch, to Los Angeles Harbor also 6 mi. spur track to serve Los Angeles and harbor district. C. F. W. Felt, ch. engr.

BIDS DESIRED

New York—Oct. 26, by Transit Comn., 49 Lafayette St., constructing Sect. 3 of Route 52, part of Rapid Transit R.R., Flushing Route, in Boro of Queens. G. McAneny, chn.

Excavation, Drainage, Irrigation

PROPOSED WORK

Ind., Warsaw — Kosciusko Co. plans dredging Tippecanoe River from Warsaw to county line, about 27 mi., 1,394,000 cu.yd. earth excav. $350,000. S. S. Boggs, Warsaw, engr.

WATER MAINS—CLEVELAND, OHIO

Following are lowest bids opened Sept. 29, by Dept. Pub. Utilities, Div. of Water, for furnishing and laying Wade Park Ave. raw water mains, Baldwin-Fairmount Project, Contr. No. 16, (A) P. F. Connolly Co., 313 Commonwealth Bldg., (awarded contract), (B) Martin, McDace, 1452 West 98th St.; (C) **T. A. Gillespie**, 7 Dey St., New York.

	A	B	C
26,800 cu.yd. excavation and backfilling	$3.49	$3.60	$3.75
5 M.Ft.B.M. lumber and wooden sheeting left in place	50.00	50.00	30.00
10,400 lin.ft. furnishing and laying 60-in. cast iron, bell and spigot pipe line.	36.49	36.00	
Alternate for item 3—furnishing and laying 63-in. riveted steel pipe line.	24.10	20.00	
Alternate for item 3—furnishing and laying 60-in. lock bar or similar steel pipe line	23.09		24.00
2,180 lin.ft. furnishing and laying 48-in. cast iron, bell and spigot pipe line	26.24	28.25	29.75
Setting three 48-in. gate valves, furnished by the City	100.00	250.00	75.00
Setting two 36-in. gate valves, furnished by the City	100.00	200.00	50.00
Setting 6-in. automatic air valves, furnished by the City	100.00	100.00	25.00
40 cu.yd. brick masonry	30.00	25.00	45.00
*20 cu.yd. concrete masonry	20.00	25.00	15.00
1,000 lb. steel reinforcement and miscellaneous wrought iron	.10	.07	.04
680 lin.ft. furnishing and laying 15-in. D.S. vitrified pipe drains	4.00	6.00	4.00
200 lin.ft. furnishing and laying 12-in. vitrified pipe drains	3.00	5.00	3.00
300 lin.ft. furnishing and laying 6-in. vitrified pipe drains	1.50	3.00	2.50
5 furnishing and setting 3-in. brass drains, and setting 3-in. valves and valve boxes, furnished by the City, complete	60.00	50.00	20.00
3 furnishing and setting 2-in. brass drains; and setting 2-in. valves and valve boxes, furnished by the City, complete	50.00	50.00	20.00
75 lin.ft. furnishing and laying 3-in. galvanized iron pipe	2.00	1.50	2.00
50 lin.ft. furnishing and laying 2-in. galvanized iron pipe	1.00	1.25	2.00
Extended totals 60-in. c.i. pipe omitting item*	$537,101		
Extended totals, 63-in. riveted steel pipe	$408,845	$541,990	
Extended totals 60-in. lock bar pipe	$398,341	$376,190	$422,200

‡Awarded contract.

Idaho, Idaho Falls — Comrs. Bonneville Co. authorized Pioneer Irrigation Dist. 2, to irrigate 50,000 acres on Upper Snake River.

Idaho, Pocatello—Comrs. Bannock Co. authorized Empire Irrigation Dist. to irrigate about 100,000 acres on Greater Fort Hall Project.

Ore., Eagle Point—Eagle Point Irrigation Dist., excavating canal, 152,000 cu.yd. dry earth and 24,000 cu.yd. dry rock excav., to W. Von der Hellen, Eagle Point, $142,300. Noted Sept. 21.

Calif., Crows Landing—West Stanislaus Irrigation Dist. had plans prepared for system to irrigate 13,800 acres, 25,000 ft. canal, 24 ft. wide at top, 9 ft. wide at bottom, concrete lined, also main pumping station and 4 Booster plants. $650,000. E. N. Bryan, Forum Bldg., Sacramento, engr.

Calif., Merced—Merced Irrigation Dist. having plans prepared North Side Canal, incl. 31.57 mi. main canals and laterals, 220,000 cu.yd. excav., 200,000 cu.yd. borrow, cost of canals $210,000, concrete structures $60,000, metal flumes $40,000, concrete lining $10,000; Lake Yosemite-Le Grande Canal extension, 25.5 mi. main laterals, 52 mi. feed laterals, $193,250; on Booster Line, 14 mi. main canals, 26 mi. feed laterals, $101,000. R. C. Starr, ch. engr.

BIDS DESIRED

N. C., Bolton—Nov. 4, by Bd. Drainage Comrs., repairing and improving main ditch of Columbus Co. D. D. 2. G. T. Meyer, secy.; adv .this issue.

Ky., Greenville—Nov. 1, by Bd. Drainage Comrs., 162,000 cu.yd. excav. for drainage ditch.

Miss., Cleveland—Nov. 2, by Comrs. of Northern D. D. at office of W. W. Boone, civil engr., Cleveland, 26 mi. of lateral ditches near Shelby, 3-10 ft. bottom width and 2-13 ft. in. depth of cut, 400,000 cu. yd. earth excav.

Ill., Carrollton—Oct. 26, by Comrs. Keach Drainage and Levee Dist. at office F. A. Whiteside, attorney, Carrollton, repair and construction of levees, cleaning out ditches, etc. Kelker, De Leuw & Co., 1206 Conway Bldg., Chicago, engrs.; adv. this issue.

Calif., Tracy—Nov. 3, by L. C. Stark, secy. Naglee-Burk Irrigation Dist., for irrigation system, Contr. 2, includes furnishing labor and materials to shape and prepare canal banks for concrete lining, furnishing material for placing 6,476 lin.ft. concrete line, etc.; Contr. 3, furnishing labor and materials for 9.2 mi. drainage laterals and 2,600 ft. main drainage canal, 1,800 ft. 18 in. rein.-con. pipe, rein.-con. superstructure for installation of necessary pumping machinery and drainage equipment, etc.; Contr. 4, furnishing and installing one 12 in. double suction vertical centrifugal pump, etc.

CONTRACTS AWARDED

N. Y., New York—J. H. Delaney, comr. Docks, Pier "A" foot of Battery Pl., North River, dredging Chelsea Piers, to Columbia Dredging Co., 30 Church St., $22,546. Noted Sept. 21.

Fla., Ft. Lauderdale—Comrs. Broward Co., constructing inlet from New River Sound to Atlantic Ocean, near here, contract for placing 6,200 cu.yd. Florida stone riprap and 2,500 ton Florida stone capping, to M. Hall & Co., Ft. Lauderdale, unit prices $5.50 and $6 respectively; dredging 81,000 cu.yd. earth and 5,000 cu.yd. rock, to Waldeck-Deal Dredging Co., Miami, $0.338 and $2.20 respectively. Noted Sept. 21.

Ia., Red Oak—Montgomery Co. D. D. 8, 242,000 cu.yd. excav., and D. D. 9, 72,000 cu.yd. excav., to G. W. Condon, 510 Farnam Bldg., Omaha, Neb., $0.083 per cu.yd. Noted Sept. 28.

Minn., Aitkin—Co. Ditch 38, 10.7 mi. open ditch, 178,856 cu.yd. excav., 12 bridges, 266 lin.ft., sixty-five 16 in. x 32 ft. culverts, to D. A. Foley, Aitkin, $24,979.

Minn., Austin—Mower and Freeborn Counties, Judicial Ditch 5, Sect. O, to A. L. Hoppma, Austin; Sect. T and L. to Natl. Clay Wks., Mason City, Ia., for tile under 12 in., and W. L. Martin, Albert Lea, for tile over 12 in. Total $99,759.

Minn., Slayton — Murray Co., repairing Ditch 19, 167,310 lin.ft. 6-36 in. tile, 35,513 cu.yd. excav., 1 concrete bulkhead, 1 concrete bridge, 18,640 lin.ft. hog tight fence, to Tracy Cement Tile Co., Tracy, $29,350. Noted Sept. 21.

Mont., Billings—Yellowstone Co. enlarging and extending irrigation ditch near here, to O. Schleuter, Fremont, Neb., and H. Schleuter, Cartersville, $450,000.

Calif., Live Oak—Recl. Dist. 2056 constructing canals and structures, to Ross Constr. Co., Forum Bldg., Sacramento, 413,210 cu. yd. earthwork at $0.27 per cu. yd., etc., total $145,000. Noted Oct. 5.

Calif., Merced—Merced Irrigation Dist., constructing Fairfield canal system, 7.4 mi. laterals and 8.4 mi. canals, to S. D. Miller, Manteca, $24,770. Noted Oct. 5.

Calif., Paradise — Paradise Irrigation Dist., constructing wood pipe line, 13,160 lin. ft. open ditch to be prepared for pipe, furnishing 13,160 lin. ft. pipe 32 in. and 34 in. and 3-7 in., control gates and appurtenances, to Pacific Tank & Pipe Co., 318 Market St., San Francisco, $54,457. Noted Sept. 21.

Streets and Roads

PROPOSED WORK

R. I., East Providence (Providence P. O.)—Plans permanent pavement on Warren Ave. Hill $23,000, Warren Ave. $32,000, Roger Williams Ave. $20,000, Bullock Pt. and Terrace Ave., $17,500. Public Wks. Dept., Town Hall, engrs.

N. Y., Auburn—Plans paving Lewis and Fulton Sts. $25,000. M. F. Dullea, city engr.

N. Y., Jamestown — Plans extending Spring St. from 8th St. to city line, $25,000; paving 13th St. between Main and Washington Sts., Catlin Ave. between Fairmont and West 3rd Sts., Utica St. between Livingston and Fairmount Sts. and Ranson alley from Cheney to Winsor Sts., Hillside vitr. brick on 5 in. concrete, $25,000. L. Bergman, city engr.

Streets and Roads (Continued)

N. Y., Jamestown—Plans paving Steele St. from end of present pavement to western terminus of street, 40 ft., brick on concrete, $25,000; soon takes bids on $10,000 worth of sample asphalt resurfacing, which if proves satisfactory will be used to resurface all necessary streets in city. L. Bergman, city engr.

N. Y., Niagara Falls—Plans paving alley between 5th and 6th Sts., 15 ft. asphalt, granite block, brick, concrete or asphaltic concrete. $25,000. W. B. Bennett, city engr.

N. Y., Rochester — Plans laying sidewalks and grading Meadowbrook Rd., Arbor Dr., Laney and Azalea Sts. $38,800; paving Santiago St., concrete, $11,900; Lapham St., asphalt, $22,300; Marlboro Rd., asphalt, $11,800; Salina St., asphalt block, $12,200. C. A. Poole, city engr.

W. Va., Weston—Freemans Creek Dist., Lewis Co., to vote on $800,000 bonds Nov. 7, for improving roads. J. H. Flesher, Weston, engr.

North Carolina—State Hy. Dept., Raleigh, plans constructing 9 ft. concrete or asphaltic roadway on 11.8 mi. road from Williamston Drawbridge to Winslow, Route 30, State Project 106 B, Bertie Co., $165,000; 19.3 mi. from Winsdor to Aulander, State Project 107 B, Bertie Co., $347,000. C. M. Upham, state highway engr.

N. C., Wilmington—City sold $450,000 bonds for street improvements and new water intake.

Fla., Bushnell — Sumter Co. plans election Nov. 7, to vote on $49,000 bonds constructing 7 mi. road from Wildwood west to Oxford-Rutland Rd.; $56,000 for 8 mi. road from Sumterville to outlet of Lake Penasoffkee; $42,000 for 6 mi. road from Webster to Mabel; $30,000 for 4½ mi. from Center Hill to Nortons Crossing; $25,000 for 10 mi. Lindon Rd. to Sloans Ridge; $51,000 for 7½ mi. State aid road, from St. Catherine to Bushnell and Rerdell; $198,000 for 16½ mi. State aid road from Weeds Landing to Sloans Ridge; $112,000 for 16 mi. road from Oxford to Rutland Bridge; $42,000 for 6 mi. road from Coleman east to Wildwood-Leesburg Rd. Engineer not announced. Noted Aug. 1.

Fla., De Land—Bd. Comrs. Volusia Co., rejected bids opened Sept. 7, constructing 5 mi. Dixie Highway between South Bank of Rose Bay and north city limits of New Smyrna; 17 mi. Dixie Highway between end of tarvia road south of city limits of New Symrna through Oak Hill to Brevard Co. line; ⅝ mi. Flagler Ave.; all foregoing 16 ft., 30 mi. New Smyrna-Osteen Ferry Rd., from west city limits of New Smyrna through Samsula, Indian Springs and Osteen to Osteen Ferry, 15 ft. Noted Aug. 31.

Fla., Titusville—Plans hard surfacing 5 mi. Ocean Rd. from Indian Bridge to Ocean. $100,000. Engineer not announced.

Alabama—State Hy. Dept., Montgomery, rejected bids grading and gravel surfacing 8.99 mi. road from Jefferson Co. line to Warrior River, Walker Co. W. S. Keller, state highway engr. Noted Oct. 5.

O., Bedford—Suburban Land & Homes Co., c/o H. H. Hardesty, 1011 Swetland Bldg., Cleveland, having surveys made grading, laying sidewalks, mains and sewers at Stop 17 Bedford. $100,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

O., Cleveland—Plans extending East 13th St. from Chest to Walnut Aves. $385,000. R. Hoffman, City Hall, engr.

O., Cleveland Heights (Warrensville P. O.)—Plans widening Lee Rd. from Cedar Rd. south to Meadowbrook Blvd., brick or asphalt. $100,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

O., Dayton—Plans paving 1,200 ft. Red Haw Rd. from Wabash Ave. north, sheet asphalt and Kentucky rock asphalt or rein.-con. sidewalk, curb and gutter, $14,969; 600 ft. Main St. Bridge, 3,300 sq.yd. granite block or medina stone, $16,370. I. E. Houk, city engr.

Ind., Ft. Wayne—Allen Co. rejected bids gravel surfacing 17,000 ft. Townley Rd., 16 ft. $33,875. Will readvertise.

Ind., Ft. Wayne—Allen Co. plans improving 1.81 mi. Pruesse Rd., 16 ft., crushed stone and tarviax, $29,235. A. W. Groswenor Co., engr.

Ind., Goshen—Elkhart Co. plans grading and gravel surfacing 31,700 ft. County Unit Rd. 37, 16 ft., $35,805; concrete paving 15,840 ft. Grimes Rd., 18 ft., 31,680 sq.yd. concrete on concrete, $74,460; gravel surfacing 15,883 ft. County Unit Rd. 11, $30,650. C. L. Kinney, co. engr.

Ind., Greencastle—Putnam Co. plans graveling 12,486 ft. C. W. Davis Rd., 16 ft. $25,945. A. Plummer, Greencastle, engr.

Ind., Indianapolis—Marion Co. plans paving 1.9 mi. Harting Rd., 16 ft., crushed stone. $28,000. J. J. Griffith, Courthouse, Indianapolis, engr

Ind., Indianapolis—Marion Co. rejected bids opened Oct. 6, concrete paving 2.8 mi. English Ave. Rd., 20 ft. $83,638. J. J. Griffith, Courthouse, engr. Noted Sept. 28.

Ind., Logansport—Cass Co. plans grading and graveling 21,300 ft. J. Long Rd., 16 ft. $31,974. J. Bennett, co. engr.

Ind., Marion—Grant Co. plans graveling 15,750 ft. Duckwall Rd., 16 ft. $31,010. G. Swisher, Marion, engr.

Ind., Monticello—White Co. plans grading and graveling 15,555 ft. Burley Rd., 16 ft. $33,509. G. A. Thomas, Co., engr.

Ind., Rockport—Spencer Co. plans graveling 14,028 ft. J. W. Eissler Rd., 16 ft. $29,191. Z. X. Bennett, Rockport, engr.

Ind., Winamac — Comrs. Pulaski Co. received no bids grading and gravel surfacing 74,185 ft. Getz Rd., 16 ft., $50,000. Will readvertise. R. E. Nutt, Winamac, engr. Noted Sept. 28.

Mich., Detroit—Had plans prepared grading and paving with 3½ in. sheet asphalt on 8 in. concrete, with Berea or Amherst curbs, 3,265 sq.yd. Bordeau Ave. from Belleterre to Nardin Sts., $19,200, 5,087 sq.yd. Indiana Ave. from Grand River to Fullerton Aves., $30,400, 4,435 sq.yd. Seminole Ave. from Harper to Georgia Aves., $26,200, 7,174 sq.yd. St. John St. from Martin to Central Aves., $43,000, 14,098 sq.yd. Six Mile Rd. from Grand Trunk Ry. to Arlington Ave., $84,500, 4,192 sq.yd. Wyoming Ave. from Grand River to Fullerton Aves., $25,000. All 26 ft. J. W. Reid, city engr.

Mich., Detroit—Had plans prepared paving with 3¼ in. sheet asphalt on 8 in. concrete, 8,400 sq.yd. Broadstreet Ave., 26 ft., 6,470 cu.yd. excav., $50,400; 1,956 sq. yd. Cherrylawn Ave., 26 ft., 837 cu.yd. excav., $11,700; 8,970 sq yd. Davison Ave., 46 ft. wide less 17 ft. track space, 7,219 cu.yd. excav., $53,400; 5,827 sq.yd. Dunbarton Rd., 30 and 36 ft., 1,831 cu.yd. excav., $35,000; 7,025 sq.yd. Greendale Ave., 26 ft., 222 cu.yd. excav., $42,000; 2,520 sq.yd. Goddard Ave., 26 ft., 1,497 cu.yd. excav., $15,000; 7,830 sq.yd. Leuschner Ave., 2,944 cu.yd. excav., $46,800; 7,931 sq.yd. Rochester Ave., 5,703 cu.yd. excav., $47,400. J. W. Reid, city engr.

Ill., Edwardsville—Madison Co. Rd. and Bridge Com. takes bids about Jan. 1, paving 4,135.9 ft. Sect. 41-15 d, 18 ft. roadway, 6 ft. earth shoulders, 8,300 sq.yd. portland cement concrete. $23,253 to $25,000. W. E. Howden, Edwardsville, supt. highways.

Wis., Waukesha—Plans paving, curbing and guttering 1.1 mi. various streets, 25 ft. one course concrete. $30,000 bond issue passed. A. P. Kuranz, City Hall, engr.

Minn., Duluth—Plans expending $1,000,000 on street paving and improvements during 1923, incl. 2,300 ft. Michigan St. from Lake Ave. to 5th Ave. W., 35 ft., 1,840 ft. 5th Ave. W. from Superior St. to dock front, 50 ft., concrete on macadam. Also concrete paving 6 streets in Lakeside residential district. E. K. Coe, city engr.

Minn., St. Paul—Rejected bids paving Grand Ave. from Oakland Ave. to Milton St., and from Milton St. to Cretin Ave. $200,000. H. W. Austin, city purch. agt. Noted Aug. 3.

Kan., Arma — Comrs. Crawford Co. (Girard) and City Council soon takes bids paving 0.945 mi. Commercial Highway, Federal Aid Project 120, 18-26 ft., concrete or monolithic brick, here. $41,250. Former bids rejected. C. M. Cooper, Girard, co. engr.

South Dakota—State Hy. Dept., Pierre, takes bids about November, 6.8 mi. earth road, Federal Aid Project 117, 60,000 cu.yd. excav., Haakon Co., also one 80 ft. and two 50 ft. concrete viaducts. $38,760. F. D. Hudgins, ch. engr.

Missouri—State Hy. Dept., Jefferson City, plans 1.773 mi. road from Billings Special Rd. Dist., 24 ft., State Project 20.207, Christian Co., 9,365 lin.ft. grading, 15,657 sq.yd. inverted penetration bituminous surface course, surfacing 15 ft. wide; 10.25 mi. road from Air Line Special Rd. Dist., 24 ft., Federal Aid Project 198 A, Mississippi Co., 18,337 cu.yd. earth excav., 6,995 cu.yd. borrow, 54,695 sq.yd. 1 course plain cement concrete pavement, 41,916 sq. yd. specification A gravel pavement, 172.1 cu.yd. concrete masonry, etc.; 1,004 mi. road from Fulton westwardly, 12 ft., Federal Aid Project 218, Callaway Co., 3,232 cu.yd. earth excav., 3,827 cu.yd. borrow, 50.7 cu. yd. concrete masonry, 7,010 sq.yd. specification C gravel pavement, etc. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, received no bids Sept. 28, 4.924 mi. road from Phelps Co. line to Houston, 24 ft., State Project Route 7, Sect. 79, Texas Co. Noted Sept. 21.

Mo., Kennett—Making surveys constructing 2 mi. 6 in. rein.-con. highway, 20 ft. between curbs. $120,000. C. E. Smith, Cape Girardeau, engr.

Tex., Bonham—Fannin Co. plans grading and concrete surfacing 7.19 mi. State Highway 5, Paris Bonham Rd. from Lamar Co. line to west line Rd. Dist. 4, 18 ft., 835 cu.yd. concrete in drainage structures, 71,460 sq.yd. concrete pavement. $228,550. A. J. Goode, co. engr.

Tex., Cleburne — Johnson Co. making plans grading, gravel surfacing, bituminous topping and bridging 10.9 mi. State Highway 2-E, from here to Hill Co. line, 18 ft. $154,990. G. W. Courter, co. engr.

Tex., Eldorado—Schleicher Co. making plans gravel surfacing with bituminous topping, crushed rock base, 9.75 mi. Eldorado-Sorona Highway, 18 ft., 25,300 cu.yd. earth, 2,500 cu.yd. loose and 1,773 cu.yd. solid rock excav., 520 cu.yd. concrete, 15,244 cu.yd. gravel and 15,245 cu.yd. crushed rock. $120,930. G. Gilchrest, San Angelo, engr. in charge.

Tex., Georgetown—Williamson Co. soon takes bids surfacing 11.5 mi. State Highway 2-C from here to Travis Co. line, 16 ft., (a) ¾ in. or 1 in. native limestone rock asphalt, (b) 1 in., 1¼ in. or 1½ in. inverted penetration method asphalt topping. $50,000. Former bids rejected. R. A. Nichols, co. engr. Noted Sept. 28.

Tex., Houston—Harris Co. election Nov. 7 to vote on $6,000,000 bond issue for constructing and maintaining 152 mi. highways and lateral roads, 117 mi. to cost $45,000 per mi. and 35 mi. to cost $25,000 per mi. Howe & Wise, 211 First Natl. Bank Bldg., engrs.

Tex., Jourdantown—Atascosa Co. plans grading, gravel surfacing and bituminous topping 1.7 mi. San Antonio-Pearsall Rd., 18 ft. $26 052. T. R. Spence, c/o Chamber of Commerce, San Antonio, div. engr.

Tex., Marlin — Falls Co. making plans grading, gravel surfacing and bridging 12 mi. State Highway 44 from Milam Co. line to north line Precinct 3, 18 ft. $200,000. G. W. Courter, co. engr.

Tex., Pecos—Reeves Co. soon receives bids gravel surfacing and bridging 4.54 mi. State Highway 27, 16 ft., 490.5 cu.yd. concrete, 11,934 cu.yd. roadway, 12,614 cu.yd. borrow and 2,698 cu.yd. loose rock excav., 9,444 cu.yd. gravel surfacing, 50,123 lb. reinforcing. $31,865. A. J. Adcock, Balmorhea, engr.

Tex., Richmond—Fort Bend Co. making plans grading, shell and bituminous macadam surfacing 15.3 mi. State Highway 3, from here to Harris Co. line, 18 ft., 50,000 cu.yd. borrow, 3,000 lin.ft. concrete curbing 120,000 cu.yd. roadway and 50,000 cu.yd. borrow excav., 8,800 sq.yd. concrete, 8,000 cu.yd. shell, 11,000 cu.yd. crushed stone, 190,000 lb. reinforcing. $296,538. C. H. Kendall, Sugarland, co. engr.

Tex., Robert Lee—Coke Co. making plans grading 42 mi. San Angelo-Bronti Rd. State Highway 4, 24 ft., concrete. $100,000. J. E. Bevers, co. engr.

Tex., Rock Springs—Edwards Co. had preliminary surveys made grading, gravel and macadam surfacing 22.15 mi. State Highway 41 from point 4.5 mi. west of here to Real Co., 18 ft. $200,720. W. E. Simpson, 414 Natl. Bank of Commerce Bldg., San Antonio, engr.

Tex., Sanderson — Terrell Co. making plans grading, gravel surfacing and building 7 bridges, 1,820 ft. in length, on State Highway 12 from Pecos Co. line to Val Verde Co. line, 18 ft., 3,000 sq.yd. concrete in drainage structures, 300,900 cu.yd. roadway and 30,000 cu.yd. loose rock excav., 3,000 sq.yd. concrete, 113,360 cu.yd. gravel surfacing. $400,175. D. E. H. Manigault, El Paso, div. engr.

Okla., Tulsa—Comrs. Tulsa Co. having plans prepared and takes bids in about 60 days, concrete paving .7 mi. road to Sa-

Streets and Roads (Continued)

pulpa, 1 mi. 18 ft., balance 27 ft. **D. Patton**, co. engr.

Wash., Seattle—King Co. had plans prepared and opens bids in about 30 days, grading, graveling and filling 2 mi. East Valley Rd. from Auburn south to Pierce Co. line, 336 ft. 12 in. vitr. or concrete pipe, 168 ft. 18-30 in. pipe, 37,812 cu.yd. borrow, 7,888 cu.yd. rock excav. T. R. Beeman, 7807 Woodland Park, engr.

Calif., San Francisco—City and San Francisco Co. having plans prepared grading Telegraph Hill Blvd. $33,000. M. M. O'Shaughnessy, city engr.

BIDS DESIRED

Rhode Island—Nov. 1, by State Bd. of Pub. Roads, Providence, constructing sections of State Highway, Contrs. 2205, 2206, 2207 and 2208; adv. this issue. Noted Aug. 31.

N. Y., Brooklyn—Oct. 25, by E. Riegelmann, boro pres., Boro Hall, repaving Court St. and Rockaway Ave., etc., asphalt.

N. Y., Long Island City—Oct. 23, by M. E. Connelly, pres. Queens Boro, Queens Subway Bldg., grading Hallett St.; repaving 5th St., asphalt blocks; paving 101st and 115th Sts., with sheet asphalt; grading, curbing, etc., 115th, 126th and Beach 25th Streets.

N. Y., Long Island City—Oct. 27, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., curbing, grading and laying sidewalks in Fresh Pond Rd. from Woodbine St. to Flushing Ave., 2nd Ward, also in Woodside Ave. from 2nd to 8th Sts.

N. Y., New York—Oct. 24, by H. Bruckner, pres. Bronx Boro, Tremont and 3rd Aves., paving Park Ave. west from East 188th St. to Fordham Rd., sheet asphalt; grading, setting curb, laying sidewalks, etc., on Pelham Parkway, Norman, Bogart and Duryea Aves.

N. J., Bridgeton—Nov. 8, paving 17,500 sq.yd. Highway Route 6, Sect. 12-A, Shiloh Rd. and Broad St., cement. Former bids rejected. Remington & Vosbury, 601 Market St., Camden, engrs. Noted Sept. 28.

N. J., Hopatcong—Nov. 2, Bd. Freeholders Sussex Co., (Newton), grading Lakeside Blvd., here. H. Snook, Newton, co. engr.; adv. this issue.

Pennsylvania—Nov 3, by State Hy. Dept., Harrisburg, 15,568 ft. Route 276 Washington and Cresson Twps., Lilly Boro., Cambria Co., 7,612 ft. Route 200, Sparta Twp., Crawford Co., both one course rein.-con.; 23,028 ft. Application 154-1092, Farmington and Pine Grove Twps., Warren Co., one course rein.-con. or bituminous on concrete. G. H. Biles, state highway engr.

Pa., Ebensburg—Nov. 6, by Supervs. East Taylor Twp., c/o H. T. Jones, controller Cambria Co., 3 mi. Ebensburg Rd. from Johnstown line to Goods Corner, 18 ft., 1,050,000 No. 1 repressed vitr. paving blocks on 5 in. concrete. C. P. Thomas, Park Bldg., Johnstown, engr.

Maryland—Oct. 31, by State Rds. Comn., 601 Garrett Bldg., Baltimore, state highway work, Contr. G-24, Garrett Co.; Contr. A-22, Allegheny Co.; Contr. HO-26, Howard Co.; Comr. M-39, Montgomery Co.; Contr. M-38, Montgomery Co.; Contr. M-37, Montgomery Co.; Contr. M-40, Montgomery Co.; Contr. AA-26, Anne Arundel Co. J. N. Mackall, chn.; adv. this issue.

D. C., Wash.—Oct. 27, by Dist. Comrs., 509 Dist Bldg., grading various streets, 44,500 cu.yd. excav. $20,000 to $30,000.

W. Va., West Union—Oct. 28, by H. Hutson, clk. Doddridge Co., paving road between Pike Fork and Talkington Fork Bridges, McClellan Dist.; grading 1 mi. McElroy Rd., McClellan Dist.

Georgia—Nov. 1, by State Hy. Dept., Atlanta, surfacing 13.025 mi. Quitman-Madison Rd., Sects. A and B Federal Aid Project 278, Quitman Co., 1,132 lin.ft. drain pipe, 1,287 lin.ft. concrete pipe, 60,235 cu.yd. earth and 54,735 cu.yd. rock excav., 22,836 cu.yd. 6 in. compacted gravel surfacing, 487. 18 cu.yd. concrete, 25,870 lb. reinforcing, 23.43 acres clearing, 594,780 sta. overhaul, state to furnish cement f.o.b. nearest railroad station. H. L. Furlow, Tipton, engr.

Ga., Augusta—Oct. 26, by J. W. Westmoreland, clk. City Council, City Hall, paving Greene St. from east boundary to 15th St. W. H. Wise, city engr. and comr. Pub. Wks.; adv. this issue.

Miss., Laurel—Oct. 30, at office of City Clerk, brick paving, concrete foundation, gravel surfacing, curbing, guttering, etc., on various streets. J. H. Pace, street comr.; adv. this issue.

Tenn., Shelbyville—Oct. 25, by H. B. Cowan, mayor and Bd. Alderman, improving various streets, 85,800 sq.yd. scarifying, shaping and rolling, 59,000 sq.yd. crushed stone, 55,156 sq.yd. penetrating bituminous macadam, 16,739 sq.yd. asphaltic carpet coat, alternate bids on rock asphalt. L. L. Chadwell, Mt. Pleasant, engr.

Ind., Greencastle — Nov. 6, by Auditor Putnam Co., graveling 12,486 ft. C. W. Davis Rd., 16 ft. $25,945. A. Plummer, co. engr.

Ind., Marion—Nov. 7, by Auditor Grant Co., graveling 15,750 ft. Duckwall Rd., 16 ft. $31,010. G. Swisher, co. engr.

Ind., Terre Haute—Oct. 30, by Auditor Vigo Co., concrete paving 11,220 ft. Fromme Rd., 30 ft., 37,400 sq.yd. concrete, $112,869; gravel surfacing 2.25 mi. Woodsmall Rd., 16 ft., $25,512; 8.5 mi. John N. White Rd., 30 ft., $110,983. G. R. Grimes, Terre Haute, engr.

Michigan—Oct. 25, by State Hy. Dept., Lansing, grading and surfacing 4.325 mi. State Trunk Line Rd. 10-33, Sect. A, Cheboygan Co., 31,157 cu.yd. excav., 40,561 sq.yd. gravel or stone gravel. F. F. Rogers, state highway comr. Noted Oct. 12.

Mich., Grand Haven—Nov. 2, by State Hy. Dept., Lansing, grading approaches to new bridge here, on State Trunk Line Rd. 11-53, Sects. A and B, incl. 54,019 cu.yd. excav.

Illinois—Oct. 31, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving 4.88 mi. Route 2, Sect. 52, De Witt Co., 4.88 mi. Route 2, Combination A, De Witt Co., incl. 1 steel bridge, 5.04 mi. Route 3, Sect. 8, Rock Island Co., 3.75 mi. Route 3, Sect. 9, Rock Island Co., 3.75 mi. Route 3, Combination C, Rock Island Co., incl. 5 concrete bridges, 2.37 mi. Route 3, Sect. 10, Rock Island Co., 11.16 mi. Route 3, Combination B, Rock Island Co., 11.16 mi. Route 3, Combination D, Rock Island Co., incl. 5 concrete bridges, 1.66 mi. Route 6, Combination 29, Whiteside Co., 6.2 mi. Route 9, Sect. 6, Tazewell Co., 3.71 mi. Route 14, Sect. 1, Perry Co., 5.24 mi. Route 14, Sect. 3, Perry-Franklin Co., 8.95 mi. Route 14, Combination E. Perry-Franklin Co., 3.22 mi. Route 15, Sect. 19, Wayne Co., 3.35 mi. Route 15, Sect. 20, Wayne Co., 6.57 mi. Route 15, Combination F, Wayne Co., 6.57 mi. Route 15, Sect. 6, Wayne Co., incl. grading 2 sections, 7.99 mi. Route 17, Sect. 3, Marshall Co., 5.85 mi. Route 17, Sect. 4, Marshall Co., 13.84 mi. Route 17, Combination H. Marshall Co., 4.12 mi. Route 18, Sect. 13-C, Kendall Co., 2.29 mi. Route 18, Sect. 14-C, Kendall Co., 6.41 mi. Route 18, Combination K, Kendall Co., 4.26 mi. Route 20, Sect. 15, McHenry Co., 5.82 mi. Route 25, Sect. 33, Iroquois-Ford Co., 5.98 mi. Route 25, Sect. 34, Iroquois Co., 6.5 mi. Route 25, Sect. 35, Iroquois Co., 18.3 mi. Route 25, Combination I, Iroquois Co., 3.32 mi. Route 25, Sect. 38, Kankakee-Iroquois Co., 3.2 mi. Route 25, Sect. 39, Kankakee Co., 6.52 mi. Route 25, Combination J, Kankakee-Iroquois Co., 2.92 mi. Route 28, Sect. 3, Knox Co., 6.82 mi. Route 37, Sect. 4, Franklin Co., 3.64 mi. Federal Aid Project 38, Sect. 46, Schuyler Co., 3.64 mi. Federal Aid Project 38, Combination L, Schuyler Co., incl. 1 section grading. Alternate bids will be received on the following types, portland cement concrete, 4" monolithic brick, 3 in. bituminous filled brick, bituminous concrete with and without binder course, all foregoing 18 ft. Grading 93,316 cu.yd. Route 3, Sect. 23-A, Mercier Co., 263,700 cu.yd. Route 12, Sect. 24-A, Clinton Co., 20,375 cu.yd. Route 15, Sect. 19-A, Wayne Co., 23,285 cu.yd. Route 15, Sect. 20-A, Wayne Co., 43,660 cu.yd. Route 15, Combination M, Wayne Co., 28,610 cu.yd. Route 25, Sect. 12-A, Effingham Co., 39,630 cu.yd. Route 25, Sect. 13-A, Effingham-Shelby Co., 13,460 cu.yd. Route 25, Sect. 14-A, Shelby-Cumberland Co., 33,815 cu.yd. Federal Aid Project 38, Sect. 46-A, Schuyler Co., 81,700 cu.yd. Route 25, Combination N. Effingham-Shelby-Cumberland Co. C. H. Older, ch. highway engr.

Ia., Toledo—Oct. 24 by Auditor Tama Co., grading 15.95 mi. road west of Tama and southeast to Benton Co. line, 311,344 cu.yd. excav., 9,080 lin.ft. 6-8 in. tile, etc., 6.283 mi. road from Gladbrock east, Federal Aid Project 176, 74,558 cu.yd. excav., also building at west end thereof 0.4998 mi. to grade, 5645 cu.yd. excav.

Minn., Duluth—Nov. 9, by F. W. Borgan, aud. St. Louis Co., one course concrete paving, 51,938 sq.yd. State Rd. 2 from here to Carlton Co. line, 81,353 sq.yd. State Rd. 3 from here to Lake Co. line, 51,877 sq.yd. State Rd. 35 from Hibbing to Chisholm; 52,688 sq.yd. State Rd. 35, from Chisholm to Buhl; 81,002 sq.yd. State Rd. 35 from Buhl to Mountain Iron, 28,107 sq.yd. State Rd. 35 from Mountain Iron to Virginia, 39,346 sq.yd. State Rd. 35 from Virginia to Gilbert; 74,375 sq.yd. State Rd. 35 from Gilbert to Biwabik, 54,839 sq.yd. State Rd. 35 from Biwabik to Aurora; 12,601 sq.yd. Thompson Hill Rd. Job 5-2153. $1,000,000. R. W. Acton, Courthouse, co. engr.

Minn., Grand Marais—Oct. 26 by G. Leng, and Cook Co., improving 14 mi. State Project 1-05, Federal Aid Project 298, 24 ft., 128,277 cu.yd. earth excav., 23,310 cu.yd solid rock excav., incl. bridges 3900 and 3902 each 30 ft. deck girder. $70,000. State Highway Dept., 1246 University Ave., St. Paul, engr.

Kan., El Dorado—Nov. 9, by Comrs. Butler Co. graveling 6.258 mi. road from Augusta to Gordon, Federal Aid Project 124, 18 ft. H. D. Barnes, co. engr. Noted Sept. 14.

Wyoming—Oct. 26 by State Hy. Comn., Cheyenne, grading, surfacing and building structures on 4.5 mi. Sheridan-Gillette Rd. from Clearmont to Double Crossing, Federal Aid Project 116 A, Sheridan Co., $55,000. C. R. Wood, Sheridan, engr.; 3.75 mi Yellowstone Highway, north of Manderson, Federal Aid Project 113, Big Horn Co., $40,000, R. L. Silver, Basin, engr.; grading and surfacing 15.1 mi. Lincoln Highway, Thayer Junction to Rock Springs, Federal Aid Project 137, Sweetwater Co., $85,000, R. J. Templeton, Rock Springs, engr.; grading and culvert construction 7.8 mi. Yellowstone Highway between Bonneville and Boysen, Federal Aid Project 118, Sect. A, Fremont Co., $100,000, C. H. Boman, Casper, engr. All foregoing 24 ft.

Montana—Oct. 27, by State Hy. Comn., Helena, grading, gravel surfacing and building structures on 10.64 mi. Belt-Riceville Rd., Federal Aid Project 73, Proposal A, Cascade Co., 21 ft., 194,692 cu.yd. unclassified and 19,555 cu.yd. rock excav., 8,425 cu.yd. crushed gravel, 170 cu.yd. concrete, etc. $115,000. J. N. Edy, ch. engr.

Tex., Ft. Worth — Oct. 26, by Comrs. Tarrant Co. grading and gravel surfacing 10.31 mi. Arlington-Mansfield Rd., Project 9, 14-24 ft. $26,341. R. V. Glenn, Courthouse, engr.

Tex., San Angelo—Oct. 28, by J. T. Matheson, judge Tom Green Co., grading, gravel surfacing, etc., 15.41 mi. State Highway 4, 18 ft., 1,375 cu.yd. earth, 2,104 cu.yd. loose and 20,894 cu.yd. solid rock excav., 144,766 gal. asphalt, 5,246 cu.yd. cover material, 20,894 cu.yd. crushed rock, 12,958 cu.yd. gravel, etc. $95,000. G. Gilchrist, San Angelo, engr. in charge.

Utah—Oct. 24, by State Rd. Comn., Salt Lake City, paving and small concrete bridge on 6.413 mi. highway from Tooele Co. line to ½ mi. north of Magna, Salt Lake Co., 18 ft., 14,800 cu.yd. earth and 6,500 cu.yd. rock excav., alternate bids on 5½ in. concrete or 2 in. bitulithic surface. H. C. Means, state road engr.

Utah—Oct. 25, by State Rd. Comn., Salt Lake City, grading and gravel surfacing 6.96 mi. road from Wellsville to county line, 18 ft., Federal Aid Project 33, Boxelder Co. $122,846. H. C. Means, state highway engr.

Calif., Sacramento—Oct. 30, by Supervs. Sacramento Co., paving 12th St. Rd. from city limits north, 14,000 sq.ft. 5 in. asphaltic concrete. C. W. Deterding, co. surv.

Calif., Tracy—Oct. 26, by City Trustees, improving portions of East 6, 6th, West 4th and 4th Sts., 3,160 cu.yd. grading, 1 drainage well, 114,457 sq.ft. 1½ in. topeka on 3½ in. asphaltic concrete, 4,815 lin.ft. concrete curb and gutter, 4,934 ft. concrete shoulders, etc. $47,500. W. D. Harrington, city engr.

Quebec — Nov. 4, by J. L. Boulanger, deputy minister of highways, Quebec, macadamizing 114,514 ft. Levis-St. Lambert Highway, 12 ft., 27,490 ft. in St. Nicholas, 42,003 ft. in St. Antoine Detilly, and 44,757 ft. in St. Croix municipalities, also 111,650 ft. waterbound macadm highway, 5,055 ft. in Leclercville, 37,936 ft. in St. Pierre les Becqueto, 42,081 ft. in Gentilly, 26,472 ft. in Becanour municipalities. M. Necktar, Dept. Rds., Quebec, engr.

Que., Montreal — Oct. 23, by Executive Com., asphalt pavements on 800 ft. Hanatoux St. from Dechateaubriand to Boyer Sts., 23-30 ft., 522 ft DeCastleneau St. from St. Andre to Dechateaubriand Sts., 30 ft.;

Streets and Roads (Continued)

concrete sidewalks on 1,214 ft. St. Andre St. from Jarry to Mistral Sts., 837 ft. St. Urbain St. from Mozart to Baby Sts., 1,606 ft. Delage St. from Mozart to Baby Sts.; 706 ft. Hadley St. from DeBiencourt to DuBois Sts., 1,376 ft. Charlemagne St. from Masson St. to Rosemount Blvd., all 5 ft. wide; also 1,158 ft. 2 x 3 brick sewer in St. Donat and Langemarck Sts. E. Gauthier, asst. city clk.

Ont., Goderich—Nov. 20, by L. L. Knox, 16,000 sq.yd. tar penetration macadam pavement with curbs and gutters.

BIDS RECEIVED

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., opened bids Oct. 10, curbing, recurbing, flagging, reflagging and asphalt paving (1) roadway of West 163rd St., (2) Isham Ave., grading, curbing and asphalt paving, etc., (3) West 157th St., laying sidewalks on (4) Park Ave., widening and repaving (5) roadway of 24th St., wood block, from Asphalt Paving Co., 1301 Metropolitan Ave., Brooklyn, (1) $8,173, (2) $7,672; Brusstar Constr. Co., Harlem River and 150th St., (1) $9,282, (2) $8,905; Interboro Asphalt Constr. Co., 233 Bway., (1) $10,078; C. D. Beckwith, 2875 Bway, (2) $8,130; Burnside Contg. Co., 270 Burnside Ave., (3) $11,070, (4) $10,397; P. J. Kearns, 2306 Creston Ave., (3) $12,120, (4) $13,224, (5) $18,747; Clementi Contg. Co., 1195 Spoffard St., (3) $12,167; C. Hellbock, 633 Wales Ave., (4) $11,018. Noted Oct. 5.

Pa., Phila.—Opened bids paving (1) Lancaster Ave. from 52nd to 56th Sts., 333 sq.yd. granite block, 7,337 sq.yd. asphalt, (2) Clearfield St. from Hancock to Howard and Diamond St. from 52nd to 54th Sts., 1,376 sq.yd. vitr. brick, 7,715 sq.yd. asphalt, (3) Anderson St. from Chelten Ave. to Haines St., Etting St. from Allegheny Ave. to Willard St., Sansom St. from 50th to 51st Sts., 16,251 sq.yd. asphalt, grading and improving (4) Algar St. from Princeton to Cottman Sts., 49,105 cu.yd. earth excav., from Eastern Paving Co., Colonial Trust Bldg., (1) $34,174, (2) $24,524, (3) $28,045; Barber Asphalt Paving Co., Land Title Bldg., (1) $33,568, (2) $25,076. (3) $29,168; J. McCool Co., 124 East Albans St., (4) $31,151; T. L. Flannigan, 1204 Montgomery St., (4) $32,652; Curtiss Bros., Tacony, (Phila. P. O.), (4) $32,695. Noted Oct. 5.

Alabama—State Hy. Dept., Montgomery, grading, surfacing 1.13 mi. York-Livingston-Gaineville Rd., and constructing with 120 ft. steel span and 865 lin.ft. creosoted timber trestle, bridge from Stanley & Singer Constr. Co., Lafayette, $75,552; Finnell Co., Tuscaloosa, $76,715; F. D. Harvey & Co., 688 South Bellevue St., Memphis, Tenn., $79,480. Noted Sept. 14.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids Oct. 13, widening old roadway and resurfacing 4.27 mi. Sect. "A" Elyria-Lorain Rd., Lorain Co., from Highway Constr. Co., Elyria, sheet asphalt A-2-a, $106,398, bituminous concrete and sheet asphalt, $92,220; Cleveland Trinidad Paving Co., The Arcade, Cleveland, sheet asphalt A-2-b, $116,788. Noted Oct. 5.

Ind., Winamac—Comrs. Pulaski Co. opened bids grading and surfacing, gravel and stone, 2.75 mi. Redline Rd., 18 ft., from Kain Bros., Winamac, $31,995, Stalbaum & Johnson, Winamac, $32,489, J. L. Hoesel, Winamac, $32,990, archts. est. $29,000; grading and gravel surfacing 15,800 ft. Burns Rd., 16 ft., from Kain Bros., Winamac, $27,000, archts. est. $28,000. Noted Sept. 28.

Mich., Detroit—Grading and paving with 3½ in. sheet asphalt on 8 in. concrete, amherst or berea curbstone, (1) Bordeau Ave. from Belleterre to Nardin Sts. (2) Indiana Ave. from Grand River to Fullerton Aves. (3) Seminole Ave. from Harper to Georgia Aves. (4) St. John St. from Martin to Central Aves. (5) Six Mile Rd. from Grand Trunk R.R. to Arlington Ave. (6) Wyoming Ave. from Grand River to Fullerton Aves., all 26 ft. wide, from Detroit Asphalt Paving Co. 20 McGraw Bldg., (1) $16,509, (2) $26,549, (3) $23,169, (4) $36,740, (5) $72,477, (6) $22,476; Cleveland Trinidad Paving Co., 402 Hammond Bldg., (1) $17,376, (2) $27,856, (3) $24,056, (4) $38,808, (5) $76,819, (6) $23,458; G. R. Cooke, 1260 Penobscot Bldg., (5) $72,909.

N. D., Bismarck—Burleigh Co., opened bids Oct. 4, grading and gravel surfacing Federal Aid Project 174, incl. 356.081 cu.yd. excav., 2,800 cu.yd. gravel, etc., from Holman & Webster, Turtle Creek, $35,237; Northern Constr. Co., 9 North 8th St., Grand Forks, $35,930; North Dakota Constr. Co., Linton, $39,070. Noted Sept. 21.

ROAD WORK—KANSAS

Following are highest and lowest three bids opened Sept. 27 by Comrs. Sumner Co., Wellington, for constructing Meridian Highway, Federal Aid Project No. 35, Sects. F. G and H, 9.148 mi., (A) Ziegler & Dalton, Junction City; (B) Hyde Constr. Co., Enid, Okla., (awarded contract); (C) Stewart & Ritchie, Wichita; (D) Stamey & Mackey, Hutchinson; Sects. J, K, L and M, (A) Ziegler & Dalton; (B) Stewart & Ritchie, (awarded contract); (C) Harrison Eng. Corp., Buffalo, N. Y.; (C) Koss Constr. Co., 2818 5th Ave., Des Moines.

	A	B	C	D
12,115 cu.yd. earth excavation	$0.80	$0.50	$0.75	$0.50
96,775 sq.yd. one course concrete, 7 in. uniform	2.94	2.44	2.57	2.64
16 cu.yd. concrete, approach slabs	2.84	2.40	3.00	2.52
1,865 lb. reinforcing steel for pavement	05	06	08	05
30 lin.ft. 15 in. v. c. pipe	2.00	1.75	1.50	1.25
4,936 lin.ft. guard rail	70	1.00	80	60
4.356 lin.ft. joints for concrete pavement	30	10	30	12
1,238 lin.ft. concrete gutter	90	1.50	1.50	75
2 inlets	40.00	25.00	30.00	25.00
Extended totals	$300,365	$249,670	$265,213	$266,177

	A	B	C	D
20,085 cu.yd. earth excavation	$0.90	$0.75	$0.75	$0.65
177,349 sq.yd. one course concrete, 7 in. thick	3.21	2.57	2.58	2.70
64 sq.yd. concrete, approach slabs	3.11	3.00	5.00	3.00
7,450 lb. reinforcing steel for pavement	05	08	10	08
13,040 lin.ft. guard rail	70	80	1.00	60
7,974 lin.ft. joints for concrete pavement	.30	.30	35	30
Extended totals	$699,459	$484,463	$489,520	$502,902

ROAD WORK—MISSOURI

Bids were opened Sept. 28, by State Highway Dept., Jefferson City, for constructing 4.457 mi. road from North Kansas City to Gashland, Clay Co., (A) Capital Constr. Co., 1207 Cherry St., Des Moines; (B) Koss Constr. Co., 2818 5th Ave., Des Moines; (C) J. O. Patterson, 311 Ridge Bldg., Kansas City. The unit bids were as follows:

	A	B	C
24,993.9 cu.yd. earth excavation	$0.55	$0.70	$0.55
8,742.7 cu.yd. rock excavation	2.00	2.10	2.50
10,163 cu.yd. borrow	55	60	45
18,045 cu.yd. overhaul	04	04	03
47,066 sq.yd. pavement (part cement concrete)	2.79	2.72	2.80
8,750 lin.ft. wooden guard fence	75	.70	80
3,100 lin.ft. concrete gutter	1.25	1.00	95
120 lin.ft. 15 in. reinforced-concrete pipe culvert	3.00	3.00	2.75
252.5 cu.yd. class "B" concrete masonry	23.00	23.00	20.00
63.7 cu.yd. class "C" concrete masonry	23.00	23.00	18.00
22,108 lb. reinforcing for concrete masonry	.06	.045	.065
Extended totals	$190,824	$190,869	$192,796

Bids were opened by State Highway Dept., Jefferson City, for constructing 4.929 mi. road from Warrensburg to St. Charles, St. Charles Co., (A) Godfrey-Meeker, (B) Moreno-Burkham Constr. Co., Syndicate Bldg.; (C) Unit Constr. Co., Title Guaranty Bldg. Contractors all of St. Louis. The unit bids were as follows:

	A	B	C
48,262 cu.yd. earth excavation	$0.53	$0.55	$0.50
2,973 cu.yd. borrow	53	60	50
103,683 cu.yd. overhaul, per 100 ft.	02	05	03
51,741 sq.yd. concrete pavement	2.40	2.60	2.85
2,790 cu.yd. class "B" concrete	19.00	30.00	24.00
22,509 lb. reinforcing steel	.05	.07	.05
Extended totals	$178,490	$200,386	$211,736

ROAD WORK—CONNECTICUT

Following are lowest bids opened Sept. 29, by State Highway Comn., Hartford, for constructing New Litchfield Rd., Litchfield and Torrington Townships, (A) Mascetti & Holley, 561 South Main St., Torrington, (awarded contract); (B) C. Vacca, Terryville Rd., Bristol; (C) J. DeMichiel & Bro., 58 High St., Torrington. The unit bids were as follows:

	A	B	C
9,200 cu.yd. earth excavation	$1.10	$1.00	$1.25
2,600 cu.yd. borrow	1.10	1.15	1.25
4,300 cu.yd. rock excavation	2.50	2.30	2.60
Grubbing (lump sum)	3,783.00	100.00	500.00
3,500 cu.yd. 12-in. stone base	2.50	1.00	2.50
20 cu.yd. class "A" concrete	15.00	15.00	18.00
350 cu.yd. class "B" concrete	12.00	10.00	16.00
56,200 lb. steel bars	0[illegible]	.03	05
10 catch basins	50.00	40.00	40.00
200 lin.ft. 14-in. c.m. pipe	2.91	2.00	2.00
700 lin.ft. 18-in. c.m. pipe	3.60	2.80	3.50
16 lin.ft. 20-in. c.m. pipe	4.20	3.25	3.50
36 lin.ft. 24-in. c.m. pipe	5.00	4.00	4.00
72 lin.ft. 30-in. c.m. pipe	6.90	5.00	5.50
36 lin.ft. 36-in. c.m. pipe	8.20	6.27	6.50
16 lin.ft. 42-in. c.m. pipe	9.50	7.40	8.00
500 lin.ft. rubble drain	1.50	1.40	1.50
9,300 lin.ft. w.g. rail	.48	.45	.60
11,000 cu.yd. concrete pavement	6.75	8.00	8.50
700 sq.yd. slope paving	1.75	1.00	2.00
500 lin.ft. sheet piling	2.25	1.25	3.00
300 lin.ft. relay old pipe	2.00	.30	1.50
Extended totals	$128,251	$129,126	$151,338

Missouri—State Hy. Dept. at div. office Hermitage, opened bids Sept. 22 3.069 mi. road from Hermitage Special Rd. Dist., 12 ft., Federal Aid Project 86-A, Hickory Co., (1) 8,862 cu.yd. earth excav., (2) 2,395 cu.yd. rock excav., (3) 12,817 cu.yd. borrow, (4) 21,886 sq.yd. specification C gravel pavement, etc., from M. E. Gillioz, Monett. (1) $0.50 per cu.yd. (2) $2 (3) $0.40 (4) $0.35, total $26,497; Coopers Constr. Serv. Co., St. Louis (street address not available) (1) $0.45 (2) $2 (3) $0.45 (4) $0.45, $29,542. Noted Sept. 14.

Colorado—State Hy. Dept., Denver, opened bids gravel surfacing 5.375 mi. Santa Fe Trail-Granada State Line, Fed-

Streets and Roads (Continued)

eral Aid Project 216 A, Prowers Co., 18 ft., from W. A. Colt & Son, Las Animas, $52,607. Standard Eng. & Constr. Co., 518 E & C Bldg., Denver, $53,066, Holly & Bershears, Swink, $58,784; engrs. est. $58,900; grading 1.453 mi. road beginning 11 mi. north of Dillon and extending toward Kremmling, incl. 100 ft. steel truss bridge over Blue River, Federal Aid Project 190, Summit Co., from Colorado Bridge & Constr. Co., Gas & Electric Bldg., Denver, $36,504, Monarch Eng. Co., West Colfax and Larimer Sts., Denver, $40,590, Plains Constr. Co., 427 E & C Bldg., Denver, $41,566, engrs. est $39,045; concrete girder bridge and gravel approaches over St. Charles River, 10 mi south of Pueblo on Rye Rd. to Walsemburg, from J. R. Donaghy, Colorado Springs, $24,650, engrs est $20,786. Noted Oct. 5.

Colo., Denver—Concrete paving 12 blocks Alley Paving Dist. 86, 16 ft., from J. F. Roberts Constr. Co., Tramway Bldg., $22,074; A. J. Collins, 2363 Blake St., $22,312; W. F. Pigg & Son, Engineers Bldg., $22,920. Noted Oct. 5.

Idaho—W. Osborn, dist. engr. State Highway Dept., 202 Pioneer Bldg., Lewiston, grading 2.5 mi. North and South Highway, Federal Aid Project 63, Idaho Co., from D. E. Murphy & Co., Boise, $40,892; G. L. Strickler, Lewiston, $42,860; General Constr. Co., Spokane Savings and Loan Bldg., Spokane, Wash. $45,906.

Wash., Seattle—Opened bids Sept. 30, paving Taylor Ave. et al, from F. Lupis, 1909 Charles St., $34,874, J. L. Smith, Pioneer Bldg. $36,160, D. H. Traphagen, Walker Bldg., $36,840. Engrs. est. $33,975. Noted Oct. 5.

Wash., Seattle—Opened bids Oct. 6, paving Findlay St. et al, 4,000 cu.yd. earthwork and subgrading, 1,020 lin.ft. type "A" armored and 9,950 lin.ft. type "A" concrete curb, 16,225 sq.yd. 6 in. concrete from V. Ramaglia, 4415 Corliss Ave., $47,051, J. L. Smith, Pioneer Bldg., $50,531, engrs. est. $44,702; Orcas St. et al, 2,000 cu.yd. subgrading, 7,250 cu.yd. earth excav., 5,450 lin.ft. type "A" concrete curb and 9,675 sq.yd. 6 in. concrete, from Stilwell Bros., Inc., 3220 9th Ave. S., $37,721, J. L. Smith, Pioneer Bldg., $44,953, engrs. est. $38,911.

California—State Hy. Dept., Sacramento, gravel surfacing 10.7 mi. highway between Ione and Jackson, Amador Co., 15,600 cu. yd. gravel, from J. Phillips, 1909 4th Ave., Sacramento, $58,500, Blumenkranz & Vernon, Farmers & Merchants Bank Bldg., Stockton, $64,740; asphaltic concrete surfacing 0.9 mi. highway through towns of Atwater and Livingston, Merced Co., 1,650 ton surfacing, from J. A. Costello, Jr., 1083 Shotwell St., San Francisco, $20,542, Valley Paving & Constr. Co., Merced, $20,592, A. Teichert & Son, Ochsner Bldg., Sacramento, $21,120. Noted Sept. 21.

Calif., Daly City—Improving various streets, from Eaton and Smith, 407 11th St., San Francisco, 87,910 sq.ft. 1½ in. topeka on 4 in. asphaltic concrete at $0.25; 6,349 lin.ft. concrete curb and gutter $1.60, 2,165 lin.ft. 4 in. vitr. lateral sewer $1.60, 150 lin.ft. 10 in. vitr. sewer $1.60, 880 sq.ft. cement walks $0.20, 4,000 cu.yd. grading $1.60. Noted Sept. 14.

Calif., Stockton — Supervs. San Joaquin Co., improving (1) 2 mi. Mt. Diablo Ave. (2) Thomas Wall Rd. (3) 1½ mi. Jack Tone Rd., (4) 2½ mi. Kettleman Rd. and Quinby Ave. (5) 3.04 mi. Brackharshner Rd. (6) 4 mi. Peters Rd. (7) 3.39 mi. Willow Glenn Rd. (8) 3 mi. East Morrison Rd., (9) 8 mi. road 2½ mi. east from Jack Tone Rd., from G. F. Gilbert, 205 West Vine St., (1) $13,132; C. Moreing, Commercial Savings Bank Bldg., (1) $17,651 (2) $15,530 (6) $22,235 (7) $18,230 (8) $21,130 (9) $26,598; C. O. Holden, 433 East Locust St., Lodi, (3) $12,465 (4) $20,710 (5) $21,677. Noted Sept. 28.

Calif., Tracy — Bd. Trustees grading, paving, curbing, guttering and laying sewers Roosevelt, Taft, Windeler, West 6th, 9th and 10th Sts., from J. E. Johnston, Savings & Loan Bank Bldg., Stockton, $59,787; Blumenkranz & Vernon, Stockton, (street address not available), $69,346. Noted Sept. 28.

CONTRACTS AWARDED

Vermont—State Hy. Dept., Montpelier, gravel surfacing 3.24 mi. Federal Aid Project 33, 18 ft. in Barton, to D. W. Overocker, Brattleboro, $59,403. Noted Sept. 14.

Mass., Pittsfield — W. R. Hagyard, 203 Bartlett Ave., 1,450 ft. parkway, 20 ft., asphalt, concrete, concrete sidewalks, curbing and gutterings, to D. J. Walsh, 107 Fenn St. Engrs. est. $25,000.

Connecticut—State Hy. Dept., Hartford, 17,150 ft. New Haven-New London Rd., in Branford, concrete, to A. D. Bridges Sons, Inc., Hazardville, $106,451 (cement furnished by State $25,000); 26,256 ft. Housatonic River Rd., in Kent, to Mascetti & Holley, 561 South Main St., Torrington, $125,818 (cement furnished by State $38,000). Noted Oct. 12.

Conn., Wallingford — Asphalt paving South Cherry St., to Robinson & Powers, Inc., Meriden. Engrs. est. $25,000. Noted Sept. 21.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, grading, flagging and curbing East 37th St., to F. Persicano, 350 Fulton St., New York, $1,550, engrs. est. $1,600; 82nd St., to T. B. Scott, 671 Halsey St., $1,650; repaving Nassau Ave., Navy and Wallabout Sts., to C. Gallagher, 745 Dean St., $40,053, $8,071 and $34,164 respectively; 23rd St., to J. O'Hara, 557 3rd St., $21,022. Noted Sept. 28.

N. Y., Rochester—Grading, laying sidewalks and sewer in Acorn St., to W. E. Kinney Co., Rochester (street address not available), $14,425; asphalt paving Navarre Rd., to O. Costich Co., Rochester (street address not available), $16,797. Noted Aug. 31.

N. Y., Rochester—To Whitmore, Rauber & Vicinus, 279 South Ave., paving Industrial St., $29,038, Oak St. $12,300, Iceland Pk. $8,291, resurfacing Oak St. $2,713, Phelps Ave. $3,997, all asphalt; to T. Holohan, Rochester (street address not available) Bronson Ave. $15,045, asphalt; to W. E. Kinney Co., Rochester (street address not available), grading and laying sidewalks on Merchants Rd. $5,238. Noted Aug. 31.

N. Y., Little Valley — Cattaraugus Co. will pave 2 mi Olean-Rock City Rd., concrete, by day labor under supervision of J. F. Dailey, engr., c/o County Clerk, Little Valley. $30,000.

N. Y., Sag Harbor — Village Trustees, Municipal Bldg., curbing, rein.-con., paving and storm water sewer, to H. J. Mullin Contg. Co., Inc., Jamaica Ave. and 144th St., Jamaica, $68,857. Noted Oct. 5.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Southfield Blvd., etc., concrete, to Brooklyn & Manhattan Contg. Corp., 26 Court St., Brooklyn, $178,580, engrs. est. $180,000; Washington Ave and roadway of Henderson Ave., to J. E. Donovan, 2205 Richmond Terrace, Port Richmond, $20,625 and $26,401, respectively. Noted Sept. 21 and Oct. 12.

N. J., Long Branch — Paving Atlantic Ave. from Ocean Ave. to Liberty St., asphalt on concrete, to Newark Paving Co., 133 1st St., Newark, $65,000. Noted Sept. 28.

Pa., Ebensburg — Comrs. Cambria Co., 22,421.43 ft. Old Plank Rd., Cambria Twp., brick surface on concrete to J. L. Elder, Ebensburg, $252,436.

Pa., Phila.—To Barber Asphalt Paving Co., Land Title Bldg., paving with asphalt, Allengrove St. $24,903; to Eastern Paving Co., Colonial Trust Bldg., Front St., $55,536; Hope, Ludlow, Matthew, Stocker and 65th Sts., $26,706; Lebanon Ave., $25,913; to Union Paving Co., 22nd and Locust Sts., Broad St. $25,043, Nedro, Buist and Beechwood Aves. $32,678; to United Paving Co., Colonial Trust Bldg., paving with brick Lebanon Ave. $25,178; to F. Mark Constr. Co., 2204 North 22nd St., grading and paving Beechwood Ave. $26,562, Cayuga St. $64,793. Noted Oct. 5.

D. C., Wash.—Dist. Comrs., 509 Dist. Bldg., 12,500 sq.yd. concrete sidewalks, to W. F. Brenizer Co., 101 New York Ave., N. E., $1.98 per sq.yd.

W. Va., Huntington—Improving Adams Ave. from Chapmans Crossing to Four Pole Bridge, vitr. brick on concrete, to Harrison & Dean, 322½ 9th St., $25,997.

W. Va., New Martinsville—Wetzel Co., grading 5.5 mi. Grant Dist. Rd., 16 ft., 45,000 cu.yd. earth and rock excav., to Stringer & Springer, Wheeling, (street address not available). $47,926.

N. C., Hillsboro—Paving 1 mi. road, 3 in. sheet asphalt on 5 in. base, (includes some curbing, guttering, etc.), to R. M. Hudson Co., Salisbury, $49,333. Noted Sept. 7.

S. C., Aiken—For 18,000 sq.yd. paving, curbs and gutters, to W. F. Bowe, Jr., 541 Broad St., Augusta, Ga., $41,862.

Alabama—State Hy. Dept., Montgomery, grading and surfacing with gravel and 2½ in. penetration macadam 7.648 mi. Huntsville-Guntersville Rd., Madison Co., to Williams Bros. Constr. Co. and M. W. London & Sons, Roanoke, Va., $124,057; grading and surfacing with 2½ in. penetration macadam 6.87 mi. Decatur-Moulton Rd., Lawrence Co., to Stanley & Singer Constr. Co., Lafayette, $181,917. Noted Oct. 5.

Ky., Grayson—Carter Co., paving 4.6 mi. Midland Trail, 18 ft., to Hatfield Constr. Co., Huntington, (street address not available). $125,000.

O., Cleveland — Cuyahoga Co. paving Hilliard Rd., asphalt, to Highway Constr. Co., Elyria, $114,420; Chagrin River Rd., to O. C. Scott, Ada, $70,805, engrs. est. $73,260. Noted Oct. 12.

Indiana—State Hy. Dept., Indianapolis, 6,007 mi. Lincoln Highway, Laporte Co., 57,042 sq.yd. bituminous macadam on concrete, to Highways Improvement Co., Merchants Bank Bldg., South Bend, $109,018. Engrs. est. $115,000.

Ind., Indianapolis—Paving 5,117 ft. Raymond Rd. from Shelby St. to State Ave., 24 ft., 13,648 sq.yd. asphalt on concrete, to Marion County Constr. Co., 1600 South West St., $25,074. Engrs. est. $28,000.

Ind., Indianapolis—Paving 18,076 ft. 1st alley north of Ohio St. from Dorman to Highland Sts., 14 ft., 28,118 sq.yd. concrete on concrete, to W. C. Halstead, Indianapolis Securities Bldg., $51,559. Engrs. est. $54,200.

Ind., Paolia—Orange Co. paving with crushed stone, 8,056 ft. Jerry Smith Rd., 18 ft., to T. F. Wires, Paoli, $25,850. Noted Sept. 28.

Michigan — State Hy. Dept., Lansing, grading and surfacing 12.062 mi. Federal Aid Project 80, Sects. A and B, Machinac Co., to S. J. Groves, Sons Co., 120 Manhattan Bldg., Duluth, Minn., incl. 73,522 sq.yd. excav. $0.40, 128.2 cu.yd. 1:2:4 concrete $22, 45 cu.yd. 1:2½:5 concrete $21, 46 cu.yd. 1:3:6 concrete $20, 127,209 sq.yd. gravel surface $0.59, total $118,661; 12.366 mi. Federal Aid Project 80, Sect. E, Machinac Co., to Regan-Baker Co., Kewadin, 626.9 sta. grading $16, 33,827 cu.yd. excav. $0.415, 130,470 sq.yd. gravel surface $0.665, total $113,484; 10.514 mi. Assessment Dist. Rd. 444, Lapeer and Genesee Counties, to J. Caldwell, Columbiaville, 63,689 cu.yd. excav. $0.40, 221.9 cu.yd. 1:2:4 and 106.6 cu.yd. 1:3:6 concrete $16, 74,015 sq.yd. gravel surface $0.62, total $81,721; 7.98 mi. Assessment Dist. Rd. 384, Eaton and Ionia Counties, to C. Barber, Cressey, $47,013; stacking 7,300 cu.yd. sand and 14,700 cu. yd. grave on Federal Aid Project 49, Sect. A, Cass Co., to G. H. Kimmerle, Cassopolis, $33,000.

Ill., Chicago—Cook Co. paving 2.33 mi. Sect. 97-B, Route 9-A, asphalt and concrete, to State Impvt. Co., 10 South La Salle St. Engrs. est. $56,374.

Ia., Decorah—Winneshiek Co., to J. A. Dunkel, Webster City, grading 6.25 mi. Federal Aid Project 98, Sect. C from here toward Calmer, 109,536 cu.yd. clay and loam, 6,390 cu.yd. loose and 2,770 cu.yd. solid rock excav., $39,072, 2.8 mi. Primary Rd. Project 121, 23,798 cu.yd. earth excav., Rd. $6,185. Engrs. est. $40,000 and 8,000 respectively. Noted Sept. 28.

Ia., Fairfield—Jefferson Co. grading and building structures on 21.51 mi. Primary Rd. Project 220, 287,749 cu.yd. excav., to L. C. Wood & Co., Alden, $71,937; 76,000 ft. 6 in., 13,600 ft. 8 in., 1,500 ft. 10 in. and 2,660 ft. 12 in. drain tile, etc. to C. L. Reis, Ottumwa, $13,830.

Kan., Iola—Comrs. Allen Co., 1 course concrete, 7.05 mi. Federal Aid Project 127, Sects. A and B, 75,000 sq.yd. concrete, to Fry Bros. Contg. Co., Iola, $2.20 per sq.yd., total $195,813. Noted Sept. 7.

Neb., Lincoln—Paving Dist. 392, to Cochrane Constr. Co., 1st Natl. Bank Bldg., $16,938; Dist. 496, to Abel Constr. Co., Terminal Bldg., $49,918. Noted Aug. 24.

S. D., Sioux Falls—To Western Asphalt Paving Corp., Sioux City, Ia., 12,199 sq.yd. sheet asphalt pavement on 8th St., $2.56 per sq.yd., to C. H. Atkinson Paving Co., Watertown, 6,200 lin.ft. concrete curb on 8th St., $0.42 per lin.ft., to S. L. Noslin, Sioux Falls, 1,200 lin.ft. curb on 2nd Ave., $0.49 per lin.ft. Noted Sept. 28.

Mont., Missoula — Missoula Co. grading and concrete paving 4.83 mi. Wolf-Lodge-Squaw Bay Rd., to H. H. Boomer, Ziegler Bldg., Spokane, Wash., $117,274.

Streets and Roads (Continued)

Missouri—State Hy. Dept., Jefferson City, 2.958 mi. road east and west of State Road, 24 ft., State Project 10, Sect. 26, Chariton Co., to E. C. Johnson, Carrollton, $87,428; 5 mi. road from Versailles to Linn Creek, 12 ft., State Project Route 5, Sect. 56, Morgan Co., to Wassman Constr. Co., Kansas City (street address not available), $16,107; 1.657 mi. road through upper Monticello and Canton Special Rd. Dist., 16 ft., State Project Route 6, Sect. 60, Lewis Co., to Henderson-Washam, Jacksonville, $41,024; 2.569 mi. road through Edinburg Special Rd. Dist., 24 ft., State Project Route 6, Sect. 22, Grundy Co., to Harris Constr. Co., Des Moines, Ia. (street address not available), $72,633; 2.36 mi. road from Hubers Ferry to Mt. Sterling, 16 ft., State Project Route 7, Sect. 38, Osage Co., to J. Pope, Jefferson City, $17,257.. Noted Oct. 12.

Missouri—State Hy. Dept. at div. office Buffalo, 10.378 mi. road north and south of Dallas, 24 ft., State Aid Project 20.183, Dallas Co., to M. E. Gillioz, Monett, $31,637. Noted Sept. 14.

Missouri—State Hy. Dept. at div. office Hermitage, 3.069 mi. road from Hermitage Special Rd. Dist., 24 ft., Federal Aid Project 86 A, Hickory Co., to M. E. Gillioz, Monett, $26,497. Noted Oct. 12.

Missouri—State Hy. Dept. at div. office Kahoka, surfacing 8.506 mi. road from Wayland to Keokuk, 16 ft., Federal Aid Project 171, Clark Co., to Henderson & Washam, Jacksonville, $60,957. Noted Oct. 5.

Missouri—State Hy. Dept. at div. office Osceola, 3.705 mi. road from Osceola Special Rd. Dist., 24 ft., Federal Aid Project 100 C, St. Clair Co., 10,607 cu.yd. earth and 913 cu.yd. rock excav., 9,360 cu.yd. borrow, 143.6 cu.yd. concrete masonry, 26,522 sq.yd. specification C gravel pavement, 12 ft. wide, etc., to Newton Constr. Co., California, $25,199.

Missouri—State Hy. Dept. at div. office West Plains, 6.527 mi. road from Springfield to Memphis, 24 ft., Federal Aid Project 51 A, Howell Co., to Jones & Harlin, West Plains, $29,074; 8.743 mi. road from Springfield to Memphis, 24 ft., Federal Aid Project 51 C, Howell Co., to Coopers Constr. Serv. Co., St. Louis (street address not available), $33,518. Noted Oct. 5.

Tex., Lufkin — Angelina Co. grading, gravel surfacing, bituminous topping and bridging 9.72 mi. State Highway 7, Sect. A, Federal Aid Project 277, 16 ft., to J. S. Moore & Sons, Lufkin, $170,317. Engrs. est. $253,350 incl. material furnished by county, and 10 per cent for engineering and contingencies. Noted Oct. 12.

Okla., Madill—Paving, curbing and guttering 110 blocks, 110,000 sq.yd. rock asphalt, to M. R. Amerman, 248 North Market St., Wichita, Kan., $224,829.

Colo., Boulder—Paving 12,000 sq.yd. 14th St. Paving Dist., bitulithic on present base, 4,000 sq.yd. Pleasant St. and Pennsylvania Ave. Paving Dist., bitulithic on rock, to Strange-Maguire Paving Co., Utah Savings & Trust Bldg., Salt Lake City, Utah. Engrs. est. $40,000 and $15,000 respectively.

Idaho—W. Osborn, dist. engr., State Highway Dept., 202 Pioneer Bldg., Lewiston grading 2.5 mi. White Bird-Salmon River Rd., 60,000 cu.yd. earth and 10,000 cu.yd. rock excav., to D. F. Murphy & Co., Spokane, Wash., (street address not available), $36,397; grading and surfacing with broken stone, 6.45 mi. road, 19,010 cu.yd. earth and 44,216 cu.yd. rock excav., etc., to Triangle Constr. Co., Realty Bldg., Spokane, Wash., $68,780.

Washington — State Hy. Rd., Olympia, 20.51 mi. Inland Empire Highway, 16 ft., Yakima Co., to Grant-Smith Co., Henry Bldg., Seattle, $556,739; 12.21 mi. highway, 16 ft., from Underwood to Lyle, Klickitat Co., to K. I. Goulter & Sons, Ilwaco, $334,-135. Noted Aug. 31.

Wash., Everett—Concrete paving Virginia St., et al., to J. W. Hoover & Co., c/o J. W. Hoover, 1607 Hoyt St., $60,695. Engrs. est. $60,000.

Wash., Seattle—Paving Taylor Ave. et al. to F. Lupis, 1909 Charles St., $34,874. Engrs. est. $33,975. Noted Sept. 28.

Wash., Tacoma—Paving St. Helens Ave. from 6th to Division Aves., asphaltic concrete, to C. E. Torkelson, 4339 East G St., $29,480.

California—State Hy. Dept., Sacramento, grading and paving with 6 in. concrete, [illegible] mi. highway between Long Beach and Huntington Beach, Los Angeles and Orange Counties, to H. H. Peterson, Loma Portal, $227,394. Noted Oct. 5.

Calif., Dinuba — Improving Alta and North Villa Aves., to Federal Constr. Co., Call Bldg., San Francisco, 25,200 sq.ft. 1½ in. warrenite on 5 in. concrete at $0.239 per sq. ft.; 34,000 sq.ft. 1½ in. warrenite on 4 in. concrete $0.219; 3,865 lin.ft. concrete curb $0.68; 7,730 sq.ft. concrete gutter $0.35; 200 lin.ft. metal culverts $8, etc.

Calif., Fresno—Improving Mono St. between Van Ness Ave. and P Sts., to Thompson Bros., Divisadero and H Sts., $26,005. Noted Oct. 12.

Calif., Lindsay—Improving various streets to Clark & Henery Constr. Co., 38 South Sutter St., Stockton, $125,413. Noted Oct. 12.

Calif., San Jose—Santa Clara Co. will clear and shape roadway of Bodfish Mill Rd., Superv. Dist. 1, 3,675 lin.ft. by day labor under supervision of I. J. Ryder, co. surv. $27,480.

Que., Montreal—Asphalt pavements on St. Emelie St., to Sicily Asphaltum Paving Co., 60 St. Viateur St., $11,270; De Villiers St., to Quinlan, Robertson & Janin, 52 Duluth Bldg., $43,949; concrete sidewalks on St. Lawrence St., to Leger & Lamoureux, 78 Bernard St., $28,393. Noted Oct. 12.

Ont., Simcoe—Paving Argyle, Robinson, Queen and West Sts., to Paving & Mastic Co., Simcoe, incl. 16,254 sq.yd. tarvia pavement $1.55 per sq.yd., 9,174 ft. curbs and gutters $5,381, also 10 and 18 in. sewers, $11,047. Noted Aug. 17.

Industrial Works

PROPOSED WORK

N. H., Sunapee—Lake Sunapee Power Co. soon takes bids hydro-electric station, dam, and about 1,500 ft. steel penstock. $300,000. I. M. Frost, Rutland, Vt., pres. C. T. Main, 201 Devonshire St., Boston, engr.

Mass., Chelsea (Boston P. O.)—B. S. Cohen, 14 Everett Ave., plans factory, Everett Ave., $300,000. Competitive plans will probably be invited.

Mass., Salem—Baker & Kimball, 38 South St., Boston, soon lets contract 3 story, 70 x 175 ft. factory, frame, plain foundation, Fort Ave., here. $50,000. Private plans.

Mass., Watertown — Vose & Sons Piano Co., 1010 Massachusetts Ave., Boston, having plans prepared by Densmore & Le Clear, archts., 88 Broad St., Boston, factory, Arsenal St., here. $200,000-$300,000.

Conn., Middletown—M. Bornstein & Sons, 40 Gray St., Paterson, N. J., plans 1 story, 60 x 200 ft. factory addition, brick and timber, here. $40,000. Private plans.

N. Y., Buffalo—D. Bunshaft, 55 Manchester Pl., plans 1 and 2 story, 66 x 100 ft., tile garage, Clinton St. To exceed $40,000. Architect not announced.

N. Y., Buffalo—Chevrolet Motor Co., Buffalo, and West Grand Blvd., Detroit, Mich., had plans prepared by A. Kahn, archt., 1000 Marquette Bldg., Detroit, Mich., 1 and 2 story, 36 ft. high, 338 x 900 ft., brick and steel factory, East Delevan Ave.

N. Y., Buffalo—Empire Drawn Steel Corp., 1133 Marine Bank Bldg., having plans prepared 1 story, 70 x 450 ft., rein.-con., brick and steel factory, Germania St. $100,000. Harding & Crea, White Bldg., engrs.

N. Y., Buffalo—P. M. McGroff, Montreal, Que., plans steel wire factory, here. $1,000,-000. Architect not selected.

N. Y., Buffalo—Pillsbury Milling Co., 302 Metropolitan Life Bldg., Minneapolis, Minn., plans and takes bids about March 1, large flour mill, 7,000 bbl. daily capacity, here, $2,500,000. A. C. Loring, pres. Architect not announced.

N. Y., Buffalo—A. Teachout Realty & Investment Co., plans 66 x 100 ft., brick warehouse, Leslie St. To exceed $40,000. Architect not announced.

N. Y., Lockport—Harrison Radiator Co., Washburn St., plans 3 story, 150 x 300 ft. brick addition to plant. J. R. Tyler, 715 Union Trust Bldg., Rochester, archt.

N. Y., New York—A. Revere, c/o H. J Nurick, archt. and engr. 44 Court St., Brooklyn, soon takes bids 3 story, 75 x 100 ft. garage, brick, steel and concrete, plain foundation, 531 West 36th St., here. $75,000.

Pa., Altoona—Pennsylvania R.R., Broad St. Sta., Phila., plans 1 story, machine shop improve freight car shop, concrete store house, on 16th St., also convert present roundhouse into locomotive repair shop. A. C. Shand, ch. engr.

Pa., Johnstown — Clarion River Power Co. plans hydro electric power plant on Clarion River above here. $3,000,000. F. T. Hepburn, pres.

Pa., Juniata—Pennsylvania R.R., Broad St. Sta., Phila., having plans prepared by W. H. Cookman, archt., Broad St. Sta., Phila., 1 story, 100 x 700 ft. shop here. $300,000. A. C. Shand, ch. engr.

Pa., Phila.—G. B. Clapp, 3717 Filbert St., having plans prepared by Ballinger & Co., archts., 12th and Chestnut Sts., 5 story and basement, 90 x 110 ft. rein.-con., brick and steel, warehouse, plain foundation, 910-914 Cherry St. $250,000. Western Electric Co., Witherspoon Bldg., lessee.

Pa., Pittsburgh—Neely Nut & Bolt Co., 26 South 22nd St., having plans prepared 1 story, 120 x 150 x 173 x 210 ft. brick and steel addition to plant, South 22nd St. and Pittsburgh and Lake Erie R.R. Private plans.

Pa., Warren—Seneca Oil Wks., South Carver St., plans plant. $60,000. Architect not announced.

W. Va., Fairmont—F. W. McIntire plans 2 story and basement, 50 x 160 ft., concrete, steel and tile garage. Private plans.

W. Va., Princeton—Princeton Hosiery Mills Co., plans 2 story and basement, 50 x 150 ft., concrete, brick and steel, mill. Private plans.

N. C., Charlotte—Southern Power Co., Church St., plans steam power plant at Mount Holly, 40,000 hp.; one at Eno, 20,-000 hp. W. S. Lee, 309 East Moorehead St., engr.

Fla., Jacksonville—Soon takes bids 2 units of cotton storage warehouse, each unit includes 6 compartments, each 75 x 100 ft., brick and tile. $50,000. G. B. Hills Co., Barnett Bldg., engrs.

Fla., New Smyrna—Volusia Cypress Co. plans sawmill, planing mill and lumber plant. $100,000.

Ky., Pikesville—Pike Power & Light Co. plans to vote on $200,000 bonds for extensions and improvements to works and lines.

Ky., Williamsburg—Iroquois Natural Gas Co. plans carbon black plant. $200,000. Architect not announced.

Tenn., Memphis—Louisville & Nashville R.R., Louisville, plans new round house near here, also switch tracks and car repair shops near coaling plant, at Leewood. $250,000. A. B. Scates, supt. Memphis div. W. H. Courtenay, Louisville, ch. engr.

O., Cleveland—Otis Steel Co., 3341 Jenning Rd., having plans prepared by R. Brakeman, archt. and engr., 3341 Jenning Rd., 1 story mill, brick and steel, incl. blooming and strip mills and open hearth furnaces. $3,000,000.

O., Cleveland—Whitmer-Jackson Sash & Door Co., 1996 West 3rd St., had plans prepared by H. M. Morse, archt., Finance Bldg., 2 story, 70 x 151 ft. lumber mill addition, brick and timber. $40,000.

O., Findlay—Adam Axle Co. plans 80 x 200 ft. addition to factory. To exceed $50,000. Architect not announced.

O., Lancaster—Fairfield Eng. Co., plans to rebuild factory destroyed by fire. $250,000.

O., Newburg Heights (Cleveland P. O.)—Aluminum Manufacturers, Inc., c/o O. Pessier, 2210 Harvard Ave., plans 2 story, 50 x 100 ft., brick and steel factory, Harvard Ave. $50,000. Private plans.

Ind., Lebanon — Cline & Hicks having plans prepared paint and machine shop, three 1 story buildings, 60 x 100 ft., 40 x 40 ft. and 40 x 60 ft., concrete blocks. $40,000. Private plans.

Ind., Lebanon—Indestructible Wheel Co. plans 2 story, 100 x 160 ft. factory addition, brick. $60,000. Private plans.

Ind., Terre Haute — Vigo Mining Co., Rose Dispensary Bldg., having plans prepared by Shourds-Stoner Co., archts., Tribune Bldg., 1 story, 50 x 80 ft. power house, rein.-con., brick and steel. $75,000.

Ill., Chicago — Bassick Mfg. Co., 2638 North Crawford Ave., having plans prepared by R. S. Ostergren, archt., 155 North Clark St., 1 story, 55 x 142 ft. factory, brick and timber, North Homan Ave.

Industrial Works (Continued)

Ill, Shelbyville—Oct 24 to vote on $100,000 bonds for 45 x 100 ft power house, 30 ft. high, etc. W. A. Fuller, 1971 Ry. Exch. Bldg., St. Louis, Mo., engrs. Noted Dec. 1.

Wis., Appleton Junction (Appleton P. O.)—Trass Candy Co., 865 College Ave., having plans prepared by E. F. Miller, archt., First Natl. Bank Bldg., Appleton, 1 story and basement, 40 x 120 ft. factory and warehouse, brick, tile and concrete, plain foundation. $40,000.

Wis., Granville — Rauschenberger Tire Co., Akron, O., plans 3 story and basement, 150 x 175 ft., brick and concrete factory, plain foundation, here. $150,000. Architect not selected.

Wis., Horicon—Allen-Spiegel Shoe Co., Belgium, plans 3 story, 60 x 150 ft., brick, rein.-con. and steel factory, plain foundation, here. E. W. Allen, mgr. Architect not selected.

Wis., Marinette — C. Anderson & Sons Co., Cook and Merryman Sts., having plans prepared for 2 story, 50 x 75 ft., brick, rein.-con. and steel factory, plain foundation. $75,000. Private plans.

Wis., Neenah—Valley Paper Mills, 145 West Wisconsin Ave., had plans prepared by E. A. Wettengel, archt., 578 Pierce Ave., Appleton, 1 and 2 story and basement, 80 x 627 ft. mill and 112 x 144 ft. warehouse, brick and steel, plain foundation. See Miscellaneous under "Contracts Awarded."

Wis., Plymouth—Phenix Cheese Co. having plans prepared by Singer-Perlstein Co., archts., 9 South Clinton St., Chicago, 5 story, 30 x 60 ft., brick, rein.-con. and steel factory incl. separate boiler house. $60,000. Noted Dept. 7.

Wis., West Bend—Amer. Service & Storage Garage, c/o M. A. Johannes, having plans prepared by L. Hunt, archt., 445 Milwaukee St., Milwaukee, 2 story, 60 x 80 ft., brick and concrete garage, plain foundation. $40,000.

Mo., St. Louis — Atlas Tack Co., Fairhaven, Mass., had plans prepared by Widmer Eng. Co., archts. and engrs., Laclede Gas Bldg., tack plant, incl. 1 story, 203 x 503 ft. main building with 2 story, 25 x 203 ft. slow combustion office, 30 x 67 ft. and 30 x 187 ft. storage sheds and 20 x 30 ft. transformer house, all concrete and steel, plain foundations, Union and Geraldine Aves., here.

Ark., Ft. Smith—O. K. Transfer & Storage Co. having plans prepared by Moores & Dunford, archts. and engrs., 38 South Dearborn St., Chicago, 4 story, 60 x 125 ft. concrete warehouse. $200,000.

Tex., Houston—See "Miscellaneous."

Wash., Yakima—Northern Pacific R.R., 5th and Jackson Sts., St. Paul, Minn., purchased land on south end of town, here, adjoining its tracks, and plans trackage and warehouses. H. E. Stevens, St. Paul, ch. engr.

Calif., Stockton—H. S. Dawson, c/o G. Allen, archt., 37 South Aurora St., having plans prepared 3 story, concrete garage, North California and Oak Sts. $50,000.

Calif., Taft—Cottage Laundry, 322 Main St., plans 1 and 2 story, brick laundry, Main St. $50,000. Architect not selected.

Calif., Tracy—General Milk Co. of California, c/o A. J. Mazurette, archt., 1002 H St., Modesto, soon takes bids rein.-con. condensary plant. $75,000. Noted March 16.

Ont., Delhi—J. E. Stedelbauer plans to rebuild garage and repair shop recently destroyed by fire. $40,000.

Ont., Hanover—Peninsular Cord Tire Co., preparing plans for new plant here. $100,000. Prices wanted on special tire and rubber equipment. W. A. Oakley, mgr.

Ont., London—Corrugated Carton Co., York and Glenbe Sts., having plans prepared new factory. $60,000.

Ont., Niagara Falls—Cameron Motor Co., Cleveland, O., (street address not available), plans factory here.

Ont., St. Thomas—Plans to vote on $100,000 bonds Dec. 1, for improving and extending gas plant. W. Miller, city engr.

Ont., Tillsonburg—Lorne Tractors, Ltd., St. Thomas, plans plant here. $100,000.

BIDS DESIRED

N. J., Atlantic City—S. Abrahamson, archt., 2313 Walnut St., Phila., taking bids 2 story and basement, 85 x 175 ft., rein.-con. and brick, plain foundation, here, for Fleck Bros., 44 North 5th St., Phila. $50,000.

Pa., Jacobs Creek — U. S. A. Drug & Chemical Co. taking bids 3 story, 72 x 120 ft. concrete and brick factory. $150,000. P. Rossello, 406 Congress Bldg., Detroit, Mich., archt.

Pa., Kane—Sakura Soap Co. will build 1 story, 45 x 126 ft. brick and steel addition to factory. Work will be done by separate contracts. E. A. Phillips, Warren Trust Bldg., Warren, archt.

Pa., Oakmont—Mills, Rhines, Bellman & Nordhoff, archts., 1234 Ohio Bldg., Toledo, O., taking bids 2 story and basement, 74 x 94 x 157 x 158 ft. factory here, for Valve Bag Co. of America, 3444 Summit Ave., Toledo, O.

Pa., Phila.—C. Wunder, archt., 1415 Locust St., taking bids 2 story, 60 x 144 ft. rein.-con., brick and steel factory, plain foundation, Torresdale Ave. and Van Dyke St., for Humphreys & Co., Front and Tusculum Sts.

Pa., Phila.—Nov. 1, by A. A. Zimmerman, archt., 85 9th Ave., New York City, 8 story, 150 x 256 ft. rein.-con., brick and steel bakery, Broad St. and Glenwood Ave., here, for Natl. Biscuit Co., $500,000.

Pa., Pittsburgh—J. E. Dwyer, archt., Forbes Murray Bldg., will build and award separate contracts for 1 story, 100 x 400 ft. mill, 56th and Butler Sts., for Hanlon Gregory Galvanizing Co., 24th St. $100,000. Noted Sept. 28.

Pa., Washington—Hazel Atlas Glass Co., South Main St., will build 3 story, 44 x 79 ft. machine shop. $50,000. Work will be done by separate contract. L. Mehary, c/o owner, engr.

Pa., Youngwood—Robertshaw Mfg. Co. taking bids 1 story, 30 x 65 ft. and 110 x 130 ft. foundry and machine shop. Amer. City Eng. Co., Peoples Bank Bldg., Pittsburgh, archts.

W. Va., Huntington—R. L. Day, archt., 1st Natl. Bank Bldg., receiving bids 1 story, 108 x 210 ft., brick and steel addition to stamping plant, for Armstrong Mfg. Co.

N. C., Morganton—See "Buildings."

Ind., Auburn—See "Waterworks."

Ill., Chicago—A. S. Alschuler, archt., 28 East Jackson Blvd., receiving bids 3 story, 100 x 300 ft. factory, rein.-con., brick and steel, Kinzie and Cicero Sts., for E. J. Brach & Sons, 215 West Ohio St. $1,000,000. Noted Aug. 31.

Ill., Chicago—A. S, Alschuler, archt., 28 East Jackson Blvd., receiving bids 3 story, 105 x 125 ft. factory, rein.-con., brick and steel, Congress and Laflin Sts., for F. T. Hoyt, c/o architect. $250,000.

Ill., Chicago—Kocher & Larson, archts., 6250 South Halsted St, receiving bids 1 and 2 story, 36 x 146 ft. factory addition, rein.-con., brick and steel, 2734 West 36th St., for Advance Fdry. and Pattern Co., 2734 West 36th St. $50,000.

Ill., Marshall—Nov. 9, by Mayor and City Council, new power house, 2 A. C. generators direct connected to uniflow engines, switchboard, 2 boilers, piping, chimney, moving and resetting 1 fire tube boiler, etc.; furnishing and installing ice making machinery, 15 ton per diem capacity, distilled water ice plant and erecting ice plant building complete, etc. F. L. Wilcox, Chemical Bldg., St. Louis, Mo., engr. Noted Sept. 14.

Calif., San Francisco—Simon Bros., 150 Townsend St., receiving bids 2 story and basement, 86 x 250 ft. rein.-con. warehouse, Townsend St. $60,000. H. C. Baumann, 251 Kearny St., archt.

CONTRACTS AWARDED

Me., Portland—Clough & Maxim, Fidelity Bldg., will build 1 story, 55 x 200 ft. service station, brick, plain foundation, Forest Ave., by day labor. $40,000. Porr & Thomas, Brown Bldg., archts. Wright Moses Motor Co., 122 High St., lessee.

Mass., Allston (Boston P. O.)—Atlantic Refining Co., 248 Boylston St., Boston, 2 story, 100 x 200 ft. warehouse and plant, rein.-con., brick and terra cotta, plain foundation, Cambridge St., to Metzger, Fisher & White, Otis Bldg., Phila. Archts. est. $85,000.

Mass., Cambridge—J. Shapiro & Son, 27 School St., Boston, will build 6 story, 84 x 133 ft. storage warehouse, rein.-con. and brick, wood pile foundation, Charles River Rd., here, by day labor. $100,000. F. A. Norcross, 46 Cornhill, Boston, archt.

Mass., Fall River—Bd. Water Comrs., 2 story, 30 x 145 ft. machine shop, brick and concrete, plain foundation, Bedford St., to Greany & Sherry, 57 North Main St. Archts. est. $40,000.

Mass., Gardner—G. E. O'Hearn, 32 Oak St., 1 story, 50 x 210 ft. plant, brick and concrete, plain foundation, Parker St., to J. Garneau, 385 Main St. Archts. est. $40,000.

Mass., Lowell—Boott Mills, Armory St., will build 1 story hydro-electric generating plant, brick and concrete, plain foundation, by day labor, under supervision of A. P. Saffor, archt. and engr., 66 Bway.

Mass., Somerville (Boston P. O.)—Boston Elevated R.R., 108 Massachusetts Ave., 3 story, 41 x 120 ft., rein.-con. storehouse, here, to Natl. Eng. Co., 60 Federal St., Boston. Archts. est. $60,000.

R. I., Pawtucket—Prescott Corp., North Main and Bates Sts., 1 story and basement, 75 x 120 ft mill addition, brick and timber, plain foundation, North Main St., to Rowley Constr. Co., 260 Central St. Archts. est $40,000.

R. I., Providence—Hope St. Garage Co., Inc., 825 Hope St., 1 story garage and service station, brick, steel and concrete, 4th and Hope Sts., to Pawtucket Builders' Finish Co., Pawtucket. Archts. est. $50,000. Noted Sept. 21.

Conn., Danbury—Ball and Roller Bearing Co., 22 Maple Ave., 2 story, 22 ft. high, 50 x 114 ft. factory addition, brick and steel, Maple Ave. and Crosby St., to L. F. Sweeney, 26 Montgomery St. Archts. est. $40,000.

Conn., Naugatuck—Goodyear India Rubber Glove Co., 58 Maple St., 3 story and basement, 60 x 110 ft. factory addition, brick and steel, plain foundation, to McNally Bldg. Co., 41 Concord St., Framingham, Mass. Archts. est. $75,000.

Conn., Norwalk—C. J. Minty, 92 Washington St., South Norwalk, 1 story, 14 ft. high, 85 x 140 ft. garage, show rooms and service station, brick and steel, plain foundation, West Ave., here, to Mattiello & Lasprogato, 62 Meadow St., South Norwalk. Archts. est. $40,000.

Conn., Waterford—J. and G. H. Bathgate, Jordan Mills, 2 story and basement, 40 x 141 ft. mill addition, brick and timber, plain foundation, to H. Wales Lines Co., 134 State St., Meriden. Archts. est $50,000.

N. Y., Mt. Kisco—Westchester Lighting Co., 1st Ave., Mt. Vernon, 1 story, auto service and repair shop, brick and steel, plain foundation, here, to H. Wales Lines Co., 134 State St., Meriden, Conn. Archts. est. $50,000.

N. Y., Brooklyn—Brooklyn Daily Eagle, Eagle Bldg., 6 story, 83 x 111 ft., publishing building, rein.-con. and steel, concrete pile foundation, Adams and Johnson Sts., to Turner Constr. Co., 244 Madison Ave., New York.

N. Y., New York—J. Stahl & Sons, 4761 White Plains Ave., 5 story, 50 x 100 ft., furniture storage warehouse, rein.-con. and steel, plain foundation, White Plains Rd. and 242nd St., to Barney-Ahlers, 110 West 40th St. Archts. est. $60,000.

N. Y., Perry—Fanning Co., Inc., 1,800 ton ice plant, to W. A. Austin, Perry.

N. Y., Yonkers—A. Smith & Sons, Elm Ave., 4 story, 130 x 136 ft. spinning mill and 2 story, 50 x 150 ft. yarn storage building, both rein.-con., also 1 story, 75 x 200 ft. waste storage building, and 1 story, 30 x 60 ft. dye house, both brick and steel, to Barney-Ahlers Constr. Corp., 110 West 40th St. Archts. est. $300,000.

Pa., Butler—Rieck McJunkin Dairy Co., Forbes St., Pittsburgh, will build 2 and 3 story top addition to garage and warehouse, brick and concrete block, McKean and Wayne Sts., by day labor. $60,000. A. Daniels, c/o owner, engr. Noted June 29.

Pa., Clairton—Carnegie Steel Co., Carnegie Bldg., Pittsburgh, addition to byproduct coke plant, here, to Koppers Co., Farmers Bank Bldg., Pittsburgh. Engrs. est. $2,000,000.

Pa., Enola—See "Pitcairn."

Pa., McKees Rocks—Chesebrough Mfg. Co., 17 State St., New York City, 2 story and basement, 106 x 143 x 190 x 195 ft. finishing building, brick, 1 and 2 story, 31 x 103 ft. tank house, 1 story, 36 x 39 ft. brick and corrugated siding boiler house, to H. Shenk Co., Century Bldg., Pittsburgh. $200,000. Noted Sept 28.

Industrial Works (Continued)

Pa., Oil City—Oil City Boiler Wks., 351 Seneca St., 1 story, 60 ft. high, 60 x 75 ft. factory addition, brick and steel, Seneca St., to L. O. Boquin, 710 West Front St.

Pa., Phila.—J. T. Hoekstra, archt., 1713 Sansom St., 1 story, 96 x 182 ft. rein.-con. and brick plant, 10th and Windrim Sts., to Monaghan & Losse, 3016 Chestnut St., for Logan Ice Co., 10th and Windrim Sts. Noted Aug. 31.

Pa., Phila.—Standard Provision Co., 3 story, 70 x 160 ft. rein.-con., brick and steel packing plant, plain foundation, Callowhill and Willow Sts., to G. Kessler Constr. Co., 1733 North Marvune St., $120,000. Noted Aug. 24.

Pa., Phila.—See "Buildings."

Pa., Pittsburgh—P. H. Butler Co., 17th and Pike Sts., 4 story and basement, 67 x 110 ft. addition to warehouse, 17th and Pike Sts., to Hughes-Foulkrod Co., Oliver Bldg. Archts. est. $150,000.

Pa., Pitcairn—Pennsylvania R.R., Broad St. Sta., Phila., following buildings and repair shops, here: 100 x 620 ft., 16 x 31 ft., 16 x 61 ft., 100 x 424 ft., 42 x 202 ft., 13 x 25 ft. oil house, also buildings and repair shops in Enola, 100 x 620 ft, 16 x 31 ft., 16 x 61 ft., 100 x 424 ft., 42 x 202 ft., all 1 story, rein.-con., to W. N. Sutherland Constr. Co., Syndicate Trust Bldg., St. Louis, Mo. Noted Sept. 28.

Pa., Pittsburgh—R. W. Hinkle, 601 Foreland St., and Buettner Bros., 3271 East St., 1 story and basement, 30 x 110 ft. garage, 21-23 Foreland St., to Good Constr. Co., State Theatre Bldg. Archts. est. $40,000.

Pa., Reading — Central Abattoir Co., Chestnut St., 3 story packing plant, rein.-con. and brick, plain foundation, to Fink Constr. Co., 658 Penn St. Archts. est. $175,000. Noted July 20.

D. C., Wash. — N. Auth Provision Co., 623 D St., S. W., alterations and additions to packing plant, to A. L. Smith Co., Woodward Bldg., $74,950.

D. C., Wash.—Lambert Hudson Motors Co., 1212 Connecticut Ave., service station on 22nd and M Sts., to Parson & Human, 816 14th St., $150,000.

W. Va., Clarksburg — Clarksburg Exponent Publishing Co., 2 story and basement, 62 x 150 ft., printing plant, Hewes St., to F. L. Grant, Lowndes Bldg., on percentage basis. Archts. est. $50,000.

W. Va., Wellsburg—Hammond Bag & Paper Co., Box 467, 1 story, 125 x 350 ft., rein.-con., brick and steel paper mill, to R. R. Kitchen Co., Natl. Bank Bldg., Wheeling. Noted June 22.

W. Va., Wheeling—Interstate Oxygen Co., 1 story, 100 x 150 ft., oxygen factory, tile, 44th and Eoff Sts., to H. L. Searight, 44th St. Engrs. est. $50,000.

W. Va., Wheeling—Wheeling Box Co., 3007 Chapline St., will build 2 story, 40 x 175 ft., addition to factory, by day labor. Private plans.

O., Canton—Natl. Pressed Gear Co., Crane Bldg., 1½ story, 50 x 175 ft. factory, Allen Ave. S. E. and along tracks of Baltimore & Ohio R.R., to H. J. Eberman, Renkert Bldg. Archts. est. $200,000.

O., Cleveland—Mechanical Rubber Co., c/o A. C. Kingston, mgr., foot of Lisbon Rd., 3 story and basement, 40 x 50 ft. brick and steel factory, Lisbon Rd., to Masters & Mullen Constr. Co., Electric Bldg. Archts. est. $40,000.

O., Cleveland—R. and L. Baker Co., c/o E. Stahl, 2180 West 25th St., 1 story. 36 x 48 ft. kiln building and 1 story, 69 x 112 ft .factory addition, brick and steel, to H. G. Slatmyer & Son Constr. Co., 203 Lakeside Ave. Archts. est. $60,000.

O., Cleveland — Gabriel Mfg. Co., 1401 East 40th St., 2 story, 60 x 160 ft., brick and rein.-con. factory addition, to S. W. Emerson Co., 1836 Euclid Ave. Archts. est. $60,000.

Ind., Elkhart — Curtain Supply Co., 1 story, 172 x 400 ft. factory, concrete black and steel, to Elkhart Realty & Housing Corp., Elkhart. Archts. est. $100,000. Noted Oct. 12.

Ind., Ft. Wayne—Wayne Tank & Pump Co., Anthony Hotel, 1 story, brick and steel factory addition, to Austin Co., 208 South La Salle St., Chicago. Archts. est. $40,000. Noted Oct. 12.

Ind., Indianapolis — Jackson Realty Co., Murphy Bldg., 6 story and basement, 120 x 195 ft. warehouse, brick and concrete, to R. W. Bauman, 3345 Central Ave. Archts. est. $400,000.

Ind., Bedford—Indiana Quarries Co., 1 story, 400 x 600 ft. mill, rein.-con., brick and stone, to Indiana Bridge Co., Macedonia Ave. and East 12th St., Muncie. Archts. est. $400,000.

Mich., Detroit—Gray Motor Co., Mack Ave., 1 story, 200 x 550 ft. rein.-con., brick and steel factory, plain foundation, Mack Ave., to J. Finn & Son, 7720 Plymouth Rd. Engrs. est. $200,000.

Ill., Chicago—Valentine-Seaver Co., 1721 Sedgewick St., 4 story, 103 x 171 x 272 ft. factory, rein.-con., brick and steel, Greenview and Wrightwood Aves., to Salmon-Waterton Co., 230 East Ohio St. Archts. est. $400,000. Noted Oct. 12.

Wis., Appleton — P. Radamacher, 801 Superior St., will build 1 story, part basement, 32 x 120 ft., brick and concrete garage, plain foundation, Superior St., by day labor. $40,000. Private plans.

Wis., Burlington — J. Alby & Son will build 2 story 30 x 80 ft., brick and concrete garage, plain foundation, by day labor. $40,000. M. White, 68 Wisconsin St., Milwaukee, archt.

Wis., Clyman — Reeseville Canning Co., Reeseville, will build 1 story, 79 x 162 ft., brick and timber, warehouse, concrete foundation, 1 story, 70 x 120 ft. timber machine room, concrete foundation, 1 story, 64 x 90 ft., brick and concrete, boiler house, concrete foundation; also miscellaneous sheds, here, by day labor. $75,000. Private plans.

Wis., Eau Claire—Garton Bros. Co., 227 Chestnut St., 1 story, 50 x 100 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation, Madison St., to H. B. Knickerbocker, 726 Babcock St. Engrs. est. $40,000.

Wis., Green Bay — Fairmont Creamery Co., 200 North Bway., 2 story, 100 x 105 ft. dairy, incl. power-boiler house, brick, rein.-con. and steel, plain foundation, to L. M. Hansen & Co., 113 West Walnut St. Engrs. est. $60,000. Noted Oct. 5.

Wis., Green Bay—Ft. Howard Paper Co., South State St., 3 story, 100 x 140 ft., brick, rein.-con. and steel plant, plain foundation, to H. J. Selmer Co., McCartney Bldg. Engrs. est. $100,000. Noted Aug. 31.

Wis., Milton—Burdick Cabinet Co., general contract, 1 story, 80 x 160 ft. addition to factory, brick, concrete and steel, plain foundation, to N. S. Lowther, Milton; structural steel to Lakeside Bridge & Steel Co., North Milwaukee. Engrs. est. $45,000.

Wis., Milwaukee—Harley-Davidson Motor Co., 3732 Chestnut St., general contract 1 story, 74 x 128 ft., brick and concrete addition to factory, to E. S. Steigerwald Co., 3602 Vliet St. Archts. est. $40,000.

Wis., Montfort—O. Yerke will build 1 story, 50 x 60 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, by day labor. $40,000. Private plans.

Wis., Park Falls—Flambeau Paper Co., 2 story, 50 x 95 ft., brick, rein.-con. and steel mill, plan foundation, to C. R. Meyer & Sons Co., 50 State St., Oshkosh. Engrs. est. $100,000.

Wis., South Milwaukee—Burnham Bros. Brick Co., 68 Wisconsin St., Milwaukee, 1 story, 85 x 100 ft., dryer plant, brick and concrete, plain foundation, Chicago Rd., to Meredith Bros. Co., 1043 Kinnickinnic Ave., Milwaukee.

Wis., Stevens Point—Stevens Point Cleaning & Dye Co., 446 Clark St., 2 story, 70 x 90 ft., cleaning and dyeing factory, brick, rein.-con. and steel, plain foundation, to Immel Constr. Co., 200 North Main St., Fond du Lac. $50,000.

Wis., Waukesha—Lux Fibre Furniture Co., 821 Meadow St., will build 1 story, 50 x 90 ft., brick, rein.-con. and steel power plant, by day labor. $40,000. Private plans.

Ia., Davenport—Kohrs Packing Co., 1343 West 2nd St., general contract 2 story and basement, 64 x 71 ft. ice-house, brick and concrete, to Priester Constr. Co., 1006 Kahl Bldg. Archts. est. $50,000.

N. D., Jamestown—Northern Pacific Ry. Co., 5th and Jackson Sts., St. Paul, Minn., remodeling and building addition to brick roundhouse, to have fifteen 100 ft. and five 116 ft. stalls, also 2 story and basement, 40 x 80 ft. concrete and brick warehouse, general contract to N. W. and W. A. Nelson, 260 Temple Court, Minneapolis, $150,000. Owner furnished ceemnt and steel, bringing total cost up to $250,000.

Calif., Oakland—Chevrolet Motor Car Co., Foothill Blvd. and 69th Ave., 2 story, brick and steel, factory and loading platform, to Dinwiddie Constr. Co., Crocker Bldg., San Francisco, $300,000. Noted Oct. 12.

Ont., London—See "Buildings."

Buildings

PROPOSED WORK

Mass., Boston—High School—Schoolhouse Dept. having plans prepared by McLaughlin & Burr, archts., 88 Tremont St., high school in Dunbar Ave. district. To exceed $1,000,000.

Mass., Boston — Police Station — Public Bldg. Dept., City Hall, had plans prepared and takes bids in November, 10 story, 65 x 90 ft., brick, steel and stone. Milk St. $500,000. J. Purdon, 8 Beacon St., archt. B. Brown, 88 Broad St., engr.

Mass., Framingham—School—Town having plans prepared by C. M. Baker, archt., 25 Arch St, Boston, 2 story and basement, 60 x 184 ft. brick, Waverly Terrace. $150,000.

Mass., Gloucester—See "Miscellaneous."

Mass., Somerville (Boston P. O.) — M. Barron, chn. Bd. Dirs. Y.M.C.A., having plans prepared by W. Atherton, archt., 15 Exchange St., Boston, and takes bids about December, 6 story, rein.-con. and brick, Highland Ave. $165,000.

Mass., Springfield—School—City having plans prepared by M. W. Maloney, archt., 145 Chestunt St., 2 story, brick, Indian Orchard. $200,000. G. M. Foss, City Hall, Chn. School Bd. Noted April 20.

Mass., Winchester—School—Town plans elementary school, Rumford Dist. $150,000. C. G. Soring, 7 Water St., Boston, archt. Noted March 9.

R. I., Providence—Dormitory and Club House—Brown University, Prospect St., plans brick, steel and stone. $750,000.

R. I., Providence—Library—Dept. Public Bldgs., plans 3 story and basement, steel, brick and stone addition, plain foundation, Fountain and Empire Sts. $400,000. Clarke & Howe, 1208 Turk's Head Bldg., archts.

R. I., Providence—School—Public Building Dept., City Hall, plans 2 story and basement. $300,000.

Conn., Hartford—Office—Aetna Life Insurance Co., 650 Main St., having plans prepared by J. G. Rogers, archt., 367 Lexington Ave., New York City, brick, steel and rein.-con., Farmington Ave. $3,000,000.

N. Y., Brooklyn—Hospital—State Hospital Comn., Albany, having sketches made by L. F. Pilcher, archt. and engr., Capitol Bldg., Albany, brick, steel and stone addition, plain foundation, here. $2,000,000.

N. Y., Brooklyn—Hospital—Sterling Private Hospital, c/o Timmis & Chapan, archts. and engrs., 315 5th Ave., New York, having preliminary plans prepared 4 story, 100 x 100 ft., brick, steel and stone, plain foundation, St. Johns Pl., here. $250,000.

N. Y., Buffalo—Office—Colson-Hudson, archts., Dun Bldg., preparing plans and takes bids about Jan. 2, 12 story, 160 ft. high, 43 x 133 ft., steel, brick and terra cotta, Washington St., for Holling Press, 498 Washington St. $600,000.

N. Y., Elmira—Store—S. F. Iszard Co., Baldwin and Water Sts., plans 5 story, 75 x 160 ft., brick and steel, Main and Market Sts. $350,000. Architect not selected.

N. Y., Fredonia—Church—First Methodist Church plans new edifice. $150,000. S. L. Maxwell, pastor. Architect not selected.

N. Y., Hamburg—High School—Bd. Educ. having preliminary plans prepared by F. Spangenburg, archt., c/o owner, new brick high school. $200,000. Noted May 25.

N. Y., Hillcrest (Jamaica P. O.)—Club Hotel—Hillcrest Hotel Corp., c/o McKim, Mead & White, archts., 101 Park Ave., New York, having sketches made brick, steel and stone, plain foundation, here. $1,500,000.

N. Y., New York — Office — Independent Fruit Auction Corp., c/o R. T. Short, archt. and engr., 370 Macon St., Brooklyn, soon takes bids 4 story, 75 x 75 ft., brick, steel and stone, plain foundation, 64 Harrison St., here. $150,000.

Buildings (Continued)

N. Y., New York — Temple — Mecca Temple A. A. N. O. M. S., 105 West 45th St., soon lets contract 10 story, brick, steel and stone, plain foundation, West 55th St. $1,000,000. H. P. Knowles, 21 West 49th St., archt. and engr. Noted May 11.

N. Y., Patchogue—Theatre—M. Glynne, Astoria Theatre, Steinway and Grand Aves., Astoria, plans brick, steel and stone, plain foundation, here. $200,000. Architect not selected.

N. J., Atlantic City — Bank — Equitable Trust Co., 2024 Atlantic St., having plans prepared by McLanaham & Benckert, archts., Bellevue Court Bldg., Phila., 2 story and basement, 48 x 96 ft., granite and limestone. $500,000.

N. J., Bordentown—High School—Bd. Educ. plans high school. $150,000. F. T. Buchanan, pres.

N. J., Passaic—School and Recreation—Holy Rosary Church having plans prepared by H. F. Ludorf, archt., Mutual Bldg., New Britain, Conn., 2 story and basement, brick and concrete, Wall St. $250,000. J. Kruczak, pastor.

N. J., Woodbury—County—Gloucester Co. having plans prepared by C. R. Peddle, archt., 136 South 4th St., Phila., 3 story and basement, 97 x 117 ft., brick, rein.-con. and steel, plain foundation. $200,000.

Pa., Altoona—Cathedral—Cathedral of Blessed Sacrament, c/o J. J. McCort, pastor, having plans prepared by G. I. Lovatt, archt., 420 Walnut St., Phila., 200 x 200 ft. stone, 14th Ave. and 13th St. $1,000,000.

Pa., Beallsville—Clubhouse—Memacolin Country Club, c/o A. L. Rowell, secy., having plans prepared by W. L. Stoddard, archt., 9 East 40th St., New York, 2 story and basement. $150,000.

Pa., Beaver Falls—High School—Bd. Educ. having plans prepared by Carlisle & Sharrer, archts., Jenkins Arcade Bldg., Pittsburgh, 2 story and basement, 68 x 129 ft. addition, brick and hollow tile. $150,000.

Pa., Freeport—High School—Bd. Educ. having plans prepared by W. G. Eckles Co., archts., Lawrence Savings & Trust Bldg., New Castle, 2 story and basement, 120 x 300 ft., brick, incl. auditorium and gymnasium, 4th St. near Buffalo St. $200,000.

Pa., Phila.—Bank—Oak Lane State Bank, c/o J. M. Holmes, 6743 Oak Lane, having plans prepared by McLanahan & Beneckert, archts., Bellevue Court Bldg., and soon takes bids 1 story and basement, Broad St. and 67th Ave. $250,000.

Pa., Phila.—Church—Lawnsdale Presbyterian Church soon takes bids 1 story and basement, 85 x 100 ft. brick, steel and stone, plain foundation, Lawnsdale Ave. $300,000. Lackman & Murphy, Drexel Bldg., archts.

Pa., Tarrs—High School—East Huntingdon Twp. Bd. Educ., c/o O. Taylor, Scottdale, having plans prepared by H. C. Frank, archt., 2nd Natl. Bank Bldg., Connellsville, 2 story and basement, 60 x 132 ft. rein.-con., brick and steel. $150,000.

Pa., Wilkinsburg—Apartment Hotel—Wilkinsburg-Plaza Hotel Corp., c/o A. A. Rockoff, 323 South Ave., soon takes bids 9 story, brick, steel and stone, plain foundation. $2,500,000. B. W. Leviton, 7 West 45th St., New York City, archt. and engr. Noted Aug. 10.

Md., Bay Ridge—Hotel—Bay Ridge Hotel Co., plans 2 story, cut stone and timber. $220,000. Dreher, Churchman & Paul, Otis Bldg., Phila., archts.

D. C., Wash.—High School—Dist. Comrs., 509 Dist. Bldg., having plans prepared for extension to Western High School, $350,000.

D. C., Wash.—Junior High Schools—Dist. Comrs., 509 Dist. Bldg. soon receive bids 2 junior high schools. $800,000.

D. C., Wash.—Theatre—H. Crandell, 934 F St., N. W., having plans prepared by T. W. Lamb, archt., 644 5th Ave., New York City, for theatre, here. $500,000.

Ala., University—College—University of Alabama conducting campaign to raise $1,000,000 for new equipment, erecting library, chemistry buildings and various other structures. G. J. Davis, Jr., dean.

Tenn., Memphis—Club—B. P. O. E. plan club near present building on Jefferson St. $200,000. I. D. Block, 1856 Autumn St., and J. H. Moselage, 188 Dudley St., et al., trustees in charge of preliminaries.

Tenn., Nashville — Apartment — Glenn Court Realty Co. soon takes bids 3 story, containing 24 apartments, brick and concrete, Bellemeade Park. $225,000. Marr & Holman, Stahlman Bldg., archts.

O., Cincinnati—Office—Rendigs, Panzer & Martin, archts. and engrs., 609 Lincoln Inn Court, soon let contract 7 story, 90 x 110 x 124 ft., rein.-con. and brick, plain foundation, Court and Vine Sts., for Railway Brotherhood, 2nd Natl. Bank Bldg. $250,000.

O., Cincinnati—Office—Union Savings Bank & Trust Co., Union Trust Bldg., had sketches made by Rendigs, Panzer & Martin, archts. and engrs., 609 Lincoln Inn Court, 10 story and basement, 2 courts, 100 x 130 x 200 ft., rein.-con. and brick, plain concrete foundation, Court and Main Sts. $500,000.

O., Dayton—Apartment—T. Horobin, 59 Pioneer St., plans 6 story, 60 x 300 ft., brick and rein.-con., incl. underground garages, etc., Forest Ave. $800,000. Private plans.

O., Dayton—Office—Carpenters' Union plans 5 story, 74 x 130 ft., brick and concrete, South Wilkinson St. $150,000. K. Koehly, secy. Architect not selected.

O., Hyde Park (Cincinnati P. O.)—School—P. J.Hynes, pastor of St. Mary's Catholic Church Congregation, Erie Ave. and Shady Lane, soon lets contract 2 and 3 story, 70 x 215 ft., brick, plain concrete foundation, Erie Ave. near Shady Lane. $180,000. H. W. Germann, Schwind Bldg., Dayton, archt. and engr.

O., Lakewood (Cleveland, P. O.)—Apartment—J. F. Mullholland, Leader News Bldg., Cleveland, is interested in company being formed, and plans 6 story, H. shaped, brick, steel and concrete, 11,834 Edgewater Dr., here. $500,000. Architect's name withheld.

O., Lakewood (Cleveland, P. O.)—Store and Apartment—Lessovitz & Fishman, 2673 East 53rd St., Cleveland, having plans prepared by M. Altschuld, archt., 5116 Woodland Ave., Cleveland, 2 story, 100 x 110 ft., brick and timber, plain foundation, Madison and Baxterly Rds., here. $150,000.

O., Marion—Bank and Office—Citizens Building & Loan Co. having plans prepared by W. E. Russ, archt., Meridian Life Bldg., Indianapolis, 8 story and basement, 61 x 132 ft., brick and steel. $500,000.

O., Oakwood (Dayton, P. O.) — High School—Bd. Educ. plans election to vote on $350,000 bonds for 3 story and basement, brick and rein.-con. Architect not selected.

O., Portsmouth—Temple—Masonic Temple Building Com., having plans prepared by Pretzinger & Musselman, archts., 1155 Reibold Bldg., Dayton, 2 and 3 story, brick, stone and concrete, Gallia St. $300,000. G. E. Carlyle, chn.

O., Tawawa Spring (near Zenia)—University—Wilberface University, plans rebuilding Shorter Hall, 4 story and basement, brick and concrete, destroyed by fire. $300,000. D. Reibel, Columbus (street address not available), archt.

O., Warren — Hospital — Trumbull Co. plans new tuberculosis hospital. $150,000. R. Keich, Warren, archt.

Indiana—Home—Knights of Pythias of Indiana, Pythian Bldg., Indianapolis, plan home for aged, brick. Site not selected. $300,000. Architect not selected.

Ind., Greenfield—Memorial—Comrs. Hancock Co. plan 2 story and basement, brick. $150,000. McGuire & Shook, Pythian Bldg., Indianapolis, archts.

Ind., Indianapolis—Bank and Office—Meyer-Keyser Bank, 136 East Washington St., having revised plans prepared by Vonnegut, Bohn & Mueller, archts., Indiana Trust Bldg., 7 story and basement, 87 x 197 ft., rein.-con., brick and steel, side addition, East Washington St. $500,000. Noted July 20.

Ind., Indianapolis—Market—Indianapolis Growers' Cooperative Asso., 758 Lemcke Annex, having sketches made by W. E. Russ, archt., Meridian Life Bldg., brick. $200,000.

Ind., Plymouth—High School—School Bd. having revised plans prepared by E. Young, archt., South Bend, 2 story and basement, 163 x 179 ft., brick, stone and steel. $300,000. Noted Aug. 10.

Ind., Terre Haute—High School—School Bd. plans 2 story and basement, brick. $200,000. Johnson, Miller & Miller, 30 North 5th St., Archts.

Mich., Detroit—Apartment—O. Kavieff, archt., 712 Empire Bldg., preparing plans 3 story and basement, 70 x 98 ft. brick, steel and stone, plain foundation, Blaine Ave. $150,000. Owner's name withheld.

Mich., Detroit—Apartment—C. D. Lundblad, archt., 214 New Telegraph Bldg., preparing plans 4 story and basement, 40 ft. high, 95 x 135 ft., brick, steel and stone, plain foundation, Woodward Ave. $250,000. Owner's name withheld.

Mich., Detroit—Clubhouse—Detroit Athletic Club, Madison Ave., plans 6 story, 140 x 150 ft. rein.-con., brick, steel and stone addition, John R. St. $500,000. Architect not selected.

Mich., Detroit—High School—University of Detroit, 630 East Jefferson Ave., plans 3 story, rein.-con., brick and steel, plain foundation, Seven Mile Rd., $300,000. Architect not selected.

Mich., Ironwood—High School—School Bd. receiving competitive sketches for 3 story, concrete, brick and tile, plain foundation. $700,000. Architect not selected.

Mich., St. Johns—High School—S. D. Butterworth, archt., Prudden Bldg., Lansing, takes bids about Nov. 10, 2 story and basement, 190 x 280 ft. rein.-con. and brick, plain foundation, Cass St., for Bd. Educ. $175,000. Election Oct. 24 to vote on proposition. Noted Sept. 28.

Mich., St. Johns—Hospital—Amer. Legion plans 2 or 3 story, brick and steel, plain foundation. $185,000.

Ill., Austin (Chicago P. O.)—Church—Greater Faith Presbyterian Congregation plans 1 story, 115 x 167 ft., rein.-con., brick and steel, North Pine Ave. and Augusta St. $150,000. S. M. Seator, 19 South La Salle St., Chicago, archt.

Ill., Chicago—High School—J. W. McCarthy, archt., 139 North Clark St., preparing plans and takes bids about Nov. 10, 3 story, rein.-con., brick and steel, 83rd and Aberdeen Sts., for Sisters of Mercy, 4928 Cottage Grove Ave. $400,000.

Ill., Evanston—Seminary—Western Theological Seminary c/o James Gamble Rogers, archt. and engr., 367 Lexington Ave., having preliminary sketches prepared brick, steel and stone, plain foundation, here. $350,000.

Wis., De Forest — High School — Bd. Educ., c/o Clerk, having plans prepared by E. Tough, archt., Conklin Bldg., Madison, 2 story, 60 x 120 ft., brick, rein.-con. and steel, plain foundation. $150,000.

Wis., Green Bay—Vocational School—Bd. Vocational Educ., 102 North Adams St., having plans prepared by Foeller, Schober & Stephenson, archts., Nicollet Bldg., 3 story and basement, 132 x 159 ft., brick, tile and concrete, plain foundation. $200,000. H. Stewart, dir.

Wis., Green Bay—Y. M. C. A.—Green Bay Y. M. C. A., c/o H. Joannes, 118 South Washington St., plans 6 story, brick, rein.-con. and steel, plain foundation. $350,000. Architect not selected.

Wis., Madison—Clinic—Jackson Clinic Co., 110 North Hamilton St., having plans prepared by F. H. Ellerbe, archt., 692 Endicott Bldg., St. Paul, Minn., 3 or 4 story, 75 x 200 ft., brick, rein.-con. and steel, plain foundation. Will also remodel present building. $250,000.

Wis., Viroqua—High School—Bd. Educ. having plans prepared by E. J. Hancock, archt., Laycock Bldg., Eau Claire, 3-4 story, brick, rein.-con. and steel, plain foundation. $150,000. C. F. Dahl, clk. Noted Sept. 28.

Ia., Cedar Rapids—Colliseum—American Legion and Chamber of Commerce, 1st Ave. and 2nd St., having plans prepard by B. Rugh, archt., 811 Security Bldg., 4 story and basement, 90 x 120 ft., rein.-con., brick, tile and stone. $250,000.

Ia., Ft. Dodge—Apartment and Store—T. G. Warden, Wahkonsa Hotel, takes bids in November, 8 story and basement, 100 x 140 x 150 ft., rein.-con., brick, tile and stone. $800,000. Damon, O'Meara & Hills, 1123 Merchants' Bank Bldg., St. Paul, Minn., and Ft. Dodge (street address not available), archts.

Minn., Mankato—School—State Bd. Control, Capitol, St. Paul, having plans prepared by C. H. Johnston, archt., 715 Capital Bank Bldg., St. Paul, 3 story and basement rein.-con., brick, tile and stone, addition, (2nd unit). Teachers' State College, here. $250,000. D. F. Mullen, St. Paul, secy.

Minn., Minneapolis—Apartment—Ambassador Holding Co., c/o W. A. Walters, 220 East 19th St., having plans prepared by L. B. Bersback, archt., 708 Oneida Bldg., 3 story and basement, 40 ft. high, 237 x 241 ft. with two courts 100 x 120 ft. and 65 x 120 ft., joist construction, brick, concrete and tile, 3rd Ave. S., near Franklin Ave. $750,000.

Minn., Minneapolis—Club and Office—Business Women's Club, M. M. Cheney, pres., c/o Minneapolis School of Arts, plans 6 to 12 story, rein.-con., brick and tile, 2nd Ave. S. and 8th St. $700,000. A. Rose, 1007 Builders' Exchange, archt.

Minn., Virginia—Lodge and Temple—E. L. Barrett, chn. building com. Knights of Columbus, plans and takes bids about Jan. 15, 3 story and basement 50 x 120 ft., rein.-con. and steel, brick faced, 3rd St. $150,000. Architect not selected.

Wyo., Casper—Hotel—W. W. Ahlschlager, Inc., archts., 65 East Huron St., Chicago,

AVERAGE ACCEPTED BID PRICES ON FEDERAL AID PROJECTS DURING JULY, 1922

Following is statement issued by U. S. Department of Agriculture, Bureau of Public Roads, Washington, D. C., showing average accepted bid prices on Federal Aid Projects during July. Prices are given for items and materials furnished in place on the project. Gravel bids are listed by square or cubic yards, depending on the specifications of the various states. Prices of items or materials showing state-furnished cement and bitumen, which was was not included in the total cost of the item are marked *.

Geographic Divisions and States	Surfacing										Steel				Cement Furnished By State	
	Gravel		Bituminous Macadam		Bituminous Concrete		Pl. Cement Concrete		Reinforced Cement Conc.		Reinforcing Bars		Structural			
	Sq.Yd.	Rate	Sq.Yd.	Rate	Sq.Yd.	Rate	Sq.Yd.	Rate	Sq.Yd.	Rate	Lb.	Rate	Lb.	Rate	Barrels	Rate
Totals for all states	207,886	$0.50	137,268	$1.64	217,491	$2.40	593,293	$2.09	961,502	$1.74	6,664,127	$0.04½	4,324,931	$0.08	252,416	$2.78
New England	630	1.30	86,730	1.41							31	0.10				
Maine																
New Hampshire																
Vermont											31	0.10				
Massachusetts	630	1.30	86,730	1.41												
Rhode Island																
Connecticut																
Middle Atlantic							27,397	1.36	185,755	1.71	1,393,750	0.03	1,171,800	0.12	155,570	3.09
New York							*27,257	1.36	*111,610	1.11	1,393,750	0.03	1,170,800	0.12	155,570	3.09
New Jersey							140	1.78	74,145	2.60			1,000	0.04		
Pennsylvania																
East North Central	72,158	0.48	50,538	2.00	41,555	2.34	328,906	1.89	706,608	1.66	1,548,077	0.04	579,310	0.06	30,365	1.60
Ohio			50,538	2.00			146,984	2.82	55,743	2.30	182,644	0.05	6,860	0.07		
Indiana																
Illinois							2,434	1.10	547,728	1.63	1,197,722	0.04	496,960	0.06		
Michigan	72,158	0.48			41,555	2.34	69,459	1.10	103,137	1.51	31,146	0.05	75,490	0.10	5	1.40
Wisconsin							110,029	1.18			136,565	0.03			30,360	1.60
West North Central	135,098	0.50			51,683	1.55	52,068	2.64	69,114	2.62	437,166	0.05	342,690	0.06		
Minnesota					16,761	2.16										
Iowa																
Missouri	135,098	0.50			34,922	1.25	52,068	2.64			92,334	0.05	154,370	0.07		
North Dakota											51,274	0.05	105,300	0.06		
South Dakota											139,601	0.04	83,020	0.07		
Nebraska																
Kansas									69,114	2.62	153,957	0.05				
South Atlantic					222,170	2.58	45,570	3.02			89,309	0.05				
Delaware																
Maryland																
Virginia																
West Virginia																
North Carolina					222,170	2.58	33,570	3.26			85,830	0.05				
South Carolina							12,000	2.34			3,479	0.04				
Georgia																
Florida																
East South Central					1,972	3.24					1,245,299	0.05	15,096	0.07		
Kentucky											15,488	0.04				
Tennessee											369,907	0.05	5,520	0.07		
Alabama					1,972	3.24					859,904	0.05	9,576	0.07		
Mississippi																
West South Central							8,739	2.65	25	2.52	987,532	0.05	272,400	0.07	59,045	2.62
Arkansas											32,700	0.05	97,400	0.07	48,000	2.55
Louisiana																
Oklahoma							8,739	2.65	25	2.52	459,310	0.05				
Texas											495,522	0.05	175,000	0.07	11,045	2.84
Mountain					111	2.50	118,015	2.21			241,163	0.08	43,635	0.06	1,152	3.17
Montana											20,933	0.07	37,300	0.06		
Idaho											3,205	0.09				
Wyoming																
Colorado					111	2.50	118,015	2.21			164,215	0.06	6,335	0.04		
New Mexico																
Arizona																
Utah											52,810	0.13			1,152	3.17
Nevada																
Pacific							12,600	1.83			721,800	0.05	1,900,000	0.08	6,284	2.94
Washington											210,000	0.06	1,900,000	0.08		
Oregon							12,600	1.83			495,500	0.05				
California											16,300	0.03			6,284	2.94

Buildings (Continued)

preparing plans rein.-con., brick and steel hotel, here. $750,000. Owner's name withheld.

Wyo., Cody—Hotel—W. W. Ahlschlager, Inc., archts., 65 East Huron St., Chicago, preparing plans rein.-con., brick and steel hotel, here. $750,000. Owner's name withheld.

Wyo., Sheridan—Hotel—W. W. Ahlschlager, Inc., archts., 65 East Huron St., Chicago, preparing plans rein.-con., brick and steel hotel, here. $750,000. Owner's name withheld.

Wyo., Thermopolis—Hotel—W. W. Ahlschlager, Inc., archts., 65 East Huron St., Chicago, preparing plans 5 story, rein.-con., brick and steel, here. $1,000,000. Owner's name withheld.

Mont., Billings—Hotel—W. W. Ahlschlager, Inc., archts., 65 East Huron St., Chicago, preparing plans rein.-con., brick and steel hotel, here. $750,000. Owner's name withheld.

Mo., St. Louis—High School—Bd. Educ., 9th and Locust Sts., having plans prepared by R. M. Milligan, archt. and engr., 506 Bd. Educ. Bldg., North Side High School, 3 story and basement, 410 x 410 ft., rein.-con. and brick, plain foundation, Natural Bridge Ave. from Vandeventer to Prairie Aves. $1,500,000.

Mo., St. Louis—Office—Famous Players Motion Picture Corp., c/o N. Frank, Arcade Bldg., having preliminary plans prepared by Hilfensteller, Hirsh & Watson, archts., 1003 Chemical Bldg., 12 story, 120 x 130 ft., Grand Blvd. and Lucas Ave. $800,000-$1,000,000.

Mo., St. Louis—Schools—Bd. Educ., 9th and Locust Sts., having preliminary plans prepared by R. M. Milligan, archt. and engr., 506 Bd. Educ. Bldg., 3 story, 95 x 220 ft., Penrose St. and North Kingshighway, $250,000, also 3 story, 95 x 221 ft., Arsenal St. and Kingshighway, $250,000-$275,000, both rein.-con. and brick, plain foundations.

Tex., Galveston—Library, etc.—Bd. Regents University of Texas, Austin, having plans prepared by H. M. Green Co., archts., North Texas Bldg., Dallas, 3 story and basement, 150 x 200 ft., library and classroom building rein.-con. and brick, plain foundation. $400,000. Power plant for which details are not yet available is included in above estimate.

Okla., Tulsa—Bank and Office—Central Natl. Bank, 2nd and Boston Sts., plan 16 story, 50 x 140 ft., brick, stone and rein.-con. $1,000,000. Architect not selected.

Idaho, Lewiston—Dormitory—State Dept. Educ., Boise, approved plans for Dormitory on campus of Normal School, here. $150,000. A. C. Price, business mgr.

Idaho, Moscow—Dormitories—University of Idaho Building Assn. having plans prepared by Whitehouse & Price, archts., Hutton Bldg., Spokane, Wash., 3 and 4 story, 59 x 150 ft. and 63 x 150 ft., dormitories on University campus, here. $200,000.

Calif., Crockett — School — Carquinez School Dist. having plans prepared by A. A. Brown, engr., c/o Matson Navigation Co., 120 Market St., San Francisco, 2 story, brick and concrete. $235,000. Noted Sept. 21.

Calif., Fresno—Schools—Plan election to vote on $2,000,000 bonds for general high school, 2 junior high schools and 6 elementary schools. R. Y. St George, city clk. Architect not selected.

Calif., Montebello—Schools—Voted $300,000 bonds for new schools.

Calif., San Francisco—Apartment—M. A. Feeley, 1945 Sutter St., had plans prepared by E. H. Denke, archt., 1317 Hyde St., 5 story and basement, rein.-con., Geary St. near Jones St. $150,000.

Calif., San Francisco — Church — Fifth Church of Christ Science, c/o C. Werner, archt., Santa Fe Bldg., having plans prepared rein.-con., O'Farrell St. and Shannon Pl. $150,000. Noted April 6.

Calif., San Francisco—Commercial—I. R. Lurie, Mills Bldg., plans 4 story, rein.-con., 7th and Folsom Sts. $250,000. Architect not selected.

Calif., San Francisco—Home—City and San Francisco Co. to vote on $2,000,000 bonds Nov. 21, for buildings at relief home. J. Reid, Jr., 1st Natl. Bank Bldg., city archt. Noted Aug. 31.

Calif., San Francisco—Hospital—Stanford University Hospital, Clay and Webster Sts., plans to raise $1,000,000 for new fireproof hospital and extensions to medical departments.

Calif., San Francisco—Schools—City and San Francisco Co. to vote on $12,000,000 bonds Nov. 21, for new schools and additions to present buildings. J. Reid, Jr., 1st Natl. Bank Bldg., city archt. Noted June 8.

BIDS DESIRED

Mass., Boston — Church — Oct. 20, by Hellenic Assn. of Boston, 46 Winchester St., 3 story and basement, 86 x 119 ft., Parker and Ruggles Sts. $250,000. H. S. Demoorjian, 340 Main St., Worcester, archt.

N. Y., Buffalo—Dining Room—Oct. 25, by State Hospital Comn., Albany, additional accommodations for patients at Buffalo State Hospital, here. L. F. Pilcher, Albany, state archt.; adv. this issue.

N. Y., New York—Apartment—A. Campagna, 200 West 72nd St., 6 story, 58 x 103 ft., brick, steel and stone, plain foundation, Riverside Dr. and 145th St. $300,000. Work will be done by separate contracts. Private plans.

N. Y., New York—Apartment Hotel—J. Axelrod & Co., 200 West 72nd St., 15 story, 87 x 102 ft., brick, steel and stone, plain foundation, 71st St. west of Central Park. Work will be done by separate contracts. Private plans.

N. Y., Patchogue—High School—Nov. 4, (change of date) by Bd. Educ., brick, steel and stone; plain foundation. $500,000. Tooker & Marsh, 101 Park Ave., New York, archts. and engrs. Noted Sept. 28.

Buildings (Continued)

Pa., Bridgeton—High School—Bd. Educ. taking bids 2½ story, 69 x 164 ft. $200,000. H. C. Richards, 608 Chestnut St., Phila., archt. Former bids rejected.

Pa., Carrick (Pittsburgh, P. O.)—School—Nov. 4, by Bd. Educ. and Estep & Estep, archts., Century Bldg., Pittsburgh, 2 story and basement, 150 x 260 ft., brick and steel, Parkway Ave. Noted Aug. 10.

Pa., Phila.—Bank—Lawndale State Bank taking bids 1 story and basement, 37 ft. high, 35 x 66 ft., rein.-con., brick, steel and stone, plain foundation, Rising Sun Ave. and McGee St. $175,000. J. T. Brugger, 505 Chestnut St., archt.

N. C., Morgonton—Hospital—Oct. 24, by Building Comm. of State Hospital for Insane, constructing (1) building for women, (2) cold storage and ice plant, (3) mechanical equipment, piping, tracks, sheetwork, etc., for ice making and refrigerating plant, Address J. McCampbell, c/o C. C. Hook, archt., 207 Trust Bldg., Charlotte.

O., Cleveland—School—Nov. 6, by Bd. Educ., East 6th St. and Rockwell Ave., 3 story, brick, steel and concrete addition, West 10th St. and Tremont Ave. $600,000. W. R. McCornack, East 6th St. and Rockwell Ave., archt.

O., Cleveland — Temple — Tifereth Israel Congregation, c/o L. M. Wolf, Hickox Bldg., taking bids and opens same about Oct. 25, 1 and 3 story, brick, steel and concrete, East 105th St. and Ansel Rd. $300,000. Former bids rejected. C. R. Greco, Guardian Bldg., archt. Noted July 27.

Ind., Evansville—Hotel—Vandome Hotel Co. taking bids 6 story, brick addition, 3rd St. $300,000. F. J. Schlotter, 113½ Upper 4th St., archt. Noted Oct. 12.

Ind., Laporte—High School—Oct. 27, by School Bd., 2 story and basement, 165 x 198 ft., brick. $400,000. Miller, Fullenwider & Dowling, 6 North Michigan Ave., Chicago, archts. Noted Oct. 5.

Mich., Detroit—School—No. 56, by Bd. Educ., 2 story and basement, 28 ft. high, 171 x 191 ft. rein-con., brick and steel, Palmer Ave. $175,000. Malcomson, Higginbotham & Palmer, 405 Moffat Bldg., archts.

Ill., Chicago—Church—J. W. McCarthy, archt., 139 North Clark St., receiving bids 1 story, 166 x 168 ft., rein.-con., brick and steel, 63rd St. near Fairfield St., for St. Rita of Casia Catholic Congregation. $300,000. J. F. Green, 6211 South Washtenaw Ave., pastor.

Ill., Chicago—Hotel—Holabird & Roche, archts., 104 South Michigan Ave., receiving bids 25 story, 173 x 402 ft., rein.-con., brick and steel, Michigan Blvd. between 7th and 8th Sts., for J. W. and E. J. Stevens, c/o Hotel La Salle. $15,000,000. Noted March 9.

Ia., Dubuque—Convent—Oct. 26, by Sisters of St. Francis, St. Marys Convent, 69 Emmett St., 4 story and basement, 56 x 170 x 288 ft., rein.-con., brick, tile and stone. $350,000 Damon, O'Meara & Hills, 1123 Merchants' Natl. Bank Bldg., St. Paul, Minn., archts. and engrs. Noted Aug. 24.

S. D., Rapid City—High School—Nov. 7 by Bd. Educ., 3 story and basement, 53 x 138 ft., rein.-con., brick, stone and tile $175,000. Perkins & McWayne, 322 Paulton Blk., Sioux Falls, archts.

Mo., St. Louis—Schools—Nov. 8, by Bd. Educ., 9th and Locust Sts., C. P. Walbridge Grade School, 2 story, 95 x 221 ft., Davison and Lilian Aves., $300,000, also Edward Long Grade School, 2 story, 95 x 221 ft. Morganford Rd. and Walsh St., $300,000. both rein.-con. and brick, plain foundations. R. M. Milligan, 506 Bd. Educ. Bldg., archt.

Tex., Beaumont—Church—Nov. 15, by Church Bd. of First Baptist Church, 2 story and basement, stone and brick, plain foundation. $150,000. Barnes & Barglebaugh, Houston, archts.

Tex., Houston—Temple—Gray & Temple Lodges, Box 515, taking bids 3 story and basement, rein.-con., tile and brick, plain foundation, Fannin and Clay Sts. $192,000. A. C. Finn, Carter Bldg., archt.

Ore., Portland—Apartment Hotel—Nov. 18, by Regent Apartment Hotel, c/o C. L. Linde, archt., Artisans Bldg., 9 story, 100 x 100 ft., rein.-con. $350,000.

BIDS RECEIVED

Mass., West Newton—(Boston P. O.)—School—City of Newton opened bids Oct. 2, 5 story and basement, brick, Waltham St., from C. H. Cunningham & Sons Co., 23 Central Ave., Lynn, $161,850, J. Slotnick, 448 Bway., Chelsea (Boston P. O.), $162,000; C. S. Cunningham & Sons Constr. Co., 80 Boylston St., Boston, $163,670.

N. Y., New York — Court House — H. Bruckner, pres. Bronx Boro, Tremont and 3rd Aves., opened bids Oct. 9, brick, steel and stone, plain foundation, East 161st St. between Washington and Brook Aves., from L. M. Neckerman, Inc., 103 Park Ave., $255,000; Willete Constr. Co., $257,000; Newenhous Co., Inc., $258,092. Noted Oct. 5.

Ind., Indianapolis—Hospital and Nurses' Home—Bd. Health, 4-story hospital addition, 3 story and basement, 44 x 136 ft. with 36 x 40 ft. wing, 4 story nurses' home, 40 x 197 ft. with 38 x 48 ft. wing, both rein.-con., brick and hollow tile, Margaret St., from Cornell Eng. Co., 2611 Cornell St., $320,000; Karstedt Constr. Co., 429 Lemcke Bldg., $320,000; L. Colvin, 16th and Meridian Sts., $332,320. Noted Oct. 5.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., opened bids 2 story and basement, 120 x 130 ft. and 67 x 180 ft. rein.-con., brick and steel, plain foundation, Clinton and Chene Sts., from F. H. Goddard, 2130 Franklin St., $726,192; F. N. Cooper, 6370 Gratiot Ave., $729,885; Corrick Bros., 507 Owen Bldg., $746,848. Noted Oct. 5.

Ia., Des Moines — Schools — Bd. Educ. opened bids Sept. 29, general contract (1) Adams School, 2 story and basement, 36 x 85 ft., East 29th and Douglas Sts. (2) Monroe School, 2 story and basement, 35 x 90 ft., 30th and Hickman Sts., both brick and concrete, from Benson Constr. Co., 422 Valley Natl. Bank Bldg., (1) $44,000 (2) $42,000; Sugarman Constr. Co., 8th and Tuttle Sts., (1) $44,350; J. E. Tusant & Son, 330 Southwest 3rd St., (1) $44,612; P. H. Zohbon, Des Moines (street address not available) (2) $36,821; Western Constr. Co., 716 Park St., (2) $43,200. Noted Oct. 12.

Calif., Oakland—High School—Bd. Educ., Theodore Roosevelt High School, general contract from R. W. Littlefield, 357 12th St., $365,300, W. G. Thornally, 351 12th St., $368,544, M. C. Vaughan, 351 12th St., $378,925; brick and terra cotta, from H. Beckwith, 323 Newton Ave., $57,340, White & Floor, 180 Jessie St., San Francisco, $58,640, Mealey & Collins, 180 Jessie St., San Francisco, $59,600. Noted Sept. 28.

Calif., Sacramento—Library, etc.—State Dept. Pub. Wks., constructing library, court and office buildings, carpentry and mill work from Reilly & Nemetz, 180 Jessie St., San Francisco, $166,200; electric work from Butte Electric & Mfg. Co., 534 Folsom St., San Francisco, $25,750; ornamental iron and miscellaneous iron and bronze work, from Monarch Iron Wks., 262 7th St., San Francisco, $94,685; metal furring, lath and plaster and imitation stone, from P. Bradley, 180 Jessie St., San Francisco, $169,800; sheet metal and skylights from Forderer Cornice Wks., 269 Potrero Ave., San Francisco, $32,740; complete mechanical equipment, from Latourette-Fical Co., 907 Front St., $90,000, Scott-Lyman & Stack, 421 J St., $139,612, Goold & Johns, 436 East Maple St., Stockton, $161,000; plumbing and drainage systems, from Latourette-Fical Co., 907 Front St., $32,327, Hateley & Hateley, Mitau Bldg., $41,585, Luppin, Hawley & Thing, 906 7th St., $43,970; interior stone work, from Bruner Marble & Tile Co., Marsh-Strong Bldg., Los Angeles, $34,100; marble, mosiac and terrazzo, from American Marble & Mosiac Co., 25 Columbia Sq., San Francisco, $222,400. Noted Sept. 7.

CONTRACTS AWARDED

Mass., Worcester—High School—School Bd., 3 story, 181 x 268 ft. brick, concrete and steel, plain foundation, Arthur, Grafton and Dorchester Sts., to L. Rocheford & Son, 44 Front St. Archts. est. $700,000. Noted Aug 31.

Conn., West Hartford (Hartford P. O.)—High School—B. I. Miller, town mgr., 2 story and basement, 200 x 210 ft., rein.-con., steel and brick, plain foundation, South Main St., to Johnson-Wester Co., 167 Washington St., Hartford, $429,162. Archts. est. $450,000. Noted Oct. 12.

N. Y., Glens Falls—School—Bd. Educ. brick, steel and stone, plain foundation, to C. P. Boland & Co., 30 4th St., Troy. Archts. est. $250,000. Noted Sept. 14.

N. Y., New York—Apartment—Greenwich Village Building Corp., c/o J. M. Felson, archt. and engr., 1133 Bway., 9 story, 80 x 102 ft., brick, steel and stone, plain foundation, 15-19 West 11th St., by day labor. $500,000.

N. Y., New York — Synagogue — S. B. Eisendrath, archt. and engr., 18 East 41st St., 4 story, brick, steel and stone plain foundation, 28 West 68th St., to G. Richard Davis & Co., Inc., 30 East 42nd St., for Congregation of Free Synagogue, c/o architect. Archts. est. $200,000. Noted Aug. 10.

N. Y., Port Jervis — High School — Bd. Educ., brick, steel and stone, plain foundation, to Moody Constr. Co., 90 West St., New York. Archts. est. $400,000. Noted Aug. 31.

N. J., Atlantic City—Hotel—W. M. Stanton, archt., 1524 Chestnut St., Phila., 6 story and basement, 69¾ x 41 ft., rein.-con., brick and steel, caisson foundation, Kentucky Ave., here, to N. W. Knauer, 132 South New York St., for S. K. Boniface, New Clarion Hotel Archts. est $500,000. Noted Aug. 10.

Pa., Braddock — Church — St. Peter and Pauls Catholic, Congregation, 1 and 2 story brick, steel and stone, to Kemena Lumber Co., Ambridge. $150,000.

Pa., Johnstown — High School — School Dist., 601 Swank Bldg., 3 story and basement, concrete and brick, 8th Ward, to Gilpatrick-Dawson Co., Maple Park and Jacoby Sts., $348,000. Noted Sept. 28.

Pa., Lykens—Lodge—C. P. Berger, archt., 1422 South Penn Sq., Phila., 3 story and basement, 49 x 140 ft. brick, steel and stone, plain foundation, to Shamokin Lumber Co., Shamokin, for L.O.O.M. 1176. Archts. est. $150,000. Noted Aug. 24.

Pa., Phila.—Apartment—Walace & Warner, 1012 Walnut St., 4 story and basement, 64 x 109 ft. rein.-con., brick and steel, plain foundation, Overbrook Ave., to Merion Constr. Co., 2313 Walnut St. Archts. est. $350,000.

Pa., Phila. — Bank — Northern Central Trust Co., Broad St. and Erie Ave., 1 story and basement, 51 x 106 ft., cut stone and granite, plain foundation, Broad St. and Erie Ave., to H. E. Baton, 1713 Sanson St. Archts. est. $150,000.

Pa., Phila.—Sales, etc—Nash Motor Co., 901 North Broad St., 5 story and basement, 75 x 160 ft., sales building and service station, cut stone, plain foundation, Broad and Thompson Sts., to Turner Constr. Co., 1713 Sanson St. Archts. est. $300,000.

Pa., Pittsburgh—Theatre and Office—Steel City Amusement Co., 801 Wylie Ave., general contract, 3 story and basement, 60 x 170 ft., brick, Center and Montrose Aves., to Tri State Constr. Co., 810 East McLamore Ave., Memphis, Tenn. Archts. est. $150,000. Noted April 6.

Pa., Sharon—High School—Bd. Educ. general contract for high school to C. Shutrump & Sons Co., 407 Home Savings & Loan Bldg., Youngstown, Ohio. $407,000.

Pa., Vandergrift — High School — Bd. Educ. 2 story and basement, addition, Franklin Ave., general contract to Natl. Concrete Fireproofing Co., Citizens' Bldg., Cleveland, O., $114,600. Archts. est. $155,000. Noted Sept. 21.

D. C., Wash.—Apartment-Hotel—F. H. Smith Co., 815 15th St., is interested in syndicate (comprising several financial concerns) which has awarded contract for apartment-hotel, "Roosevelt," to Boyle-Robertson Constr. Co., Evans Bldg., $300,000.

D. C., Wash.—Office—C. Gilbert, archt., 244 Madison Ave., New York City, general contract stone, brick and steel office building, here, to J. Stewart, 30 Church St., New York City, for U. S. Chamber of Commerce, c/o L. A. Skinner, secy., Mills Bldg. Archts. est. $1,500,000. Noted Sept. 14.

W. Va., Bluefield—Hospital—St. Lukes Hospital, Bland St., 5 story and basement, 45 x 130 ft., rein.-con., stone, brick and steel, to C. W. Hancock & Sons, Lynchburg, Va., and Bluefield. Archts. est. $150,000. Noted Aug. 17.

Ga., Atlanta—Hotel—Dinkler Hotel Co., 12 story and basement rein.-con. addition to Ansley Hotel on Forsyth St., to H. J. Carr & Co., Chandler Bldg., $270,000. Noted Aug. 24.

O., Canton—Bank and Office—First Natl. Bank, Market Ave. and Tuscarawas St. S.W., 14 story, 85 x 87 ft., brick, steel and concrete, to Walbridge-Aldinger Co., Penobscot Bldg., Detroit, Mich. Archts. est $1,000,000. Noted Aug. 17.

O., Cleveland—Commercial—Upper Euclid Co, c/o W. A. Greenlund, Williamson Bldg., 2 story and basement, 60 x 150 ft., brick, steel, stucco and marble, 9999 Euclid Ave., to Craig-Curtiss Co., 4614 Prospect Ave. Archts. est. $175,000. Noted Sept. 28.

O., Cleveland—Hotel—Hotel St. Regis Co., c/o G. Hale, 621 Hanna Bldg., will alter 6 story, 8205 Euclid Ave., by day labor. $200,000. H. T. Jeffrey, 621 Hanna Bldg., archt.

O., Cleveland—Store and Office—J. Babin, 8272 Superior Ave., 2 story and basement, 60 x 234 ft., brick and steel, 9701 Euclid Ave., to Piscopi Constr. Co., Murray Hill Rd. Archts. est. $200,000.

Mich., Detroit—Apartment—P. Gordon, 1037 Detroit Savings Bank Bldg., 3 story and basement, 36 ft. high, 75 x 100 ft., con-

Buildings **(Continued)**

crete, brick and steel, plain, foundation, Medbury Ave., to W. S. Pocock, 815 Hammond Bldg., $160,000.

Mich., Mt. Pleasant—Dormitory—T. E. Johnson, secy. State Bd. Educ., Lansing, 3 story and basement, concrete, brick and steel, plain foundation, to Prost, Forde & Westall, Penobscot Bldg., Detroit, $179,000. Noted Sept. 28.

Ill., Chicago — Hall, Store and Office — Maccabees Council of Austin, c/o C. A. Eckstrom, archt., 5 North La Salle St., 2 story, 120 x 128 ft., rein.-con., brick and steel, Chicago Ave. and Woller St., to F. O. Johnson, 4856 Christiana Ave. Archts. est. $200,000.

Ill., Chicago—Hotel—E. L. Ohrman c/o J. E. O. Pridmore, archt., 38 South Dearborn St., first unit 10 story, 160 x 348 ft., rein.-con., brick and steel, Bway. and Sheridan Rd., to Caldwell & Son Co., 508 State Savings and Trust Bldg., Indianapolis, Ind. Second unit, will be 100 x 348, third unit 83 x 348. Archts. est. $5,000,000.

Ill., Chicago—Store, Office and Apartment—Levy & Kline, archts., 111 West Washington St., 2 story, 82 x 227 ft., rein.-con., brick and steel, State St. and Bellevue Ave., to Kadeshewitz & Buckel, 1305 Independence Blvd. Archts. est. $500,000.

Ill., Evanston — Museum and Library—Garret Biblical Institute, 2 story and basement, rein.-con., brick and steel, to A. Brundage, 110 South Dearborn St., Chicago. Archts. est. $600,000. Noted Aug. 18, 1921.

Wis., Milwaukee—Lodge and Club—Owl Realty Co., c/o T. C. Massett, 67 Keefe Ave., 2 story and basement, brick and concrete, plain foundation, Port Washington Rd., to H. Schmitt & Son, 430 Farwell Ave. Archts. est. $150,000.

Ia., Bloomfield—School—Bd. Educ., gen-contract, 2 story and basement, rein.-con., brick, tile and stone, to Garmer-Stiles Co., 519 14th St., Des Moines, $130,000. Noted Sept. 21.

Ia., Cedar Rapids—Junior High School—Bd. Educ., general contract 3 story and basement, 160 x 200 ft., rein.-con., brick, tile and stone, 20th St. and Ave. B, East, to T. Stark & Co., 118 South 11th St., $307,577. Noted Sept. 14.

Ia., Des Moines—Apartment—C. H. Eddy, 26th and Clark Sts., 3 story and basement, 65 x 118 ft., rein.-con., brick and stone, Park Blvd. and Lakeview Ave., to W. F. Kucharo & Co., 622 Hubbell Bldg., $230,000.

Ia., Waterloo — Apartment — Walnut Realty Co., 302 Walnut St., general contract 4 story and basement, 100 x 230 x 315 ft., brick, steel, stone and tile, Walnut, Pine and Iowa Sts., to H. Evers, 656 Builders Exch. Bldg., Minneapolis, Minn., about $228,000. Noted Oct. 5.

Minn., Duluth—Hotel—Andray Hotel Co., c/o Quigley & Doran, Andray Hotel, Hibbing, 12 story, 100 x 140 ft., rein.-con., brick, stone and terra cotta, 1st St. and 4th Ave. W., here, to Jacobson Bros., 619 Columbia Bldg., $1,500,000.

Minn., St. Paul — High School — Dept. Educ., City Hall, general contract 3 story and basement, 150 x 250 ft., with 1 story, 48 x 90 ft. wing, rein.-con., brick, tile and stone, to Gauger-Korsmo Constr. Co., 301 Endicott Bldg., $282,981. Noted Oct. 12.

Neb., Beatrice—Hotel—Paddock Hotel, c/o W. H. Hepperlen, 5 story, 75 x 142 ft., 6th and Court Sts., to J. Black Masonry & Contg. Co., World Theatre Bldg., Omaha. Archts. est. $300,000.

Mo., St. Louis—High School—Bd. Educ., 9th and Locust Sts., general contract Theodore Roosevelt High School, 3 story and basement, 410 x 410 ft., rein.-con. and brick, plain foundation, Hartford St. between Louisiana and Compton Aves., to E. C. Gerhard Bldg. Co., Post-Dispatch Bldg., $1,148,000; blast fan heating and ventilating system, tunnel distribution, 3 air fans, heating and ventilating pumps, etc., to Sodemann Heat & Power Co., 2306 Morgan St., $117,847; electric wiring, conduits, silent calls, to W. C. Burton Electric Co., 1532 Olive St., $57,000.

Mo., St. Louis—Hospital—Liberty Hospital Assn., Pendleton and Delmar Aves., 4 story, 40 x 200 ft., brick and concrete, Washington and Taylor Aves., to H. O. Hirsch Co., Wainwright Bldg. Archts. est. $250,000.

Utah, Sale Lake City—Bank and Office—Continental Bank, 21 East 2nd St., and Natl. Bank of Republic, Main St., 20 story, Main and 2nd St., S., to P. J. Walker Co., Monadnock Bldg., San Francisco, Calif., $1,250,000. Noted June 20.

Calif., San Francisco — Apartment — D. McKillop, 540 Cole St., will build 5 story

WATER SUPPLY PROJECT—TULSA, OKLA

Bids were opened Sept. 25, by city, for constructing major portion of Spavinaw Water Supply Project, Contr. No. 3, Spavinaw Dam, (A) Engineer's Estimate; (B) Standard Paving Co., 321 North Boston St., (awarded contract); (C) Allied Contractors, Inc., Omaha, Neb.; (D) O'Rourke Eng. Co., Tulsa; Contr. No. 4, 60 in. concrete conduit, (A) Engineer's Estimate, (B) Byrne Bros. Constr. Co., Chicago; (C) Smith Bros., Dallas; (D) Walbridge-Aldinger Co., 2356 Penobscot Bldg., Detroit, (awarded contract); Contr. No. 5, tunnel and approaches, (A) Engineer's Estimate; (B) Williams Bros., Tulsa; (C) Standard Paving Co., (awarded contract); (D) Byrne Bros., Chicago; Contr. No. 7, Mohawk Reservoir, (A) Engineer's Estimate; (B) R. M. Davies & Son, Tulsa, (awarded contract); (C) Allen & Harrison, Okmulgee; (D) L. O. Hales, Topeka; Contr. No. 11, high pressure reservoir, (A) Engineer's Estimate; (B) Trailor-Dewey Contg. Co., Tulsa; (awarded contract on gunite floor); (C) Standard Paving Co. The unit bids were as follows:

Contract No. 3	A	B	C	D
16,400 cu.yd. earth excavation	$0.50	$0.50	$0.25	$0.50
4,800 cu.yd. earth excavation in core wall trench	1.00	.75	.25	.50
2,300 cu.yd. shale excavation	1.00	1.20	1.00	1.50
1,600 cu.yd. rock excavation above elevation 631	3.00	3.00	1.50	2.00
2,500 cu.yd. rock excavation below elevation 631	6.00	5.00	3.50	4.00
1,750 cu.yd. rock excavation in cut-off and core wall trench	6.00	7.50	4.50	4.00
182,000 cu.yd. embankment earth section of dam	.40	.30	.30	.40
2,200 squares grassing	2.20	1.00	1.00	1.30
15,000 sq.yd. stone paving	1.50	2.50	1.50	1.00
2,500 cu.yd. broken stone or gravel backing	1.75	1.75	1.50	1.00
100 lin.ft. drilled holes in rock or masonry	2.00	1.00	1.00	5.00
57,400 cu.yd. cyclopean concrete	7.00	6.50	7.50	6.96
13,660 cu.yd. class "C" concrete	9.00	9.50	9.00	11.00
8,100 cu.yd. class "D" concrete	10.50	10.00	10.25	9.50
1,260 cu.yd. class "E" concrete	16.00	12.00	11.20	17.00
100 cu.yd. grout	30.00	30.00	30.00	20.00
4,000 lb. reinforcing steel	.06	.05	.07	.05
24 tons B. & S. cast iron pipe and specials	120.00	90.00	120.00	100.00
42 tons flanged pipe and specials	150.00	125.00	150.00	90.00
1,000 lb. cast iron soil pipe and specials	.15	.07	.15	.07
Sluice gates (lump sum)	4,200.00	4,150.00	4,200.00	3,000.00
Gate House and concrete balustrade, superstructure above elevation 692 (lump sum)	16,590.00	16,750.00	17,400.00	18,000.00
Stop planks (lump sum)	550.00	500.00	550.00	2,000.00
Screens and racks (lump sum)	2,450.00	2,500.00	2,450.00	2,400.00
Crane (lump sum)	1,300.00	1,500.00	1,500.00	3,500.00
Iron castings (lump sum)	2,400.00	2,400.00	2,400.00	2,000.00
48-in. Venturi meter (lump sum)	5,000.00	5,000.00	5,000.00	2,000.00
400 lb. copper for expansion joints	.60	.45	.50	.60
Drainage for berm (lump sum)	500.00	500.00	500.00	2,000.00
2,800 sq.ft. granolithic finish	.20	.25	.20	.25
Extended totals	$825,365	$787,610	$807,722	$820,334

Contract No. 4	A	B*	C*	D*
100 acres clearing right-of-way	$50.00	$25.00	$50.00	$25.00
184,000 cu.yd. earth excavation	.33⅓	.16	.44	.30
1,400 cu.yd. shale excavation	1.50	3.00	.65	1.00
15,000 cu.yd. loose rock excavation	.50	1.25	.65	1.00
26,000 cu.yd. solid rock excavation	3.50	4.00	2.00	3.50
100,000 cu.yd. backfill	.15	.10	.20	.20
147,600 lin.ft. 60-in. pre-cast reinforced concrete pipe laid in trench	13.11	9.51	11.60	12.55
30 cu.yd. concrete in beams for pipe support	30.00	15.00	40.00	40.00
50 cu.yd. concrete in piers and culverts	40.00	15.00	40.00	40.00
200 cu.yd. extra concrete	20.00	15.00	40.00	20.00
70 ton cast iron bends or specials	100.00	200.00	180.00	140.00
25,000 cu.yd. drainage ditches	.30	.20	.50	.30
Spavinaw Creek Crossing exclusive of pipe (lump sum)	4,000.00	4,000.00	22,000.00	10,000.00
Grand River Crossing exclusive of pipe (lump sum)	30,000.00	55,000.00	64,000.00	45,000.00
Wolfe Creek Crossing exclusive of pipe (lump sum) bid	3,000.00	2,500.00	2,500.00	10,000.00
Pryor Creek Crossing exclusive of pipe (lump sum)	15,000.00	3,000.00	5,000.00	10,000.00
Extended totals	$2,200,858	$1,660,266	$2,010,580	$2,136,980

Contract No. 5	A	B	C	D
6,950 lin.ft. excavation for tunnel 84-in. diameter	$17.00	$16.70	$18.50	$24.70
6,950 lin.ft. lining tunnel with 6-in. concrete lining	15.00	14.87	14.75	10.00
55,000 cu.yd. earth excavation in approach cuts	.30	.27½	.30	.15
2,700 cu.yd. shale excavation in approach cuts	1.50	1.50	75	3.00
100 cu.yd. loose rock excavation in approach cuts	1.50	1.50	1.25	3.00
5,000 cu.yd. solid rock excavation in approach cuts	3.50	3.00	3.00	4.00
1,400 cu.yd. concrete in 84-in. monolithic conduit in solid rock	28.00	26.70	25.00	17.00
8,100 cu.yd. backfill on 84-in. conduit	.20	.15	.20	.10
90 cu.yd. concrete in place in overflow wier and "Y" connections	32.00	30.00	30.00	25.00
Extended totals	$305,150	$295,031	$304,057	$304,675

Contract No. 7	A	B	C	D
40 acres clearing	$50.00	$50.00	$50.00	$25.00
30 acres grubbing	70.00	150.00	70.00	60.00
15,000 cu.yd. stripping where excavation is not required	.80	.50	.60	.40
8,800 cu.yd. earth excavation for diversion canal	.30	.27	.35	.35
350 cu.yd. earth excavation for core walls and pipe lines	1.00	.75	1.00	.60
450 cu.yd. shale excavation for core walls and pipe lines	2.00	1.25	2.00	.90
560 cu.yd. concrete in core walls and gate chambers	18.00	18.00	15.00	18.00
Laying cast iron pipe and installing valves furnished by the city (lump sum)	4,000.00	4,500.00	4,500.00	1,600.00
300 000 cu.yd. earth embankment for reservoir	.40	.24½	.32	.36
2,500 cu.yd. earth embankment for diversion levee	.40	.27	.35	.30
Extended totals	$155,070	$105,956	$127,205	$132,925

Contract No. 11	A	B	C
3,900 cu.yd. earth excavation for reservoir	$0.50	$0.45	$0.35
70 cu.yd. earth excavation in trenches	1.00	.45	.75
28,200 cu.yd. sandstone excavation for reservoir	1.50	1.70	1.25
650 cu.yd. sandstone excavation in trenches, gate house and column footings	2.00	1.70	1.50
1,450 squares grassing and placing loam	4.00	1.70	3.50
2,700 cu.yd. concrete class "A"	18.00	15.00	18.00
350 cu.yd. concrete class "B"	20.00	15.00	25.00
1,350 cu.yd. concrete class "C"	16.00	14.96	17.50
64,700 sq.ft. gunite 3-in. thick	.334	.35	.45
481,600 lb. reinforcing steel	.03½	.04½	.04
Laying pipe, setting valves, floor stands, etc. (lump sum)	1,900.00	3,360.00	1,850.00
2,100 lin.ft. tile drain	.20	.30	.18
Gate House, super-structure (lump sum)	4,000.00	3,200.00	4,000.00
Extended totals (concrete floor)	$150,592	$148,105	$149,185
Extended totals (gunite floor)	150,592	150,554	154,675

Buildings (Continued)

and basement. 45 x 100 ft. concrete, Geary St. near Hyde St., by day labor. $150,000. Private plans.

Calif., San Francisco — Apartment — Sacramento-Powell Co., c/o Macdonald & Couchot, archts., 234 Pine St., 9 story and basement. rein.-con., Powell and Sacramento Sts., to Macdonald & Kahn, 130 Montgomery St., $500,000.

Calif., San Francisco—Church—Fourth Church of Christ Scientist, 1 story, rein.-con., Funston Ave. near Clement St., general contract to C. Coburn, 180 Jessie St.; concrete work to Mission Concrete Co., Call Bldg. Noted Aug. 24.

Calif., San Franciso—Hotel—Whitcomb Estate, Whitcomb Hotel, 7 story and basement, rein.-con.. addition, (102 bedrooms and 114 bathrooms) Market St. near 8th St., to Macdonald & Kahn, 130 Montgomery St., $275,000.

Calif., San Francisco—Office, etc.—MacDonald & Kahn, 130 Montgomery St., will build 3 story, 182 x 275 and 50 x 218 ft., concrete office, studio and workshop, on block bounded by Pierce, Steiner, Turk and Eddy Sts., by day labor. $200,000. Foster & Kleiser Co., 287 Valencia St., lessee. Weeks & Day, 921 California Insurance Bldg., archts.

Calif., San Francisco—Store and Apartment—G. D. Smith, 735 Taylor St., 10 story, rein.-con., Sutter St. near Taylor St., to Clinton Constr. Co., Townsend St., $500,000. Noted July 12.

Que., Montreal—City Hall—Steel work for new city hall, Notre Dame St., to Dominion Bridge Co., Lachine, $124,450. Noted Oct. 12.

Ont., London—Art—J. M. Moore, archt., 489 Richmond St., 3 story, 100 x 300 ft. stone, also 2 story, 60 x 100 ft. central heating plant, Western University, to P. H. Secord & Sons, 133 Nelson St., Brantford. $308,000 and $50,000, respectively, cement smoke stack to Weber Chimney Co., 332 South Michigan Ave., Chicago, Ill. Noted Aug. 10.

Federal Government Work

PROPOSED WORK

R. I., Providence—Repairing Jetty—U. S. Engineer rejected bids repairing east jetty at entrance to Nantucket Harbor, Mass. Noted Sept. 28.

N. Y., Tupper Lake—Hospital—Spec. 4710—Bureau Yards & Docks, Navy Dept., Wash., D. C., for administration and subsistence buildings, infirmary, 5 ward buildings and power house at U. S. Veterans' Hospital, here, (1) work complete from G. Dekimpe, 141 Summit Ave., West Hoboken, N. J., (1) $1,425,000 (360 days) (2a) deduct $1,500 (2c) add $3,800 (2d) add $6,650 (2e) deduct $500 (2f) add $5,000 (2g) add $32,550 (2h) add $10,000 (3) $80; power house tunnels to be completed within 200 days; Northeastern Constr. Co., 101 Park Ave., New York (1) $1,478,000 (360 days) (2a) add $1,600 (2b) add $347 (2c) add $4,507 (2d) add $4,700 (2e) deduct $1,346 (2f) add $24,418 (2g) add $15,000 (2h) $4,700 (3) $2 per car; William Sutherland Building Co., 408 Compton Bldg., St. Louis, Mo., (1) $1,575,000 (360 days) (2a) deduct $1,900 (2b) add $2,200 (2c) add $5,680 (2d) add $6,000 (2e) deduct $400 (2f) deduct $10,000 (2g) deduct $12,500 (2h) add $5,000 (3) $50 per car. All bids rejected. Will readvertise. Noted Sept. 21.

H. T., Pearl Harbor—Refrigerating and Ice-Making Plant — Spec. 4735 — Bureau Yards & Docks, Navy Dept., Wash., D. C., soon receives bids refrigerating and ice-making plant, at Naval Operating Base, here. Noted Oct. 12.

BIDS DESIRED

N. Y., Tupper Lake—Equipment—Spec. 4721—Nov. 15, by Bureau Yards & Docks, Navy Dept., Wash., D. C., coal and ash handling equipment at U. S. Veterans Hospital, here.

N. Y., Tupper Lake—Equipment, etc.—Spec. 4720—Nov. 15, by Bureau Yards & Docks, Navy Dept., Wash., D. C., refrigerating equipment, etc., at U. S. Veterans Hospital, here. R. E. Bakenhus, acting chief of Bureau; adv. this issue.

N. Y., Tupper Lake—Mechanical Equipment, etc.—Spec. 4719—Nov. 15 by Bureau Yards & Docks, Navy Dept., Wash., D. C., mechanical equipment, etc., for U. S. Veterans Hospital, here. R. E. Bakenhus, acting chief of Bureau; adv. this issue.

N. Y., Tupper Lake—Radial Brick Stack—Spec. 4722—Nov. 15 by Bureau Yards & Docks, Navy Dept., Wash., D. C., for radial brick stack, at U. S. Veterans Hospital, here. R. E. Bakenhus, acting chief of Bureau; adv. this issue.

N. Y., Tupper Lake—Water Tank—Spec. 4724—Nov. 15 by Bureau Yards & Docks, Navy Dept., Wash., D. C., for steel tank, tower, etc., U. S. Veterans Hospital, here. R. E. Bakenhus, acting chief of Bureau; adv. this issue.

Md., Annapolis—Deferrization Plant, etc.—Spec. 4682—Nov. 1 by Bureau Yards & Docks, Navy Dept., Wash., D. C., deferrization plant and high power radio station, here. Noted July 6.

Va., Yorktown — Standpipe, etc. — Spec. 4609—Nov. 1, by Bureau Yards & Docks, Navy Dept., Wash., D. C., standpipe and piping, here.

N. C., Cape Hatteras (Hatteras P. O.)—Extension, etc.—Spec. 4706—Oct. 25 by Bureau Yards & Docks, Navy Dept., Wash., D. C., for extension to barracks and painting, here. Noted Sept. 28.

N. D., Fargo—Extension, etc.—Nov. 6, by Treas. Dept., Wash., D. C., extension to workroom and mailing vestibule, etc., U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

Idaho, Boise—Pumping Units—Dec. 6 by U. S. Recl. Service, Denver, Colo., for 2 direct pumping units for Black Canyon pumping plant, here. M. Bien, acting dir.; adv. this issue.

Nevada—Road—Oct. 31 by C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., 881 Mills Bldg., San Franciso., Calif., grading and building structures on Currant Creek Rd. in Nevada Natl. Forest, here, 44.5 acres clearing and grubbing, 3,000 cu. yd. rock and 45,000 cu.yd. earth excav., 260 cu. yd. Class B concrete, etc. Former bids rejected. Noted Sept. 21.

Calif., Chollas Heights—Gas Tank, etc.—Spec. 4714—Nov. 8 by Bureau Yards & Docks, Navy Dept., Wash., D. C., for gas tank and pumps, here.

Calif., San Jose—Extension, etc.—Nov. 7, by Treas. Dept., Wash., D. C., extension to building and driveway at U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

BIDS RECEIVED

N. Y., Chelsea—Treas. Dept., Wash., D. C., construction, of infirmary group for U. S. Veterans Hospital, here, (1) work complete, from Northeastern Constr. Co., 101 Park Ave., New York, (1) $415,697 (2) $220,697 (3) $419,274; M. Serreto, 3 Tremont Row, Boston, Mass., (1) $423,000 (2) $231,000 (3) $429,000; Rosenthal Eng. & Contg. Co., 228 Jackson St., Brooklyn, (1) $439,997 (2) $219,495 (3) $386,370; mechanical equipment for above, from S. W. Rittenhouse, 1327 Taylor St., N. W., Wash., D.C., (1) $124,333 (2) $157,498 (3) $70,228; W. G. Cornell Co., 19 Patterson St., Wash., D. C., (1) $137,300 (2) $169,700 (3) $68,557; S. Faith & Co., 2427 Pennsylvania Ave., Phila., Pa., (1) $142,000 (2) $179,000 (3) $73,600. Noted Sept. 28.

W. Va., Charlestown—Post Office—Treas. Dept., Wash., D. C., construction incl. mechanical equipment of U. S. Post Office, here, from E. G. Heflin, 23 Law Bldg., Fredericksburg, Va., $59,381; Pearce Bros., 220 West 42nd St., New York City, $62,220; Deitrick & Devault, Canton, O. (street address not available) $65,720. Noted Sept. 14.

Idaho—Bridge—District Engineer, U. S. Bureau Pub. Rds., Missoula, Mont., 2 timber pile trestle bridges on Wolf Lodge Bay, Beauty Bay and Lake Coeur d' Alene, Kootenai Co., here, one 1,615 x 18 ft. with 133 wye connections and other 57 x 18 ft., from A. B. Lafferty Tug Line, Coeur d' Alene, $22,863; H. H. Boomer, 515 Zeigler Bldg., Spokane, Wash., $25,434; Siems & Carlson, 412 Realty Bldg., Spokane, Wash., $26,112.

Idaho—Roads—District Engineer, U. S. Bureau Pub. Rds., Missoula, Mont., improving 7.36 mi. Kootenai-Cabinet. Hope-Pack River, Sect. N.F.R., Bonner Co., 42,000 cu.yd. earth and 137,000 cu.yd. rock excav., 29.5 acres clearing, 7.36 mi. finishing, etc., from Sloan Constr. Co., 210 Columbia Bldg., Spokane, Wash., $172,409, Pacific Coast Paving Co., 910 Rust Bldg., Tacoma, Wash., $187,040, Montague-O'Reilly Co., 11 North 6th St., Portland, Ore., $193,916; 7.14 mi. North Pacific Highway. Cataldo-Schoolhouse Sect. N.F.R., Kootenai Co., 80,700 cu.yd. earth and 22,900 cu.yd. rock excav., 20 acres clearing, 7.14 mi. finishing, etc. from General Constr. Co., 307 Spokane Savings & Loan Bldg., Spokane, Wash., $69,225, H. S. Barr, Colfax, Wash., $74,917, H. H. Boomer, 515 Ziegler Bldg., Spokane, Wash., $78,800.

Wash., Olympia—Bridge—C. H. Purcell, dist. engr. U. S. Bureau Pub. Rds., Post Office, Portland, Ore., Dosewallips River Bridge near Olympia Natl. Forest, Jefferson Co., here, 240 ft. steel truss span with two 32 ft. concrete approach spans, from Ward & Ward, Inc., Tacoma, (street address not available) $41,355; Owens Bros., Port Angeles, $41,750; Amer. Pile Driving Co., Everett, $42,153.

California — Road — C. H. Purcell, dist. engr. Bureau Pub. Rds., Post Office, Portland, Ore., grading 12.8 mi. Grants Pass-Crescent City Highway, Del Norte Co., here, (A) concrete pipe, concrete headwalls (b) corrugated pipe, rubble masonry headwalls, from Pacific Coast Paving Co., 910 Rust Bldg., Tacoma, Wash., (a) $394,959 (b) $376,410; Utah Constr. Co., Eccles Bldg., Ogden, Utah (a) $407,502 (b) $397,712; Rajotte & Winters, Portland (street address not available) (a) $403,655 (b) $387,555.

Calif., Mare Island — Remodeling — Spec. 4601—Bureau Yards & Docks, Navy Dept., Wash., D. C., remodeling barrack's building 53 at Navy Yard, here, (1) work complete from F. H. Warren, 1032 Carolina St., Vallejo, (1) $23,350 (120 days) (2) $960; B. Ward, Los Angeles (street address not available) (1) $25,598 (120 days) (2) $800; J. Moton, 593 Market St., San Francisco, (1) $26,617 (2) $620. Noted Sept. 21.

Calif., San Diego—Quarters, etc.—Spec. 4665—Bureau Yards & Docks, Navy Dept., Wash., D. C., for quarters, wings to mess hall, barracks, administration building and pump house at Naval Base Training Station and Barracks, here, (1) work complete, from R. E. Campbell, 1190 State St., Box 716, Salt Lake City, Utah, (1X) $446,564 (2X-3X-4X-5X-6X-7X-8X) $18,295 each (9X) $31,041 (10X) $27,077 (11X) $159,694 (12X) $31,041 (13X) $27,077 (14X) $104,439 (15X) $18,295 (16X) $18,295 (17X) $186,297 (18X) $18,295 (19X) $37,635 (20X) $56,655 (21X) $81,148 (22X) $81,148 telegraphic modification increase all bids 3%; K. E. Parker, 519 California St., San Francisco, (1X) Marine Barracks, $130,000, Training Station, $270,000 total $400,000 (2X-3X-4X-5X-6X-7X) $15,000 each (8X) $17,000 (9X) $60,000 (10X) $50,000 (11X) $190,000 (12X) $50,000 (13X) $100,000 (14X) $60,000 (15X) $15,000 (16X) $25,000 (17X) $120,000 (18X) $15,000 (19X) $25,000 (20X) $40,000 (21X) $50,000 (22X) $60,000 telegraphic modification add $79,000 to Marine Barracks, $23,000 to Naval Training Station; Lange & Bergstrom, 819 Timber Bldg., (1X) Marine Barracks $162,000, Naval Training Station $262,000 (2X-3X-4X-5X-6X-7X-8X) $18,000 each (9X) $42,000 (10X) $38,000 (11X) $172,000 (12X) $42 000 (13X) $80,000 (14X) $90,000 (15X) $18,000 (16X) $36,000 (17X) $162,000 (18X) $180,000 (19X) $36,000 (20X) $54,000 (21) $72,000 (22X) $72,000 telegraphic modification add $28,000 to Naval Training Station, $66,000 to Marine Barracks; David Godon Building and Constr. Co., Burnett and North Aves., Cincinnati, O., cost plus 5%. Noted Sept. 21.

CONTRACTS AWARDED

N. Y., Buffalo—Dredging—U. S. Engineer, dredging and rock excavation in Sandusky Harbor, O., to Duluth-Superior Dredging Co., foot of 45th Ave., Duluth, Minn., $86,800. Noted Aug. 31.

N. Y., New York—Dredging, etc.—U. S. Engineer, 39 Whitehall St., dredging and rock removal in East River, to New Jersey Ship-building and Dredging Co., Foot of 28th St., Bayonne, N. J., $695,096. Noted Sept. 7.

Del., Wilmington—Jetties—U. S. Engineer, Wilmington, jetty construction at mouth of Smyrna River, Delaware, to General Ship Repair Co., 113 Walnut St., Phila., $52,900. Noted Aug. 24.

W. Va., Parkersburg—Extension—Treas. Dept., Wash., D. C., extension to U. S. Post Office, remodeling interior and improving driveways, here, to Pearce Bros., Inc., 220 West 42nd St., New York City, $11,958 (120 days). Noted Oct. 12.

Ga., Savannah—Walls—U. S. Engineer raising training wall, here, to J. W. Fitzgerald, Natl. Bank Bldg., Savannah, $300,000. Noted Aug. 31.

Ala., Florence—Turbine—U. S. Engineer 1,000 hp. turbine with generator, draft tubes, etc., to S. Morgan Smith Co., York, Pa., $17,060. Noted Aug. 24.

La., New Orleans—Dikes—U. S. Engineer, Custom House, dikes at Head of Passes, Mississippi River, to T. O. Hotard, 235 Lavergne Ave., $104,970. Noted Sept. 21.

La., New Orleans—Spur-dikes—U. S. Engineer, 329 Custom House, spur-dikes at Southwest Pass, Mississippi River, to L. F. Alexander Co., Inc., Audubon Bldg., $666,867. Noted Sept. 21.

Tenn., Memphis—Levee Work—Mississippi River Comn., 1st and 2nd Dist., Custon House, levee work in Lower St. Francis

Federal Government Work (Continued)

Levee Dist., to Roach, Stansell, Lawrence Bros. & Co., North Memphis Savings Bank Bldg., $35,160.

Mo., St. Louis—Earthwork—Mississippi River Comn., 1311 International Life Bldg., earthwork in Bay Island Drainage and Levee Dist. 1, Ill., Sect. M. R. D., to La Crosse Dredging Co., 405 Plymouth Bldg., Minneapolis, Minn., $103,550. Noted Sept. 28.

Tex., Galveston—Repairs to Dam—U. S. Engineer, Galveston, repairs to Caddo Lake Dam near Mooringsport, La., to Blodgett Constr. Co., Shreveport, La., $58,511. Noted Aug. 24.

N. M., Ft. Bayard — Quarters — Treas. Dept., Wash., D. C., officers and employees quarters at U. S. Veterans' Hospital, here, to R. E. McKee, 1918 Texas St., El Paso, Tex., $141,150 (5 months). Noted Oct. 5.

Utah, Eureka — Post Office — Treas. Dept., Wash., D. C., for U. S. Post Office, here, to G. A. Whitmeyer & Sons, 2759 Grant Ave., Ogden, $35,200 (1 year). Noted Oct. 12.

Wash., Grays Harbor—Dredge—U. S. Interior Dept., Wash., D. C., for dredge, here, to Sun Shipbuilding Co., Chester, Pa. Cost over $500,000.

Calif., Los Angeles—Stone—U. S. Engineer, stone for silt diversion channel, to Russell-Foell Co., Los Angeles (street address not available) $124,813, Bly Bros. and McGilliard Stone Co., Los Angeles, (street address not available). $64,138.

FEDERAL POWER COMMISSION

Applications for Licenses and Permits:

Applications

346—Pike Rapids Power Co., Royalton, Minn.—Wants preliminary permit for dam 45 ft. high, in Mississippi River at point near Royalton, in Morrison Co.

347—A. B. Jones, c/o B. M. Jones, Dayton Morgan Eng. Co., Pueblo, Colo.—Wants preliminary permit to develop 3 power projects on Middle and North St. Vrain Creeks, Boulder Co.

348—Home Builder Mining & Development Co., 528 Hutton Bldg., Spokane, Wash.—Wants license for power development on Wolf Lodge Creek in Coeur d'Alene Natl. Forest, Kootenai Co., Idaho.

Miscellaneous

PROPOSED WORK

Pier, Golf Course, etc.—Gloucester, Mass.—Wolf Hill Country Club plans pier, golf course, tennis courts, club house, etc. $50,000. W. E. Kern, chn. building com. Engineer not selected.

Coal Breaker — Pittston, Pa. — Hillside Coal & Iron Co., soon takes bids for 25,000 ton daily capacity coal breaker at Butler Colliery, steel on concrete foundation, to exceed $100,000.

Monument—Wilkes-Barre, Pa.—G. A. R. Veterans, c/o R. Smith, attorney, Wilkes-Barre, plan monument in Public Sq. $100,000.

Dock — Jacksonville, Fla. — Soon takes bids extending municipal dock system. Work will be followed promptly by contract for placing 3,350 cu.yd. concrete, and furnishing and placing 41 mooring posts. $100,000. G. H. Hills Co., Barnett Bldg., engrs.

Fill—Jacksonville, Fla.—Soon takes bids placing 650,000 cu.yd. earth fill by hydraulic dredge, for filling in pier. $200,000. G. B. Hills Co., Barnett Bldg., engrs.

Transit Shed—Jacksonville, Fla.—Soon takes bids steel transit shed, 850 ft. long, 100 ft. clear inside span will be built on pier, 540 ton structural steel and roofed and sided with Robertson Process metal or zinc. $50,000. G. B. Hills Co., Barnett Bldg., engrs.

Transmission Line—Pikesville, Ky.—See "Industrial Works."

Lighting System—Cleveland, O.—Plans installing white way lighting system on Superior and Hough Aves. from East 79th St. to Ansel Rd., Wade Park Ave. from Addison Rd. to East 105th St., St. Clair Ave. from East 53rd to East 79th Sts., Euclid Ave. from East 90th St. to University Circle. $150,000. G. Beckwith, City Hall, engr.

Transmission Line—Chilton, Wis.—Calumet Service Co. making plans transmission line to serve surrounding cities incl. Calumet Harbor, Charlesburg and Stockbridge. $25,000. Private plans.

Golf Course, etc. — Stoughton, Wis. — Stoughton Golf Club, Inc., c/o F. J. Vea, plans 9 hole golf course, club house, locker rooms, etc. $50,000.

Fire Alarm System—Amarillo, Tex.—Plans electric fire alarm system. $30,000 available. Address L. D. Marrs, mayor.

Enlarging Port—Corpus Christi, Tex.—City and Nueces Co. election Oct. 31 to vote on $1,000,000 bond issue for enlarging port as per recommendation of Federal Engineers. Address H. R. Sutherland, co. judge.

Wharf and Warehouse Facilities—Houston, Tex.—Harris Co. Port Comn. plans $3,000,000 bond issue for wharf and warehouse facilities. E. A. Penden, chn.

Levee Improvements—Kaufman, Tex.—Attorney Generals Dept., Austin, approved $55,000 for Levee Impvt. Dist. 7 of Kaufman Co. Address W. P. Williams, co. judge, or State Recl. Dept., Austin.

Electric Traveling Crane—San Francisco, Calif. — Yuba Development Co., Hobart Bldg., will soon be in market for 20 ton electric traveling crane.

Parks, etc.—San Francisco, Calif.—City and San Francisco Co., having plans prepared laying out parks; constructing concrete swimming tank, 100 ft. wide, 1,000 ft. long; clubhouse, tennis courts and 5 baseball diamonds. J. McLaren, supt. of parks.

Steel Pipe—San Francisco, Calif.—Yuba Development Co., Hobart Bldg., soon takes bids 340 lin. ft. riveted steel Penstock pipe, ranging from 7 ft. 6 in. to 8 ft. 9 in., 20 lin. ft. 24 in. air relief stand pipe.

Park—San Mateo, Calif.—Voted $80,000 bonds to purchase and improve park lands. E. W. Foster, city clk.

High Power Line—Montreal, Que.—Montreal Light, Heat & Power Co., 83 Craig St. W., plans 9,700 ft. high power line, 24 in. c.i. pipe, from Hochelaga Gas Wks. to Hochelaga St. and Pie IX Ave., $56,090, 2,886 ft. 4 in. pipe in Marquette St. $5,599, 300 ft. 6 in. pipe in St. Zotique St. from Marquette to Fabre Sts. $807, 250 ft. 6 in. pipe in St. Zotique St. from Marquette St. to Papineau Ave. $673, 1,594 ft. 4 in. pipe in Fabre St. $3,092, 325 ft. 6 in. pipe in Beaubien St. $875, 1,405 ft. 6 in. pipe in Garnier St. $3,274, 700 ft. 4 in. pipe in Park and Atlantic Aves. $1,772, 175 ft. 8 in. pipe in Hutchison St. $550, 400 ft. 8 in. pipe across Canadian Pacific Ry. on Hutchison St. $1,926.

Arena — Brantford, Ont. — Brantford Arena Co. having plans prepared ice arena and artificial ice plant. $200,000. Prices wanted on equipment and steel. A. Ballyntyne, pres. Noted Aug. 24.

BIDS DESIRED

Subway—Long Island City, N. Y.—See Railways under New York."

Rip Rap, etc.—New York, N. Y.—Oct. 25, by Bd. Purch., Municipal Bldg., furnishing and delivering rip rap, structural steel, oak, pine and spruce lumber to Dept. Plant & Structures.

Wire Mesh Fences—New York, N. Y.—Oct. 26, by Park Bd., Municipal Bldg., furnishing and erecting wire mesh fences around certain lawns in various city parks in Manhattan Boro.

Stone—Cape May, N. J.—Oct. 24, providing and placing approximately 1,400 ton stone along beach bulkhead. H. W. Bell, city engr.; adv. this issue.

Heating Plant—Winton, N. C.—Oct. 23, by Bd. Comrs. Hertford Co., installing and furnishing heating plant and other equipment for court house. $25,000. J. A. Northcott, clk.

Dock System—Jacksonville, Fla.—Oct. 23, constructing 2,933 lin.ft. bulkhead wall necessary to the construction of new pier, 1,000 ft. long, 350 ft. wide. Bulkhead construction will include placing of (3,442 ton steel sheet piling and fabricated master piles, already purchased from Lackawanna Steel Co.) and furnishing and placing 275,480 lin.ft. wood piling and 655,000 ft. lumber in construction of wooden relieving platform. G. B. Hills Co., Barnett Bldg., engrs.

Lumber—New Orleans, La.—Oct. 26, by Bd. Port Comrs., New Court Bldg., 60,000 ft. untreated yellow pine, and 120,000 ft. creosoted lumber. A. Walsh, genl. mgr.

Structural and Tank Steel—New Orleans, La.—Nov. 9, by Bd. Port Comrs., New Court Bldg., furnishing and erecting structural and tank steel for grain elevator sacking plant shed and bins; adv. this issue.

Trenching Machine—Memphis, Tenn.—Oct. 24, at office Memphis Artesian Water Dept., 105-107 North 2nd St., gasoline engine driven trenching machine. J. Sheahan, acting genl. supt.; adv. this issue.

Steam Heating Plant—Wausau, Wis.—Fraternal Realty Corp., taking bids steam heating plant for store, office and lodge building. $25,000 H. E. Schuler, pres. Private plans.

Excavator—Woonsocket, S. D.—J. Jensen, Route 1, in market for one economy or Universal drag line excavator.

Stone—Olympia, Wash.—Oct. 30, by C. V. Savidge, secy. State Capitol, furnishing exterior cut Wilkenson stone for Legislative Building. $25,000. Wilder-White, 16 East 41st St., New York City, and Bebb-Gould, 710 Hoge Bldg., Seattle, archts.

Concrete Pipe—Delhi, Calif.—Oct. 23, by E. C. Fortier, resident engr., laying 68 mi. 8-24 in. concrete pipe, for Division of Land Settlement, (State of California).

Hoist and Trailers—San Jose, Calif.—Nov. 16, by H. A. Pfister, clk. Santa Clara Co., furnishing 1 or more 1A Heil hydro hoist 5 with all steel dump body 4 yd. with double acting tailgate to be installed on Liberty trucks, also for 1 or more 4 ton Lee trailers.

BIDS RECEIVED

Asphalt Wearing Surface Sand, etc. — New York, N. Y.—H. Bruckner, pres. Bronx Boro. Tremont and 3rd Aves., opened bids Oct. 9, furnishing and delivering 3,500 cu.yd. asphalt wearing surface sand, from Z. Mahoney, 557 46th St., Brooklyn, $3,900, C. W. Crane, 17 Battery Pl., $4,305, M. T. Colgan, $4,515; 3,000 cu.yd. binder stone, from Calvin Tompkins, 30 Church St., $5,220; 350 ton asphalt cement, from Warner Quinlan Co., 79 Wall St., $6,556, Standard Oil Co., 26 Bway., $7,350; 200 ton limestone dust or other suitable inorganic dust, from E. Meyer Co., 25 Church St., 1,240, New York Trap Rock Co., 101 Park Ave., $1.392. Noted Oct. 5.

Fire Alarm Signal System—Minneapolis, Minn.—Opened bids Oct. 11, materials for fire alarm signal system in underground conduits, 99,878 lin.ft. cable, 3-55 pairs, 6-110 conductors, from Standard Underground Cable Co., Conway Bldg., Chicago, $54,869; Safety Insulated Wire Cable Co., 108-116 South Desplaines St., Chicago, $58,557; Hazard Mfg. Co., 81 East Ross St., Wilkes-Barre, $60,636.

CONTRACTS AWARDED

Wire Conduit—East Springfield (Springfield P. O.), **Mass.**—United Electric Light Co., 95 State St., Springfield, about 2 mi. conduit for wires, etc., with manholes, here, to F. T. Ley & Co., Inc., 499 Main St., Springfield. Engrs. est. $50,000.

Granite Paving Blocks, etc.—New York, N. Y.—Bd. Purch., Municipal Bldg., furnishing and delivering granite paving blocks to Dept. Plant & Structures, to J. Leopold Co., Woolworth Bldg., $10,275; structural steel, to Amer. Bridge Co., 30 Church St., $58,450. Noted Oct. 5.

Wood Paving Blocks—New York, N. Y.—J. Miller, pres. Manhattan Boro, Municipal Bldg., furnishing and delivering 300,000 wood paving blocks, to Amer. Creosoting Co., 17 Battery Pl., $12,591. Engrs. est. $12,600. Noted Oct. 5.

Fire Wall, etc.—New Orleans, La.—Bd. Port Comrs., New Court Bldg., 100 ft. concrete fire wall, ratproofing Market St. shed rebuilding large part of dock,, new roadway, to Dahgren Constr. Co., 303 Louisiana Bldg., $91,886.

Foundation—Neenah, Wis.—Valley Paper Mills, 145 West Wisconsin Ave., plain foundation for 1 and 2 story and basement, 80 x 627 ft. mill and 112 x 144 ft. warehouse, brick and steel, to Appleton Constr. Co., I. O. O. F. Bldg., College Ave., Appleton.

Subway, etc.—Clinton, Ia.—Chicago & Northwestern Ry., Franklin St. and West Jackson Blvd., Chicago, for 2nd St. subway and elevation of tracks, here, to White & Duffey, Box 248, Clinton.

Gravel and Sand—St. Paul, Minn.— H. W. Austin, city purch. agt., to J. L. Shiely Co., 305 Dakota Bldg., 1,400 cu.yd. 2 in. ring gravel at $2.65 per cu.yd., 700 cu.yd. washed sand $1.45. Noted Sept. 14.

Sand and Gravel—Washington—State Hy. Comn., Olympia, placing 46,300 yd. sand and gravel in stock piles, for paving Pacific Highway from Kalama to Toledo, to Pioneer Sand & Gravel Co., Leary Bldg., Seattle, $110,021.

Oil Storage Reservoir—Tracy, Calif.—Pacific Oil Co., 79 new Montgomery St., oil storage reservoir, 750,000 bbl. capacity, to Shattuck Constr. Co., Underwood Bldg., San Francisco, $100,000. Owner furnishes fabric roofing, cement and lumber, contractor furnishes sand and rock. Noted Oct. 5.

Curb Stone—Montreal, Que.—To Villeray Cut Stone Co., 848 Du Rosaire St., 10,000 ft. straight curb stone $1.10 per ft., 1,000 ft. curved curb stone $1.20, total $12,200. Noted Sept. 28.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Oct. 24.

Road Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the construction of the followin:

Route No. 4, Section No. 7-A, New Gretna Alternate, Burlington County; estimated amount of gravel surface eight (8) inches thick is 13,618 square yards.

Bids will be received at the office of the State Highway Commission at the Broad Street Bank Building, Trenton, New Jersey, on Tuesday, October 24, 1922, at 11:00 A.M. and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars ($10.00) upon application to the State Highway Department, 9th floor, Broad Street Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated therein and as required by the 1922 specifications, same to be enclosed in sealed special addressed envelopes bearing the name and address of bidder and the name and section of the Route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that said certified check shall not be less than $500.00 or more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelopes will be furnished on application. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: Nov. 2.

Sewer Tunnel

Tulsa, Okla.

Sealed proposals will be received by the Board of Commissioners of the City of Tulsa, Oklahoma, until five o'clock P.M., November 2nd, 1922, for the construction of a Storm Sewer 5,700 feet long, 5,100 feet of which will be in tunnel cut. Approximate size 14½ x 15½ feet. Bond issue $900,000. Estimates payable in cash. Certified bidding check five per cent.

Plans and profiles, etc., may be secured from City Engineer, upon deposit of $25, which will be refunded to all parties submitting a bona fide bid.

CHARLES SCHULTZ,
City Engineer.

W. W. HORNER,
Consulting Engineer,
St. Louis, Mo.

OFFICIAL PROPOSALS

Bids: Oct. 24.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P. M., on Tuesday the 24th day of October, 1922 for the improvement of highways in the following counties:

HAMILTON ....(one highway: 3.57)
ORANGE ....(one highway: 3.71)
SARATOGA ....(one highway: 2.67)
SUFFOLK ....(two highways: 2.41 & 0.09)

ALSO FOR THE RECONSTRUCTION OF THE FOLLOWING:

BROOME ....(one contract: 2.27)
CHEMUNG ....(one contract: 3.00)
CLINTON ....(one contract: 3.19)
OTSEGO ....(one contract: 2.00)
STEUBEN ....(one contract: 2.50)
SUFFOLK ....(one contract: 2.36)
WESTCHESTER .....(one contract: 2.67)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "Geueral Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner,
State Commission of Highways.
J. C. FINCH, Secretary.

Bids: Oct. 24.

Sewage Disposal Plant

Albuquerque, N. M.

Sealed proposals will be received at the office of the City Clerk of the City of Albuquerque, New Mexico, until 2:00 o'clock p.m. on Tuesday, the 24th day of October, 1922, for constructing a certain sewage disposal plant for the City of Albuquerque, New Mexico. Each bidder will be required to deposit with the City Clerk to the credit of the City of Albuquerque without endorsement a certified check of deposit in the sum of ten per cent of the total amount bid, as a guaranty that the bidder will enter into contract and execute all bonds and guaranty in the forms provided within ten days after the notice of award of contract to him.

Bidders are expected to inspect the site of the work and to inform themselves regarding all local conditions. Instructions to bidders, proposal and contract forms, plans and specifications are on file at the office of the City Engineer, City Hall, Albuquerque, New Mexico. Copies of plans and specifications may be secured from the city engineer on or after October 5th, 1922, upon deposit of $50.00, to be returned to contractor upon submission of a bona fide bid on the work with plans and specifications, or upon returning plans and specifications intact prior to the date of receiving bids. Otherwise the deposit will be forfeited to the City of Albuquerque.

The City of Albuquerque reserves the right to reject any or all bids.

B. H. CALKINS, City Manager.
FRANK KIMBALL, City Engineer.
IDA V. MALONE, City Clerk.

OFFICIAL PROPOSALS

Bids: Oct. 25.

Highway Work

Raleigh, N. C.

Sealed bids for the construction of the following Projects will be received by the North Carolina State Highway Commission at Raleigh, N. C., until 10.00 a.m., on the 25th day of October, 1922, when they will be opened and read:

Hard surface (Concrete or Asphaltic Paving Projects), including grading, reinforced concrete or cast iron pipe, structures, etc.

Project No.	County	Length (Miles)
101	Beaufort	4.23
105-A	Beaufort	2.00
105-B	Beaufort	5.04
113-B	Chowan	9.89
220 & 282	Duplin-Wayne	28.75
901	Buncombe	7.52

Topsoil, Sand Clay, or Gravel Projects, including grading, drainage pipe, structures, etc.

133	Gates-Pasquotank	14.09
152	Hyde	10.89

BRIDGE PROJECT

254	Lenoir-Pitt	1 70 ft. low steel truss, 1 78 ft. Strauss Bascule and 5 40 ft. R. C. Deck Girder approach spans.

Specifications, proposal forms, etc., may be obtained from the State Highway Commission at Raleigh, N. C.

Plans may be seen in the Raleigh office or in the offices of the District Engineers.

Bridge plans may be obtained from the State Highway Commission at Raleigh N. C., upon payment of five ($5.00) dollars per set.

The right is reserved to reject any or all bids.

By order of the North Carolina State Highway Commission.

Bids: Oct. 24.

Concrete Water Reservoir

Albuquerque, N. M.

Sealed proposals will be received at the office of the City Clerk of the City of Albuquerque, New Mexico, until 2:00 o'clock p.m. on Tuesday, the 24th day of October, 1922, for constructing a certain reinforced concrete water reservoir for the City of Albuquerque, New Mexico. Each bidder will be required to deposit with the City Clerk to the credit of the City of Albuquerque without endorsement a certified check of deposit in the sum of ten per cent of the total amount bid, as a guaranty that the bidder will enter into contract and execute all bonds and guaranty in the forms provided within ten days after the notice of the award of the contract to him.

Instructions to bidders, proposal and contract forms, plans and specifications are on file at the office of the City Engineer, City Hall, Albuquerque, New Mexico. Copies of plans and specifications may be secured from the City Engineer on and after October 5th, 1922, upon deposit of $15.00, to be returned to the contractor upon submission of a bona fide bid on the work with plans and specifications, or upon returning plans and specifications intact prior to the date of receiving bids. Otherwise the deposit will be forfeited to the City of Albuquerque.

The City of Albuquerque reserves the right to reject any or all bids.

B. H. CALKINS, City Manager.
FRANK KIMBALL, City Engineer.
IDA V. MALONE, City Clerk.

Bids: Oct. 31.

Hospital Construction

New York, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work, for Central Heating and Lighting Plant, Kitchen and Dining Room Building and Buildings for Chronic Patients (North and South), and Construction of Tunnels at the Creedmoor Division, Brooklyn State Hospital, Creedmoor, Borough of Queens, Long Island, N. Y., will be received by the State Hospital Commission, Room 1046, 25 Broadway, New York City, N. Y., until 12 o'clock noon (Standard Time), on Tuesday, October 31st, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contracts within thirty (30) days after official notice of award of contracts and in accordance with the terms of Specifications Nos. 3979, 3980, 3981, 3982, 3983, 3984, 3985, 3986, 3987, 3988, 3989, 3990 and 3995. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Brooklyn State Hospital, Brooklyn, N. Y., at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon the deposit of a certified check in the sum of $25.00 made payable to the State of New York for each set of plans and specifications, which check will be returned if plans and specifications are returned in good condition to the State Architect, L. F. Pilcher, Capitol, Albany N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.
Dated: September 21, 1922.

Bids: Oct. 24.

Bridge Repairs

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the following:—

For repairs to bridge over Barnegat Bay from Seaside Heights to Island Heights, in the Municipality of Dover, County of Ocean.

Bids for the above will be received at the office of the State Highway Commission, Broad St. Bank Building, Trenton, N. J., on October 24th, 1922, at 11:00 A.M.. and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond form for the proposed work are on file in the office of Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J., and may be inspected by prospective bidders. Plans will be furnished on deposit of ten ($10.00) dollars, for doing this work upon application to Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J. Bids must be made on the standard proposal form in the manner designated therein and as required by the specifications for this work; same to be enclosed in sealed special addressed envelopes, bearing the name and address of bidder and the work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the State Treasurer for not less than ten (10%) per cent of the amount of the bid, provided the said certified check shall not be less than $500.00 nor more than $20,000 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelope will be furnished on application to Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a Surety Company duly authorized to do business in this State, stating that such Surety Company will provide said bidder with a bond in such sum as is required in and in accordance with the specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: Nov. 1.

Construction of Power House

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Wednesday, November 1st, 1922, at which place and hour they will be publicly opened and read, for the development of canal water power pursuant to the provisions of Chapter 532 of the Laws of 1922, as follows:

CONTRACT B-3—VISCHER FERRY POWER HOUSE

For constructing a power house and work incidental thereto, at Vischer Ferry dam, County of Saratoga.

Sheets 1-15, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required, and other information for proposers, may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Eastern Division, Wedgeway Building,, Schenectady, N. Y.; at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division, at Rochester, N. Y.; at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bond, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposit of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE,
Superintendent of Public Works.
October 7th, 1922.

Bids: Oct. 31.

Barge Canal Terminals

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, October 31st, 1922, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and amendatory laws, and Chapter 402 of the Laws of 1920, as follows:

TERMINAL CONTRACT NO. 91.

For paving a portion of the terminal site at Hallets Cove, New York City.

Contract plans, sheets 1 to 3 inclusive.

Plans may be seen and detailed specifications, engineers' estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE,
Superintendent of Public Works.

September 28, 1922.

OFFICIAL PROPOSALS

Bids: Nov. 1.

Hospital

Irvington, N. J.

Sealed **proposals for furnishing all the** necessary labor and materials for the erection and completion of the new Irvington Hospital, will be received by the Board of Commissioners of the Town of Irvington, N. J., and will be publicly opened and read at a meeting of the said Board of Commissioners to be held in the Town Hall, Irvington, N. J., at 8 p.m., Wednesday, November 1st, 1922 (standard time).

The building will be located on the southeast corner of Chancellor Avenue and Park Place, Irvington, N. J.

Proposals will be received **for the following**:

Item No. 1. Mason work; carpenter work; iron and steel work; sheet metal and roofing work; glazing; painting; elevator and dumb waiter.

Item No. 2. Plumbing and gas fitting.

Item No. 3. Heating and ventilating.

Item No. 4. Electrical work.

Contractors may bid on any or all items, but separate bids must be submitted for each item.

Each proposal must be accompanied by a certified check for 5 per cent of the amount of such bid, payable to the order of the Board of Commissioners of the Town of Irvington, N. J., or a bid bond in the amount of 5 per cent of such estimate, issued by a surety company approved by the said board, and authorized to conduct business in the state of New Jersey. The successful bidder will be required to furnish the said board within ten days of the award of the contract by the said Board of Commissioners, a bond executed by an approved surety company in the sum of one hundred per centum (100%) **of the amount** of said contract, conditioned **on the faithful** performance of the **contract.**

Should the bidder refuse **or neglect** to sign the said contract and **furnish** the said bond within ten days after notification from the Board of **Commissioners** that the contract has been awarded to **him**, he shall agree to forfeit the certified **check** accompanying the bid, or the amount **of** the bid bond, and said amount shall **become** the property of the Board of **Commissioners.**

Plans and specifications of **items** No. 1 and No. 2 may be seen at the office of Jos. B. Allen, Architect, 1091 Sanford Ave., Irvington, N. J., and of items No. 3 and No. 4 at the office of Runyon and Carey, Engineers, 843 Broad Street, Newark, N. J., between the hours of 9.30 a.m. and 4.30 p.m. and copies may be obtained from them by depositing the sum of twenty-five dollars ($25), which will be returned after bids are received and on return of the plans and specifications.

Any contractor obtaining plans and specifications and not submitting a bid must forfeit his deposit.

The Board of Commissioners reserves the right to waive informalities and to **accept** or reject any or all bids.

All proposals must comply in all **respects** with the instructions and general **conditions** forming a part of the **specifications.**

Each contractor shall state in his proposal the time he will require for completing the work and shall guarantee completion in such time.

Each proposal must be enclosed **in a** sealed envelope properly endorsed with **the** name of the bidder and marked "Proposal for erection of Irvington Hospital," **and** must state the kind of work for which the proposal is submitted.

HENRY P. BEDFORD,
Director Parks **and Public Property.**
W. H. JAMOUNEAU,
Town Clerk,
Irvington, N. J.
October, 1922.

Bids: Dec. 1.

Cast Iron Pipe and Castings

San Juan, Porto Rico.

Sealed proposals for the furnishing of about 20,020 tons of cast iron pipe and of 250 tons of special castings, or its equivalent in steel pipe and specials, delivered at San Juan, Porto Rico, for the City of San Juan, will be received in the office of the Commissioner of Public Service until December 1, 1922, at 10 a.m.

All plans, specifications, instruction to bidders, blanks, forms for proposals and all other information may be obtained at the office of the City Commissioner of Public Works at San Juan, Porto Rico.

The right is reserved to reject any and all bids.

MARTIN TRAVIESO,
Commissioner of Public Service.

OFFICIAL PROPOSALS

Bids: **Oct. 31.**

Construction of Viaduct

Trenton, N. J.

On Tuesday, the 31st day of October, 1922, at 2:30 o'clock in the afternoon, at its regular place of meeting, in the Court House, Trenton, New Jersey, the Board of Chosen Freeholders of the County of Mercer will receive proposals:

For performing all work and labor and furnishing all the materials, tools and equipment necessary or incident to the construction and completion of a through plate girder viaduct containing a vertical lift span of the wire-rope type, over the Delaware and Raritan Canal and the Pennsylvania Railroad at Olden Avenue in Trenton, Mercer County, New Jersey, to be known as the "Olden Avenue Viaduct," in accordance with plans and specifications prepared by J. A. L. Waddell, and on file in his office, 35 Nassau Street, New York City, or in the office of the Mercer County Engineer at the Court House, Trenton, New Jersey, to which bidders are particularly referred for detailed information and for necessary proposal forms. Copies of plans and specifications may be obtained at either of the above named offices upon deposit of Ten Dollars ($10.00).

The length of steel viaduct is 400 feet including the lift span of 75 feet. Revision of the approaches brought about by a slight raise of grade, includes a small amount of embankment, pavement, sidewalk, and concrete railing. The total length of approaches is 400 feet.

The approximate quantities **of the principal** items are as follows:

600 tons of structural steel.
50 tons of reinforcing rods.
2,000 cu.yds. of excavation.
2,000 cu.yds. of all classes **of concrete.**
75,000 lbs. of machinery, cables, **sheaves,** etc.

Bidders' attention is called particularly to the fact that the specifications **provide for a** bonus of Twenty Dollars ($20.00) **for each** any every day that the work is completed in advance of the specified time **of** completion, and a penalty of the same amount per day for delay in completing the work. The entire work is to be completed within eleven (11) months after the execution of the contract.

Each bid must be accompanied by the written proposal of a surety company fulfilling the requirements of section 507, chapter, 185, laws of 1918, and the form of bond required will be substantially as described in chapter 75 of the laws of 1918. The amount of the bond required will be the full amount of the contract price. Each proposal must also be accompanied by **cash** or a certified check, in the amount of Ten Thousand Dollars ($10,000.00) payable to the order of Edgar G. Weart, County Treasurer, and deposited upon condition that as against the successful bidder the same will be retained by the county as liquidated damages should he fail to execute a valid contract and furnish an acceptable surety company bond within seven days from the awarding of the contract.

The right is reserved to reject any or all bids and to waive any immaterial defect or informality in any bid should it be deemed to the interest of the county to do so.

CHARLES H. REICHERT,
Director of Dept. of Bridges.

Bids: Nov. 7.

Sewage Disposal

Miami, Fla.

Sealed **proposals will be received by the** Commission of the City of Miami, Florida, at their **regular meeting, November the 7th,** 1922, until 9 a.m., for furnishing:

1 Motor driven sewage screen, including motors and necessary equiqment; capacity 2100 gallons per minute.

2 Motor driven centrifugal pumps, including motors and necessary equipment; capacity 2100 gallons per minute, **against** total head **of 30 feet.**

2400 feet 16 inch Class B Cast Iron Pipe.

Each proposal must be accompanied by a certified check for 2½ per cent of the amount of the bid, or by bidders bond, to insure the execution of the contract as provided by Section 56 of the City Charter.

The Commission of the City of Miami reserves the right to reject any or all bids.

Detailed specifications and bidders blank form can be obtained from Chas. W. Murray, Director of Public Service, upon deposit of $10.00, this deposit to be returned to those submitting a bona fide bid.

F. H. WHARTON,
City Manager.

OFFICIAL PROPOSALS

Bids: Oct. 31.

Sewage Disposal Plant

Indianapolis, Ind.

Sealed proposals will be received by the **Board of Sanitary Commissioners**, Sanitary **District of Indianapolis, at its** office in the **City Hall, Indianapolis, Indiana**, until 10 **A.M., October 31st, 1922, at** which time **bids will be publicly opened and** scheduled **and awards made as soon** thereafter as **practicable, for the construction** of Section **3, Division III, and furnishing** and erecting **mechanical equipment for the** Sewage Disposal **Plant of the Sanitary** District of Indianapolis, **in accordance with** plans and **specifications on file at the** office of the **Board. This construction and** equipment **consists of the following items:—**

1. ***Activated Sludge Plant:***
   - a. **Aeration and Settling** Tanks, **including Pipe Gallery and Connecting** Conduits.
   - b. **Air Mains, Air Distribution** System, **Sewage, Sludge and Drain** Piping.
   - c. **Sluice Gates and Gate** Valves.
   - d. **Air Control and Drain** Valves.
   - e. **Diffuser Plates.**
   - f. **Air and Sewage Meters and** Recorders.
   - g. **Sludge Removal Equipment,** Erected.
2. ***Power Plant Auxiliary*** *Equipment:*
   - a. **Boiler Settings and Breeching.**
   - b. **Coal Storage Bunker.**
   - c. **Coal Handling Equipment.**
   - d. **Power Plant Piping.**
   - e. **Boiler Feed Pumps and Regulators.**
   - f. **Feed Water Heaters and** Softening **System.**

Each bidder shall be required to deposit **with his bid a certified check in** the amount **as provided in said specifications** and information **to bidders, to secure the** execution **of the contract for which bid** is made.

Copies of plans and specifications and **general information may be obtained** at the office of Charles H. Hurd, 1405 Merchants **Bank Building, Indianapolis, Indiana.**

The Board reserves the right to reject **any and all bids.**

BOARD OF SANITARY COMMISSIONERS.
JAY A. CRAVEN, **President.**
JOHN L. ELLIOTT, Vice-Pres.
LUCIUS B. SWIFT.

Bids: Oct. 21.

Water System

Mayfield, N. Y.

Sealed proposals for furnishing all labor and material for the construction of water system for the village of Mayfield, N. Y., will be received the 21st day of Oct., 1922, at the office of the village clerk, until 2 p.m. of that day. A certified check or N. Y. draft for **$2,500.00 to** accompany plans.

The work includes approximately 3 miles **of water pipe with appurtenances.** Plans **and specifications may be obtained** from **the village clerk or engineer.** Deposit of **$5.00 required.**

For all information address Clerk of the **board of Trustees** or the Engineer.

FRED J. WARNER,
Clerk.
MORRELL VROOMAN,
Engineer.

At the same time and place, proposals **for furnishing and erecting a 150,000** gal. **elevated steel water tank will be** received.

FRED J. WARNER,
Clerk.
MORRELL VROOMAN,
Engineer.

Bids: Oct. 24.

Trenching Machine

Memphis, Tenn.

The Memphis Artesian Water Department **will receive proposals at its** offices, **105-107 North Second Street,** Memphis, **Tennessee, up to 12 o'clock noon** Tuesday, **October 24, 1922, for furnishing** delivered **F.O.B.. Memphis, Tennessee:**

One Gasoline Engine Driven Trenching **Machine—cutting depth zero to** not less **than 6 feet nor more than 10** feet; **minimum width of trench** approximately **24 inches, maximum,** approximately **30 inches; machine** to be of **standard manufacture.**

Complete specifications, performance test, **etc. to accompany bid. Time of** delivery **must also be stated.**

The right is reserved to reject any or **all bids.**

Address proposals to Board of Water **Commissioners, Memphis Artesian** Water **Department, Memphis, Tennessee;** mark **"Bid on Trenching Machine".**

JAMES SHEAHAN,
Acting General Superintendent.

OFFICIAL PROPOSALS

Bids: Oct. 25.

State Hospital Work

Buffalo, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work, Additional Accommodations for Patients (Dining Room Accommodations), at the Buffalo State Hospital, Buffalo, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock p.m., on Wednesday, October 25, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3950, 3951, 3952 and 3953, and Addenda dated October 9, 1922. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Buffalo State Hospital, Buffalo, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.
Dated: October 10, 1922.

Bids: Oct. 26.

Drainage and Levee Work

Carrollton, Ill.

Sealed proposals for levee and ditch construction will be received by the Commissioners of the Keach Drainage and Levee District at the office of F. A. Whiteside, Attorney, at Carrollton, Illinois, until 1:00 p.m., Thursday, October 26th, 1922.

The work consist of repair and construction of levees, the construction and cleaning out of ditches and other work, divided into ten items, as follows:

Item No. 1. Levee Repair, 254,000 cu.yd.
Item No. 2. Levee Construction, 123,600 cu.yds.
Item No. 3. Clearing,
Item No. 4. Brush Dams.
Item No. 5. Earth Excavation, New Ditch, 17,000 cu.yds.
Item No. 6. Earth Excavation, Main Ditch, 90,000 cu.yds.
Item No. 7. Earth Excavation, Bowman Ditch, 8,000 cu.yds.
Item No. 8. Earth Excavation, East Lateral Ditch, 7,000 cu.yds.
Item No. 9. 20-inch Tile, 80 lin.ft.
Item No. 10. 12-inch Tile, 500 lin.ft.

Plans, profiles, specifications and proposal blanks may be obtained at the office of the engineers, Kelker, De Leuw & Co., 1206 Conway Building, Chicago, upon payment of $10.00, which will be refunded upon their return in good condition before November 15th.

Board of Commissioners of Keach Drainage and Levee District.

Bids: Nov. 9.

Grain Elevator

New Orleans, La.

Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans at their office, Suite 200, New Court Building, until 3:00 P.M. November 9, 1922, and then publicly opened for furnishing and erecting approximately 265 tons of Structural and Tank Steel required for the Grain Elevator Sacking Plant Shed and Bins.

A deposit of $1,000.00 in cash or certified check is required with each proposal.

A bond to the amount of 50% of the sum bid is required with notarial contract.

Specifications and proposal forms are on file in the office of the Supervisor of Purchases, at No. 1 Canal Street, New Orleans, Louisiana. Complete sets will be furnished to prospective bidders on deposit of $5.00, which will be refunded to depositors who submit proposals, or return sets in good condition.

The right is reserved to reject any or all bids and to waive informalities.

J. H. WALSH,
General Manager.

OFFICIAL PROPOSALS

Bid. Nov. 1.

State Road Work

Providence, R. I.

Sealed proposals for the construction of the following sections of State Highway will be received by the State Board of Public Roads at its office State House, Providence, R. I. until 12M on Wednesday, November 1st, 1922, at which time they will be opened and read in public:

Contract No. 2205—Lincoln-Smithfield Avenue, Pawtucket Line to Lonsdale Ave., 1.32 miles—Sheet Asphalt Pavement with Concrete Base.
Contract No. 2206—North Kingston-Ten Rod Road, Wickford Junction easterly to Tower Hill road, 1.8 miles—Bituminous Macadam.
Contract No. 2207—South Kingston-Kingston Road, Usquepaug to West Kingston Station, 2.46 miles—Bituminous Macadam.
Contract No. 2208—Warwick-Apponaug Road. Pawtuxet Bridge to Elmwood Avenue, 2.05 miles—Bituminous Macadam.

Bids must be made upon blank forms to be furnished by the Board. No bids will be accepted unless accompanied by a certified check for the sum of $200.00, payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids, and to give preference to towns or cities, in accordance with Section V of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Friday, October 20, 1922, every week day (except holidays and Saturdays), between the hours of 9 a.m. and 5 p.m., Saturdays 9 a.m. to 12 m.

State Board of Public Roads.
ABRAM L. ATWOOD.
BENJAMIN F. ROBINSON.
FRANK COLE.
J. H7NRY WOODARD.
ALTON HEAD.

Bids: Nov. 17.

Road Work

Tampa, Fla.

Sealed proposals will be received by the Board of County Commissioners of Hillsborough County, Florida, until 11.00 a.m., on November 17th, 1922, for the construction of approximately one hundred and sixty (160) miles of nine (9) and fifteen (15) foot roads, to be paved with either brick, asphalt, block, sheet asphalt, asphaltic concrete, cement concrete, or bituminous macadam, as set forth in the specifications.

Specifications may be obtained on application from the Clerk of the Circuit Court of Hillsborough County, at Tampa, Florida. A deposit of $5.00 will be required for specifications.

A certified check or bidder's bond executed by a reputable bonding company authorized to do business in the State of Florida, in the sum of Five (5%) per cent of bid must be attached up to a bid of Five Hundred Thousand ($500,000.00) Dollars. Any contractor bidding on more than amount of work up to and including the total project may make a check or bidder's bond for only Twenty-Five Thousand ($25,000.00) Dollars, payable to Charles T. Friend, Chairman of the Board of County Commissioners. A bond must be submitted with each proposal.

Bidders may submit proposals on each road separately or on the combined project as a whole, it being understood, however, that the Board reserves the right to award this work as they deem best, either separately or as a whole.

The right is reserved to select the type of curbing and paving for each road and to reject any or all bids.

Bids will also be received for road building materials; such materials to conform to the requirements as set forth in the construction specifications. A certified check or bidder's bond must accompany each proposal for materials, payable to Charles T. Friend, Chairman of the Board of County Commissioners, for the sum of One Thousand ($1,000.00) Dollars. The right is reserved to reject any and all bids. Address all bids to C. T. Friend, Chairman Board of County Commissioners, Tampa, Florida.

CHARLES T. FRIEND,
Chairman Board of County Commissioners.
Date, October 13th, 1922.

OFFICIAL PROPOSALS

Bids: Oct 31.

Highway Work

Baltimore, Md.

Sealed proposals for building eight sections of State Highway, as follows:

Garrett County—Cont. G-24—One section of state highway from Luke to Bloomington, a distance of 0.5 miles (Penetration Macadam).

Allegany County—Cont. A-22—One section of state highway along the Williams Road, for a distance of 1.6 miles (Concrete).

Howard County—Cont. HO-26—One section of state highway along the Old Frederick Road from the end of St. Johns Lane to the Woodstock Road, a distance of 2.56 miles (Concrete).

Montgomery County—Cont. M-39—One section of state highway thru Laytonsville, for a distance of 1.0 miles (Concrete).

Montgomery County—Cont. M-38—One section of state highway from Dawsonville toward Beallsville for a distance of 1.0 miles (Concrete).

Montgomery County—Cont. M-37—One section of state highway from Dawsonville towards Seneca, for a distance of 1.0 miles (Concrete).

Montgomery County—Cont. M-40—One section of state highway from Seeks Corner to the Pr. Geo. County Line, for a distance of 0.7 miles (Concrete).

Anne Arundel County—Cont. AA-26—One section of state highway from Tracy's Corner toward Nutwell, a distance of 1.0 miles (Gravel)

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., on the 31st day of October, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 11th day of October, 1922.

JOHN N. MACKALL,
Chairman
L. H. STEUART,
Secretary

Bids: Dec. 11.

Labor-Material Percentage Contract

New Orleans, La.

Sealed proposals will be received at the Sewerage and Water Board, Room 401, No. 526 Carondelet Street, New Orleans, La., up to 12 o'clock noon of Monday, December 11th, 1922, on Labor-Material Percentage Contract for year 1923.

Specifications and blank forms of proposal may be obtained at the office of the Board.

The right is reserved to reject any or all bids.

October 12th, 1922.

A. G. MOFFAT,
Secretary.

GEO. G. EARL,
General Superintendent.

Bids: Nov. 29.

Filtration Plant and Reservoir

San Juan, Porto Rico.

Sealed proposals for the furnishing of all labor and material for the construction of a 8,000,000 gals. filtration plant and a 10,500,000 gals. filtered water concrete reservoir for the City of San Juan will be received in the office of the Commissioner of Public Service until November 29, 1922, at 10 A.M.

All plans, specifications, instruction to bidders, blanks, forms for proposals and all other information may be obtained at the office of the City Commissioner of Public Works at San Juan, Porto Rico.

The right is reserved to reject any and all bids.

MARTIN TRAVIESO,
Commissioner of Public Service

OFFICIAL PROPOSALS

Bids: Nov 7

Bridge

Vicksburg, Miss.

Sealed alternate bids will be received by the Board of Supervisors of Warren County, Miss., at the office of the Chancery Clerk until 12 o'clock noon, Tuesday, November 7th, 1922, and at that time publicly opened for a bridge over Big Black River on the South Scenic Highway 4 miles south of Yokena, Miss., on the Mississippi River Scenic Highway between Vicksburg and Port Gibson.

The principal items of work are as follows, approximately:

628.26	Cu.Yds. Class "A" Concrete.
9,640	Lbs. Steel Reinforcing.
158,000	Lbs. Structural Steel.
301.3	Sq.Yds. Asphalt Paving.
347	Lin.Ft. Gas Pipe Railing.
206,800	Ft. B.M. Creosoted Lumber.
10,600	Ft. B.M. Untreated Lumber.
13,000	Lin.Ft. Creosoted Piling.
2,000	Lin.Ft. Untreated Piling.
257	Cu.Yds. Gravel Ballast.

and for all materials in connection with said work.

Plans and specifications are on file in the office of the Chancery Clerk, Vicksburg, Miss., and at the office of the Warren County Highway Engineer. On the receipt of check for $5.00, Contractors will be furnished with a set of plans and Bidder's Blank.

Any additional information may be secured from H. R. Rhodes, County Highway Engineer, Vicksburg, Miss. The right to reject any or all bids is reserved.

Cash or certified check for $3,000.00 made payable to the Board of Supervisors of Warren County, must accompany each bid as evidence of good faith and as a guarantee that if awarded the contract, the bidder will execute the contract and give bond as required.

By order of the Board of Supervisors.

J. G. SHERARD,
Chancery Clerk.

Bids: Nov. 2.

Grading

Newton, N. J.

Notice is hereby given that sealed bids will be received by The County of Sussex for the grading of Lakeside Boulevard in the Boro of Hopatcong in the County of Sussex. Estimated amount of excavation 16,453 cu.yds. and opened and read in public at the Freeholders Office, Newton, N. J. on November 2, 1922, at 11:30 A. M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Harvey Snook, County Engineer, and approved by the Board of Chosen Freeholders of the County of Sussex have been filed in the office of said Engineer at Newton, N. J. and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the Specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of the road on the outside addressed to The County of Sussex, Newton, N. J. and must be accompanied by a bonding Company's Certificate and a certified check for not less than 10% of the amount bid and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

By order of The County of Sussex.

WILLIAM S. VOUGHT,
Clerk

Wanted—GRADING

For full grading outfit, Model O, Thew Shovel and full grading equipment. South preferred.

DAYTON CONSTRUCTION CO.,
Elkins, W. Va.

OFFICIAL PROPOSALS

Bids: Nov 4.

Drainage Work

Bolton, N. C.

Notice is hereby given that sealed proposals for repair and improvement of the main ditch of Columbus County Drainage District No. 2, will be received until twelve o'clock noon, Eastern Standard time, November 4, 1922, at the office of the Board of Drainage Commissioners, Bolton, N. C.

The work to be performed consists of removing earth from the main ditch for a distance of approximately three miles, between laterals D and G, by means of a drag line. Earth to be deposited on one side.

The yardage of earth to be removed is approximately 168,000 cubic yards. The date of completion to be five months from date of awarding contract.

A certified check in the amount of $2,000,00 payable to the Board of Drainage Commissioners of Columbus County Drainage District No. 2, must accompany each proposal. Checks of unsuccessful bidders will be returned within ten days of awarding of the contract.

The said board reserves the right to reject any or all bids. Plans and specifications are on file at the office of the Board, Bolton, N. C. or same will be mailed upon application when same is accompanied by a deposit of $10.00, which will be refunded if plans are returned in good condition.

By order of the Board of Drainage Commissioners, Columbus County Drainage District No. 2.

G. T. MEYER, Secretary.

Bids: Oct. 26.

Street Paving

Augusta, Ga.

Sealed proposals will be received by the Streets and Drains Committee of The City Council of Augusta, Georgia, until 12 o'clock (noon), at the City Hall, Thursday, October 26, 1922, and at that time and place publicly opened, for paving Greene Street, from East Boundary to Fifteenth Street. Approximate quantities as follows:

89,000.00	square yards of pavement.
11,500.00	lineal feet re-set curb.
1,500.00	lineal feet new granite curb.
900.00	lineal feet marginal curb.
31,000.00	cubic yards excavation.
42,000.00	lineal feet 30" x 6" gutter.

Proposal form, plans and specifications may be obtained from the undersigned by depositing the sum of $10.00, which will be refunded upon the return of the plans and specifications.

As a guarantee that the bidder will execute the contract if awarded, all bids must be accompanied with a certified check in favor of The City Council of Augusta, in five per cent (5%) of the total amount bid.

Address all bids to J. W. Westmoreland, Clerk of Council, marking on envelope "Proposal for paving Greene Street, from East Boundary to Fifteenth Street, Augusta, Ga."

The City reserves the right to reject any and all bids.

W. H. WISE,
City Engineer and Commissioner of Public Works.

October 12, 1922.

TO SUBLET

Hauling of Material on 13 Mile Concrete Base-Contract, in Southern Kentucky—Average Haul 2½ Miles—Industrial Equipment Preferred—

METZEL & O'HEARN
Covington, Ky.

OFFICIAL PROPOSALS

Bids: Nov. 14.

Yellow River Bridge

Milton, Fla.

Sealed proposals for constructing the Yellow River Bridge on the Milton-Camp Walton Road about eight miles southeast of Milton and located within the Florida National Forest, State of Florida, County of Santa Rosa, will be received by the Board of County Commissioners of Santa Rosa County at the County Court House, Milton, Florida, until twelve (12) o'clock M., on the 14th day of November, 1922 at which time and place they will be publicly opened and read. The right is reserved to reject any and all bids, and none will be considered except those from contractors ascertained to be experienced and responsible.

The length of the project to be constructed is approximately 0.873 miles, and the principal items of work are approximately as follows: Clearing 6 acres, the construction of about 4,450 feet of untreated timber trestle of 10-ft. roadway with four turnouts, and the installation of two old 80 ft. steel spans over the channel. The steel spans shall be shipped from the site where they are now in use over the Yellow River on the County Road between Milton and Holley about nine and one-half miles upstream from the proposed bridge site. The right to cut timber for use in the construction of this bridge from National Forest land will be granted to the contractor, as stated under the section of the Specifications entitled "Government Stumpage."

Alternate bids will be received upon piles of creosoted pine timber in lieu of red cypress of juniper herein specified.

The work embraced in this contract shall be completed with in 200 weather working days (page 11), following the execution of the contract by the Board of County Commissioners.

The contract form and the maps, plans specifications and estimates of quantities may be examined by responsible contractors at the following addresses:

(Extra copies of plans, etc., are available upon deposit of $10.00 at the first named office only).

Office of Clerk of Board of County Commissioners, Milton, Fla.

U. S. Bureau of Public Roads, Room 917, Bell Bldg., Montgomery, Ala.

All proposals must be made on forms and in accordance with instructions forming a part of the specifications above referred to, and must be accompanied by a proposal guarantee in an amount at least equal to five (5) per cent of the total amount of the proposal.

C. H. OVERMAN,
County Engineer
Santa Rosa County, Florida.

Bids: Oct 30.

Southwest Trunk Sewer

Owosso, Mich

Sealed proposals will be received by the Clerk of the City of Owosso, Michigan, up to 7:30 o'clock p.m. Central Standard Time of the 30th day of October, 1922, for the construction of approximately 4707 lineal feet of combination main drain and main house sewer with manholes, inlets and other appurtenances.

The plans and specifications under which the work is to be done may be examined at the office of the City Clerk, Owosso, Michigan, or at the office of the Engineers Ann Arbor, Michigan, and copies of the plans and specifications may be obtained by making a deposit of five dollars which will be refunded upon their return in good condition.

A certified check for a sum not less than 5 per cent of the amount of the proposal will be required with each proposal.

The right to reject any or all proposals, and the right to waive defects in proposals will be reserved by the City.

B. K. LUCAS, City Clerk.

HOAD, DECKER, SHOECRAFT and DRURY,
Consulting Engineers,
Ann Arbor, Michigan.

CONTRACT BONDS FOR RESPONSIBLE CONTRACTORS

Ætna stands for the highest quality of insurance and surety bonds.

ÆTNA CASUALTY AND SURETY COMPANY
HARTFORD, CONN. AGENTS EVERYWHERE

OFFICIAL PROPOSALS

Bids: Nov. 9.

School Building

Trenton, N. J.

Sealed proposals for the complete construction of a new Elementary and Intermediate Public School Building will be received by the Board of Education of Trenton, in the county of Mercer, at the meeting room of the board in the Administration Building, No. 9 South Stockton Street, Trenton, New Jersey, at 8:30 o'clock p.m., Eastern Standard Time, on Thursday, the 9th day of November, 1922, at which place and time all bids received will be unsealed and the contents publicly announced. No bids will be received previous to the time designated, and none will be received thereafter.

All bids shall be presented to the board at the place and time mentioned by the parties bidding, or their agents when called for by the president of the board.

Bids for the general construction for the heating and ventilating, for the plumbing, and for the electrical work, will be taken separately.

A certified check for five (5%) per cent of the amount of the bid must accompany each proposal, made payable to the Board of Education of the city of Trenton, to be treated is liquidated damages in case the bidder receiving the award shall fail to execute a contract and furnish the required bond, within ten days after notification of the acceptance of their bid.

The Board of Education reserves the right to reject any or all bids, or to waive defects or informalities in any bid if it be deemed to the interest of the city so to do.

Copies of the plans and specifications will be on file at the office of the secretary of the Board of Education, in the Administration Building, for the purpose of estimating.

A limited number of copies of the plans and specifications will be loaned to the prospective bidders on deposit of a certified check drawn to the order of the Board of Education, Trenton, New Jersey, in the sum of $25.00. These plans and specifications may be obtained by application to the architect. Ernest Sibley, Edgewood Lane and Bluff Road, Palisade, New Jersey, or from Wm. Slack & Son, associate architects, 144 East State Street, Trenton, New Jersey. Deposits will be forfeited unless plans and specifications are returned to the architects within ten days after bids are opened.

(Signed),
ROBERT C. BELLVILLE,
Secretary, for the Board of Education,
City of Trenton, N. J.
Dated Oct. 16, 1922.

Bids: Oct. 30.

Street Improvement

Laurel, Miss.

Sealed proposals will be received by the Mayor and Board of Commissioners of the City of Laurel, Mississippi, until two o'clock P.M., October 30th, 1922, at the office of the City Clerk of said city for constructing approximately:

19,865 sq.yds. brick pav't concrete foundation.
16,160 sq.yds. gravel surfacing.
20,243 lin.ft. combined curb and gutter.
3,000 sq.yds. concrete sidewalk.
1,357 lin.ft. 8-in. sanitary sewer with all appurtenances thereto.

Plans and profiles may be seen, specifications and proposal forms may be obtained at the office of the City Clerk of the City of Laurel.

J. H. PACE.
Street Commissioner.

Bids: Oct. 24.

Stone Bulkhead

Cape May, N. J.

Sealed bids will be received by the Commissioners of the City of Cape May, N. J. until eleven o'clock a.m., October 24, 1922, for providing and placing approximately 1400 tons of stone along Beach Bulkhead.

Specifications and additional information may be obtained from the office of the City Engineer.

Bids must be accompanied by certified check for five per cent of the amount bid.

The Commissioners reserve the right to reject any or all bids.

HARRY W. BELL,
City Engineer.

OFFICIAL PROPOSALS

Bids: Nov. 2.

Wells and Water Main

Nokomis, Ill.

Sealed proposals will be received by the City Council of the City of Nokomis, Illinois, until 7 p.m., Thursday, November 2, 1922, and then publicly opened and read, for furnishing all material and labor for the construction of the following work:

4 Wells, 10 inches in diameter and 40 ft. deep, including screens, suction line, fittings and manholes.

4,300 feet of 8 inch Class B water main, with hydrants, valves, etc., complete in place.

Separate bids will be received on the wells and on the mains.

Each proposal must be accompanied by a certified check for not less than 10% of the bid and the successful bidder will be required to furnish a bond for the amount of the contract.

Payment for the work will be made in cash.

Plans and specifications are on file at the office of the City Clerk at Nokomis, Illinois, or they may be obtained from the Engineers, Taylor & Woltmann, 428 Unity Bldg., Bloomington, Illinois. A charge of $3.00 will be made for each set.

The right is reserved to reject any or all bids.

FRANK KROEGER, JR.,
Mayor.
WM. BOTE,
City Clerk.

Contractors Everywhere Read These Advertisements

to see where bids are desired on contracts suited to their available plant and organization. The suggestion is therefore made to advertisers that they word their advertisements so that the contractor will get a good idea of the size and kind of work to be let, and perhaps the plant needed. This should result in an increased number of desirable bidders.

U. S. GOVERNMENT

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., Oct. 6, 1922.—Sealed proposals will be opened in this office at 3 P.M., Nov. 1, 1922, for construction (including Mechanical Equipment) of a one story laundry building covering 5,130 square feet, for the United States Veterans' Hospital at the Bronx, New York, N. Y., to be completed within four months from award of contract. Drawings and specifications may be obtained at this office in the discretion of the Supervising Architect. Proposals will be considered only from individuals, firms, or corporations possessing satisfactory financial and technical ability, equipment, and organization to insure speedy completion of the contract, and who have established a record for expedition on contracts of similar character and magnitude. Before drawings and specifications are forwarded to prospective bidders, applicants must cite at least one specific instance where a record for speed has been established on a job of equivalent magnitude, giving date of award of contract, amount of contract, specified time for completion and date of actual completion. The fact that any concern obtains a set of the plans and specifications from any source whatever and submits a bid shall not constitute a waiver of the foregoing stipulations. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, MILWAUKEE, WIS., Sept. 30, 1922. Sealed proposals will be received here until 2 p.m., Nov. 6, 1922, and then opened, for constructing pile pier, removing old timber-crib pier, and dredging at Racine Harbor, Wis. Further information on application.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, BUFFALO, N. Y.—Sealed proposals will be received here until 11 a.m., November 6, 1922, and then opened, for construction of three 400-cu.yd. steel dump scows. Further information on application.

U. S. ENGINEER OFFICE, PROVIDENCE, R. I. Sealed proposals will be received here until 12 o'clock noon, Oct. 23, 1922, and then opened, for dredging in New Haven Harbor, Conn. Further information on application.

SEALED PROPOSALS, indorsed "Proposals for Refrigerating Equipment, Tupper Lake, N. Y. Specification No. 4720," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., November 15, 1922, and then and there publicly opened, for refrigerating and ice-making equipment, using as refrigerant any satisfactory substance, except ammonia, and consisting of two motor-driven compressors, condensers, liquid receiver, two motor-driven brine pumps, a combination freezing and brine cooling tank with expansion coils, a water-precooler tank with coils, two charcoal filters, brine agitator, water agitating system by compressed air, automatic can filler, hand operated can hoist, automatic can dump and ice chute, ice cans, oil and scale traps, piping and other accessories; and for cold storage rooms with insulation for eight compartments including doors, floors and equipment for the storage and handling of goods in the subsistence building at the U. S. Veterans' Hospital, Tupper Lake, N. Y. Drawings and specification No. 4720 may be obtained on application to the Bureau of Yards and Docks. Deposit of a check or postal money order for $10, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the drawings and specification. R. E. BAKENHUS, Acting Chief of Bureau, October 6, 1922.

SEALED PROPOSALS, indorsed "Proposals for Boiler Plant Equipment and Steam Distribution, Tupper Lake, N. Y., Specification No. 4719," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., November 15, 1922, and then and there publicly opened, for Mechanical equipment, piping and an outside steam distributing system consisting of brick settings on concrete foundations for 5 water tube boilers, side-feed mechanical stokers with extension furnaces, smoke flue, feed water heater, storage tank, feed water and vacuum pumps, combined twin pump and receiver, drip traps, an incinerator plant equipped with two incinerators and hot water heating and sterilizing equipment and complete piping systems for all equipment; the installation of 5 marine type water tube boilers furnished by the Government, and an outside steam distribution system including condensate and vacuum return lines; all at the U. S. Veterans' Hospital, Tupper Lake, N. Y. Drawings and Specification No. 4719 may be obtained on application to the Bureau of Yards and Docks. Deposit of a check or postal money order for $20, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the drawings and specification. R. E. BAKENHUS, Acting Chief of Bureau, October 5, 1922.

SEALED PROPOSALS will be received and publicly opened by the Director of the U. S. Veterans Bureau in the office of the Quartermaster General, 2306 Munitions Building, Washington, D. C., at 11:00 A.M., November 14, 1922, for the construction of a 400 bed neuro-psychiatric hospital at Camp Sherman, Chillicothe, Ohio. Work will include construction of twenty-two buildings, built of reinforced concrete and brick, complete with water, lighting, heating and sewer systems, roads and walks. Plans and specifications may be obtained after October 14, upon deposit of $100, from the Quartermaster General, 2312 Munitions Building, Washington, D. C., or from the Constructing Quartermaster, Chillicothe, Ohio. One set of plans and specifications will be on exhibition at each of the following stations: Constructing Quartermaster, 39 Whitehall Street, New York City, Constructing Quartermaster, Scott Field, Belleville, Illinois; Quartermaster Supply Officer, Chicago General Intermediate Depot, 1819 West Pershing Road, Chicago, Illinois.

U. S. GOVERNMENT

SEALED PROPOSALS, indorsed "Proposals for Stack, Tupper Lake, N. Y., Specification No. 4722," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C. until 11 o'clock a.m., November 15, 1922, and then and there publicly opened, for a radial brick stack on a concrete foundation, at the U. S. Veterans' Hospital, Tupper Lake, N Y. Specification No. 4722 may be obtained on application to the Bureau of Yards and Docks. Deposit of a check or postal money order for $10, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the specification. R. E. BAKENHUS, Acting Chief of Bureau, October 5. 1922.

DEPARTMENT OF THE INTERIOR, UNITED STATES RECLAMATION SERVICE, Washington, D. C., October 9, 1922. Sealed proposals for furnishing two direct pumping units for the Black Canyon Pumping Plant, Boise Project, Idaho, will be received at the office of the United States Reclamation Service, Denver, Colorado, until 2 o'clock p.m., December 6, 1922. and will then be opened. For particulars address the United States Reclamation Service, Washington, D. C., or Denver, Colorado. Morris Bien, Acting Director.

U. S. GOVERNMENT

SEALED PROPOSALS, indorsed "Proposals for Steel Water Tank, Tupper Lake, N. Y., Specification No. 4724," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., November 15, 1922, and then and there publicly opened, for 200,000 gallon steel tank with tower and appurtenances at the U. S. Veterans' Hospital, Tupper Lake, N. Y. Specification No. 4724 may be obtained on application to the Bureau of Yards and Docks. Deposit of a check or postal money order for $5, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the specification. R. E. BAKENHUS, Acting Chief of Bureau, October 5, 1922.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., Oct. 13, 1922.—Sealed proposals will be received at this office until 3 p.m., Nov. 7, 1922, and then opened for an extension to the building and driveway, at the United States Post Office at San Jose, Calif., in accordance with the specifications and drawings mentioned therein. Copies of which may be had at this or at the office of the Custodian, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. GOVERNMENT

PROPOSALS FOR CONCRETE CAISSON BREAKWATER. — U. S. Engineer Office, Room 1201, 537 South Dearborn Street, Chicago, Illinois.—Sealed proposals for constructing concrete caisson breakwater at Indiana Harbor, Indiana, will be received here until 10 a.m., November 6, 1922, and then opened. Further information on application.

PROPOSAL FOR PIER REMOVAL, ETC.—U. S. Engineer Office, Room 1201, 537 South Dearborn Street, Chicago, Illinois. Sealed proposals for pier removal, dredging, etc., in Calumet Harbor, Illinois, will be received here until 10 a.m., October 24, 1922, and then opened. Further information on application.

U. S. ENGINEER OFFICE, PROVIDENCE, R. I. Sealed proposals will be received here until 12 o'clock, noon, Oct. 30, 1922, and then opened for maintenance dredging in Milford Harbor, Conn. Further information on application

U. S. ENGINEER OFFICE, BUFFALO, N. Y.—Sealed proposals will be received here until 11 a.m., October 30, 1922, and then opened for constructing stone-concrete superstructure on breakwater, Buffalo Harbor, N. Y. Further information on application.

POSITIONS VACANT

EMPLOYMENT

POSITIONS WANTED

POSITIONS VACANT

ASSISTANT engineer wanted, experienced in survey work. Must be a good draughtsman, college graduate preferred. Salary $150.00 per month. State experience, when available and give referencs. P-138, Eng. Nws-Record.

ESTIMATOR. Well established Cleveland Construction Co. expanding their operations have an opening for an experienced estimator familiar with general contracting, should be in position to make small investment with services. Opportunity for ambitious man to get started in his own business and in short time work into worthwhile income. P-149, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

EXPERIENCED estimator wanted, fully acquainted with taking off quantities for all types of buildings. Reinforced concrete especially. State experience and salary expected. Information confidential. P-137, Eng. News-Record.

DRAFTSMEN, experienced, wanted for structural steel buildings; apply by mail only, giving age, nationality, education, experience and salary expected. Post & McCord, 101 Park Ave., New York.

DRAFTSMEN, experienced on bridge, structural or reinforced concrete. give details, experience, education and salary desired. P-111, Eng. News-Record.

DRAFTSMAN, must be expert letterer for general drawing and map work in office of consulting engineer of large railroad system. Apply by letter stating nationality, age, education, experience and salary desired. P-132, Eng. News-Record.

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POSITIONS VACANT

FIRST class structural **steel detailers** and checkers with **experience on mill buildings**, office buildings, etc. Position in Pittsburgh district. State experience and salary desired. P-525, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

FOREMAN wanted, experienced on sewer and rock work, one who can produce results and is not afraid of work; no other need apply. State age, salary expected and experience in first letter. Position open now. R. F. Relly Contracting Co., Brownville, N. Y.

ORNAMENTAL iron **draftsman, familiar** with the designing and **detailing** of all kinds of ornamental and miscellaneous iron work for buildings. Apply by letter, stating experience, references and salary desired, to James McKinney & Son, 925 Broadway, Albany, N. Y.

SALES engineer; headquarters probably New York City; salary and travelling expenses; preferably one having had sewer design and construction experience. State experience and salary desired. P-115, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

POSITIONS VACANT

SALES engineer to represent well-known manufacturer of material handling machinery in Chicago district. Products consist of wagon loaders, portable belt conveyors, clamshell buckets and water front and railroad unloading machinery; commission arrangement desired. State experience, age and qualifications. P-116, Eng. News-Record.

STRUCTURAL steel detailers for buildings and bridges and general structural work. Must be able to produce results. State in application, age, nationality, education, experience, salary expected, date available. Pittsburgh District. P-135, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

STRUCTURAL engineer wanted at once to take charge of structural department of 15 to 25 men in architects office. Must have had wide experience in architectural engineering including designing and checking of all types of steel and concrete structures as well as executive direction of staff. Location Detroit, Michigan. State full details including salary requirements in first letter. P-134, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

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CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Oct. 30	St. Paul, Minn.	Oct. 26
Oct. 31	Abercrombie, N. D.	Oct. 26
Oct. 31	Warren, O.	Oct. 19
Oct. 31	Jersey City, N. J. Adv. Oct. 26.	Oct. 26
Nov. 1	Bay Saint Louis, Miss.	Oct. 5
Nov. 1	Marlin, Tex.	Oct 19
Nov. 1	Elmsford, N. Y. Adv. Oct. 26.	Oct. 26
Nov. 1	Boulder, Tex.	Oct. 26
Nov. 2	Auburn, Ind.	Oct. 19
Nov. 2	Nokomis, Ill.	Oct. 19
Nov. 3	Nashville, Tenn.	Oct. 26
Nov. 9	Marshall, Ill.	Oct. 26
Nov. 10	Gridley, Ill. Adv. Oct. 26.	Oct. 26
Nov. 14	Newport, Ky.	Oct. 5
Nov. 24	Memphis, Tenn. Adv. Oct. 26.	Oct. 26
Nov. 29	San Juan, Porto Rico Adv. Oct. 12 to 26.	Oct. 19
Dec. 1	San Juan, Porto Rico Adv. Oct. 19 and 26.	Oct. 19

SEWERS

Oct. 30	Dover, N. J.	Oct. 5
Oct. 30	Owosso, Mich.	Oct. 19
Oct. 31	Long Island City, N. Y.	Oct. 26
Nov. 1	Denver, Colo.	Oct. 26
Nov. 2	Tulsa, Okla.	Oct. 12
Nov. 2	Cedarburg, Wis.	Oct. 26
Nov. 3	Lublock, Tex.	Oct. 26
Nov. 6	Amboy, Minn.	Oct. 19
Nov. 7	Miami, Fla. Adv. Oct. 19 and 26.	Oct. 19
Nov. 14	Indianapolis, Ind. Adv. Oct. 26.	Oct. 26
Dec. 11	New Orleans, La. Adv. Oct. 12 to 26.	Oct. 12

WASTE DISPOSAL

Nov. 6	Waco, Tex.	Oct. 26

BRIDGES

Oct. 30	Houston, Tex.	Oct. 5
Oct. 30	Sterling, Ill.	Oct. 26
Oct. 31	Sydney, Australia	Jan. 12
Oct. 31	Trenton, N. J.	Oct. 19
Oct. 31	Illinois	Oct. 19
Oct. 31	Bridgewater, Mass.	Oct. 26
Nov. 1	Georgia	Oct. 19
Nov. 2	Ft. Worth, Tex.	Oct. 26
Nov. 2	Ottawa, Kan.	Oct. 26
Nov. 7	Vaudreuil, Que.	Oct. 19
Nov. 7	Vicksburg, Miss.	Oct. 19
Nov. 10	Tennessee	Oct. 26
Nov. 14	Milton, Fla.	Oct. 19
Jan. 23	Spokane, Wash.	Sept. 21
Sept. 1, 1923,	Sydney, New South Wales, Australia	Aug. 3

EXCAVATION, DRAINAGE AND IRRIGATION

Oct. 30	Tunica, Miss.	Oct. 19
Nov. 1	Greenville, Ky.	Oct. 19
Nov. 1	Lions Head, Ont.	Oct. 26
Nov. 2	Cleveland, Miss.	Oct. 19
Nov. 3	Tracy, Calif.	Oct. 19
Nov. 4	Bolton, N. C. Adv. Oct. 19 and 26.	Oct. 19
Nov. 13	Newark, N. J. Adv. Oct. 26.	Oct. 26

STREETS AND ROADS

Oct. 30	Laurel, Miss. Adv. Oct. 19 and 26.	Oct. 19
Oct. 30	Sacramento, Calif.	Oct. 19
Oct. 30	Terre Haute, Ind.	Oct. 19
Oct. 30	Altmont, Tenn.	Oct. 26
Oct. 30	Great Bend, Kan.	Oct. 26
Oct. 30	Lamar, Mo.	Oct. 26
Oct. 31	New York, N. Y.	Oct. 26
Oct. 31	Milwaukee, Wis.	Oct. 12
Oct. 31	New York, N. Y. Adv. Oct. 5 to 26.	Oct. 5
Oct. 31	Illinois	Oct. 19
Oct. 31	Maryland Adv. Oct. 19 and 26.	Oct. 19
Oct. 31	Avon, N. J. Adv. Oct. 26.	Oct. 26
Oct. 31	Austin, Tex.	Oct. 26
Oct. 31	Daingerfield, Tex.	Oct. 26
Oct. 31	Pointe Claire, Que.	Oct. 26
Oct. 31	Ft. Madison, Ia.	Oct. 26
Nov. 1	Rhode Island Adv. Oct. 19 and 26.	Oct. 19
Nov. 1	Georgia	Oct. 19
Nov. 1	Columbia, S. C.	Oct. 26
Nov. 2	Hopatcong, N. J.	Oct. 19
Nov. 2	Michigan	Oct. 19
Nov. 2	Marietta, Okla.	Oct. 26
Nov. 2	Ft. Wayne, Ind.	Oct. 26
Nov. 2	Goshen, Ind.	Oct. 26
Nov. 2	Evansville, Ind.	Oct. 26
Nov. 3	Pennsylvania	Oct. 19
Nov. 3	Goshen, Ind.	Oct. 26
Nov. 3	Decatur, Ga.	Oct. 26
Nov. 4	Quebec	Oct. 19
Nov. 4	Laporte, Ind.	Oct. 26
Nov. 6	Ebensburg, Pa.	Oct. 19
Nov. 6	Fresno, Calif.	Oct. 26
Nov. 6	Warsaw, Ind.	Oct. 26
Nov. 6	Utah	Oct. 26
Nov. 6	California	Oct. 26
Nov. 7	Marion, Ind.	Oct. 19
Nov. 7	Stockton, Calif.	Oct. 26
Nov. 7	Topeka, Kan.	Oct. 26
Nov. 7	Birmingham, Ala.	Oct. 26
Nov. 7	Topeka, Kan.	Oct. 26
Nov. 7	Louisiana	Oct. 26
Nov. 8	Bridgeton, N. J.	Oct. 19
Nov. 8	Monticello, Ind.	Oct. 26
Nov. 8	Mays Landing, N. J. Adv. Oct. 26.	Oct. 26
Nov. 9	Duluth, Minn.	Oct. 19
Nov. 9	Eldorado, Kan.	Oct. 19
Nov. 9	Duluth, Minn.	Oct. 26
Nov. 10	Tennessee	Oct. 26
Nov. 14	Santa Rosa, Calif.	Oct. 26
Nov. 14	Massachusetts	Oct. 26
Nov. 17	Tampa, Fla.	Oct. 26
Nov. 18	Logansport, Ind.	Oct. 26
Nov. 20	Goderich, Ont.	Oct. 19
Nov. 21	Pascagoula, Miss.	Oct. 26
Jan. 7	Duluth, Minn.	Sept. 28

INDUSTRIAL WORK

Nov. 1	Vischer Ferry, N. Y. Adv. Oct. 12 to 26.	Oct. 12
Nov. 1	Phila., Pa.	Oct. 19
Nov. 6	Crawfordsville, Ind.	Oct. 26
Nov. 9	Marshall, Ill.	Oct. 19

BUILDINGS

Oct. 28	Marquette, Mich.	Oct. 26
Oct. 30	West Orange, N. J.	Oct. 26
Oct. 30	Pittsburgh, Pa.	Oct. 26
Oct. 31	Creedmoor (Jamaica P. O.), N. Y.	Sept. 28
Oct. 31	Baltimore, Md.	Oct. 12
Nov. 1	Centerville, O.	Oct. 12
Nov. 1	Plant City, Fla.	Oct. 5
Nov. 1	Duluth, Minn.	Oct. 5
Nov. 1	Irvington, N. J.	Oct. 12
Nov. 1	Attica, N. Y.	Oct. 26
Nov. 1	Winfield, Kan.	Oct. 26
Nov. 2	Chisholm, Minn.	Oct. 26
Nov. 2	Pittsburgh, Pa.	Oct. 26
Nov. 4	Patchogue, N. Y.	Oct. 19
Nov. 4	Carrick (Pittsburgh P. O.), Pa.	Oct. 19
Nov. 6	Detroit, Mich.	Oct. 19
Nov. 6	Cleveland, O.	Oct. 19
Nov. 6	Maywood, N. J. Adv. Oct. 26.	Oct. 26
Nov. 7	Rapid City, S. D.	Oct. 19
Nov. 8	St. Louis, Mo.	Oct. 19
Nov. 8	Kitchener, Ont.	Oct. 26
Nov. 9	Trenton, N. J.	Oct. 26
Nov. 9	Minneapolis, Minn.	Oct. 26
Nov. 9	Pittsburgh, Pa.	Oct. 26
Nov. 14	Wash., D. C.	Oct. 26
Nov. 14	Theills, N. Y. Adv. Oct. 26.	Oct. 26
Nov. 15	Ocean City, N. J.	Oct. 5
Nov. 15	Butler, Pa.	Oct. 26
Nov. 15	Beaumont, Tex.	Oct. 19
Nov. 18	Portland, Ore.	Oct. 19
Dec. 1	Oil City, Pa.	Oct. 26

FEDERAL GOVERNMENT WORK

Oct. 30	Superstructure — Buffalo, N. Y. Adv Oct. 5 to 26.	Oct. 5
Oct. 30	Dredging—Providence, R. I. Adv Oct. 5 to 26.	Oct. 5
Oct. 30	Alterations, etc.—Richmond, Va.	Oct. 5
Oct. 31	Dredging—Honolulu, H. T.	Aug. 31
Oct. 31	Road—Nevada	Oct. 19
Nov. 1	Laundry — New York, N Y.	Oct. 12
Nov. 1	Alterations, etc. — Fitzsimons, Colo.	Oct. 12
Nov. 1	Deferrization Plant, etc.— Annapolis, Md.	Oct. 19
Nov. 1	Standpipe, etc. — Yorktown, Va.	Oct. 19
Nov. 6	Pier, etc. — Milwaukee, Wis. Adv. Oct. 12 to 26.	Oct. 12
Nov. 6	Breakwater—Chicago, Ill. Adv. Oct. 12 to 26.	Oct. 12
Nov. 6	Dump Scows — Buffalo, N. Y. Adv. Oct. 12 to 26.	Oct. 12
Nov. 6	Extension—Fargo, N. D.	Oct. 19
Nov. 7	Extension, etc.—San Jose, Calif.	Oct. 19
Nov. 8	Gas Tank, etc.—Chollas Heights, Calif.	Oct. 19
Nov. 14	Hospital—Chillicothe, O. Adv. Oct. 19 and 26.	Oct. 12
Nov. 15	Radial Brick Stack—Tupper Lake, N. Y. Adv. Oct. 19 and 26.	Oct. 19
Nov. 15	Mechanical Equipment, etc —Tupper Lake, N. Y. Adv. Oct. 19 and 26.	Oct. 19
Nov. 15	Water Tank—Tupper Lake, N. Y. Adv. Oct. 19 and 26.	Oct. 19
Nov. 15	Refrigerating and Ice-Making Equipment, etc.—Tupper Lake, N. Y. Adv. Oct. 19 and 26.	Oct. 19
Nov. 15	Coal and Ash Handling Equipment, etc. — Tupper Lake, N. Y.	Oct. 19
Nov. 15	Post Office—Vernal, Utah	Oct. 26
Nov. 15	Repairs — Moorhead City, N. C.	Oct. 26
Nov. 16	Post Office—Shawnee, Okla. Adv. Oct. 26.	Oct. 26
Nov. 17	Re-roofing—Carville, La.	Oct. 26
Nov. 20	Horses and Props—Huntington, W. Va. Adv. Oct. 26.	Oct. 26
Nov. 20	Steel Hull—Pittsburgh, Pa. Adv. Oct. 26.	Oct. 26
Nov. 20	Roof—Toledo, O. Adv. Oct. 26.	Oct. 26
Nov. 23	Earthwork—St. Louis, Mo. Adv. Oct. 26.	Oct. 26
Nov. 24	Post Office—Chandler, Okla. Adv. Oct. 26.	Oct. 26
Nov. 25	Dredging—Charleston, S. C. Adv. Oct. 26.	Oct. 26
Dec. 1	Barge—Montgomery, Ala. Adv. Oct. 26.	Oct. 26
Dec. 6	Pumping Units — Boise, Idaho	Oct. 19

MISCELLANEOUS

Oct. 30	Broken Trap Rock Stone, etc., New York, N. Y.	Oct. 26
Oct. 30	High School Equipment— Wash., D. C.	Oct. 12
Oct. 30	Stone—Olympia, Wash.	Oct. 19
Oct. 31	Steam Pumps — Atlanta, Ga.	Oct. 5
Oct. 31	—Coarse Aggregate, New York, N. Y.	Oct. 26
Nov. 2	Dock Wall—Buffalo, N. Y.	Oct. 26
Nov. 3	Spillway Gates — Turlock, Calif.	Oct. 26
Nov. 4	Transformers, etc. — Melbourne, Australia	Aug. 17
Nov. 4	Concrete Culvert Pipe—South Carolina	Oct. 26
Nov. 4	Jetties, etc. — Longport, N. J. Adv. Oct. 26.	Oct. 26
Nov. 8	Foundation—Cleveland, O.	Oct. 26
Nov. 9	Structural and Tank Steel— New Orleans, La.	Oct. 19
Nov. 13	High School Equipment— Wash., D. C.	Oct. 12
Nov. 16	Hoist and Trailers — San Jose, Calif.	Oct. 19
Nov. 16	Steel Shed—New Orleans, La.	Oct. 26
Nov. 21	High School Equipment— Wash., D. C.	Oct. 12
Dec. 18	Coal Handling Plant — Melbourne, Victoria, Australia	Sept. 21

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., New Britain — Plans to issue bonds extending water supply system. $100,000. J. D. Williams, city engr.

Waterworks (Continued)

La., Pontchatoula—Takes bids in December, waterworks system. $65,000 bonds voted. Swanson & McGraw, United Fruit Bldg., New Orleans, consult. engrs.

Ind., Mishawaka—Had plans prepared 500,000 gal. rein.-con. reservoir, incl. 3 motor driven pumps. $40,000. Burns & McDonnell, 402 Interstate Bldg., Kansas City, Mo., consult. engr.

Mo., Milan—Soon takes bids extending present mains, also new purification plant. $30,000. E. T. Archer & Co., 609 New England Bldg., Kansas City, engrs.

Mo., Paris—Nov. 21, to vote on $57,000 bonds for improvements to present water, light and ice plants, incl. two 200 hp. oil engines to be leased from Fairbanks Morse Co., 217 South 8th St., St. Louis. W. P. Rollins & Co., 521 R.R. Exch. Bldg., Kansas City, engrs.

Okla., Cyril—Nov. 6, to vote on $31,000 bonds for new waterworks system. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Ore., Portland—Plans new Bull Run pipe line, 10 mi. 60 in. and 14 mi. 52 in. riveted steel pipe, or 10 mi. 58 in. and 14 mi. 50 in. lock bar pipe, clearing and grubbing 16 acres three 80 ft. combined highway and pipe spans with abutments. $1,000,000. F. Randlett, ch. engr.

Ore., The Dalles — Making preliminary studies and estimates preparatory to bond election, for earth dam and pipe line between Mill Creek and east fork of Hood River. $300,000. Stevens & Koon, Spaulding Bldg., Portland, consult. engrs.

Ont., Whitby—Pub. Utilities Comn. having plans prepared for 1,000 ft. intake and slow sand filter. $55,000. F. W. Thorold, 54 Admiral Rd., Toronto, engr.

BIDS DESIRED

N. Y., Elmsford—Nov. 1, by Bd. Village Trustees, Lawn Ave., extending mains. Wulff Eng. Co., Natl. Bank Bldg., Tarrytown, engrs.; adv. this issue.

N. J., Jersey City—Oct. 31, by Bd. City Comrs., about 5,000 lin.ft. 36 in. c.i. mains in various streets. E. J. Holland, city clk.; adv. this issue.

Ala., Birmingham—L. Holt, purch. agt. for Tennessee Coal, Iron and R.R. Co., Brown-Marx Bldg., taking bids laying 11,000 ft. of 10 in., 1,750 ft. 8 in. and 8,150 ft. 16 in. c.i. pipe. $65,000. A. F. Haswell, Ensley, engr.

Tenn., Memphis—Nov. 24, by Bd. Comrs. Memphis Artesian Water Dept., superstructures for new water supply works, incl. Contrs. 7, 8, 9 and 10. Fuller & McClintock, 170 Bway., New York City, engrs.; adv. this issue.

Tenn., Nashville—Nov. 3, by S. H. McKay, secy. Bd. Pub. Wks., 125 water meters, ⅝ in. with necessary couplings.

Ill., Gridley—Nov. 10, for 290 ft. well, etc., Taylor & Woltmann, 428 Uni y Bldg., Bloomington, engrs.; adv. this issue.

Ill., Marshall — Nov. 9, by Mayor and City Council, removing old pumps from pumping station, putting in new concrete floor, water-proofing walls and floors, furnishing and installing 2 motor driven triplex pumps, 350 g.p.m. each, furnishing and erecting transmission line incl. transformers and lighting fixtures from power house to pumping station (about 1.8 mi.). F. L. Wilcox, Chemical Bldg., St. Louis Mo., engr. Noted Sept. 14.

Wis., Cedarburg — Nov. 2, by F. G. Schuette, city clk., furnishing two hundred ⅝ in. and ¾ in. water meters.

Minn., St. Paul—Oct. 30, by H. W. Austin, city purch. agt. 4 lime tanks and agitators, 800 cu.yd. gravel and 1,500 cu.yd. sand, for Water Dept. C. Claussen, city engr.

N. D., Abercrombie—Oct. 30, waterworks system incl. 8,125 lin.ft. galvanized iron mains, 2, 2½ and 3 in., 9 hydrants, pneumatic pressure tank, pumping plant of 1,200 gal. capacity. $15,000. J. Wicklein, village clk.

Tex., Lubbock—See "Sewers."

Colo., Boulder — Nov. 1, 10,000,000 gal. rein.-con. reservoir. Burns & McDonnell, 402 Interstate Bldg., Kansas City, Mo., engrs.

BIDS RECEIVED

N. J., Newark—North Jersey Dist. Water Supply Comn., 20 Clinton St., opened bids Oct. 19 for great notch tunnel and approaches, Contr. 3, from Heyman & Goodman Co., 15 Exch. Pl., Jersey City, $918,297; T. A. Gillespie Co., 7 Dey St., New York City, $978,543; Mason & Hanger Co., 52 Vanderbilt Ave., New York City, $1,158,441; Contr. 4, from Heyman & Goodman Co., 25 Exch. Pl., Jersey City, $978,000, Patrick McGovern, Inc., 50 East 42nd St., New York City, $1,295,000, Frederick Snare Corp., 8 West 40th St., New York City, $1,412,000. Noted Sept. 7.

Md., Baltimore — Opened bids Oct. 18, storm water drains in Dist. P-8, Contr. 55, from D. Catalana, 34 Knickerbocker Bldg., $38,758; Aiello Constr. Co., 76 Knickerbocker Bldg., $43,674; Ryan Constr. Co., 735 Real Estate Trust Bldg., Phila., $45,349.

La., Cedar Grove—Opened bids Oct. 3, waterworks and sanitary sewerage systems, from James Contg. Co., Dallas, Tex., (street address not available), $179,357; C. H. Everett, Hutchison, Kan., $186,905; Merkel Mchy. Co., 1733 Walnut St., Kansas City, Mo., $189,048. Contract awarded to lowest bidder. Noted Sept. 28.

CONTRACTS AWARDED

Tenn., Memphis — Memphis Artesian Water Dept., rein.-con. reservoir and rein.-con. substructures for pumping station, iron removal plant and aerator, also furnishing and installing c.i. pipe, valves, drains, etc., to D. D. Thomas & Sons, 463 North Dunlap St. Noted Sept. 21.

O., Cleveland—For 10,400 lin.ft. 60 in. steel pipe for Fairmount Water Project, to P. F. Connolly, Commonwealth Bldg., $398,341. Noted Oct. 12.

O., Wickliffe—Mains in Worden Ave., to B. H. Whittaker, 343 The Arcade, Cleveland, $16,716; Wade Ave. to J. B. Lynn, 343 The Arcade, Cleveland, $3,536. Work involves 7,300 ft. 4-8 in. c.i. pipe. Noted Sept. 28.

Ia., Bedford—For 19,046 lin.ft. 4 in. Class B c.i. mains, 3.3 ton Class D specials, 28 fire hydrants, etc., to Cowan & Smith, 1733 Walnut St., Kansas City, Mo.; labor to N. E. Stucker & Son, Lawrence, Kan., total $18,500.

Colo., Glenwood Springs—For 4,100 ft. tunnel and 1,500 ft. concrete and metal flume and appurtenances thereto for city water supply, to White & Johnson, Chamber Commerce Bldg., Denver, $70,000. Noted Sept. 21.

Sewers

PROPOSED WORK

Mass., Fall River—Plans sewerage extension North Main St. north of New St. $100,000. A. Wolstenholme, city engr. Noted May 4.

Pa., Butler — City Council authorized $300,000 bond issue for sewage disposal plant.

La., Pontchatoula—Takes bids in December, sewerage system. $65,000 bonds voted. Swanson & McGraw, United Fruit Bldg., New Orleans, consult. engrs.

Kan., Pittsburg—Nov. 7, to vote on $125,000 bonds for sewers and sewage disposal plant. Black & Veatch, 701 Mutual Bldg., Kansas City, Mo., engrs.

Kan., Robinson—Voted $25,000 bond issue for sewers. E. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., engrs.

Colo., Denver—Having plans and estimates prepared storm sewer in Park Hill Storm Sewer Dist. $1,000,000. A. K. Vickery, City Hall, engr.

Calif., Sanger—Had plans prepared 23,760 lin.ft. 6 in. and 2,138 lin.ft. 8 in. vitr. sewers, 3,930 ft. 30 in., 1,414 ft. 28 in., 1,980 ft. 14 in., 1,760 ft. 12 in. and 850 ft. 8 in. precast concrete sewers, etc. R. Phillips, Sanger, engr. Noted Sept. 21.

Ont., Grimsby—Plans new sewerage system. W. F. Randall, town clk. Engineer not selected.

BIDS DESIRED

N. Y., Long Island City—Oct. 31, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Depot Rd., Barclay, Orontes, 88th and 106th Sts., etc.

Ind., Indianapolis—Nov. 14 (change of date), by Bd. of Sanitary Comrs., City Hall, constructing Sect. 3, Div. 3, and furnishing and erecting mechanical equipment for sewage disposal plant. J. A. Craven, pres.; adv. this issue. Noted Oct. 12.

Tex., Lubbock—Nov. 3, by P. Spencer, mayor, sewage disposal plant, sewers and water mains. $100,000. S. Sanders, city engr. J. B. Hawley, Cotton Exch. Bldg., Ft. Worth, engr. E. E. Sands, Mason Bldg., Houston, engr. Noted Aug. 31.

Colo., Denver—Nov. 1, by Dept. Impvts. and Parks, 36,040 ft. 8-10 in. vitr. pipe sewer and 134 manholes in Berkeley Special Sanitary Sewer Dist. $49,412. A. K. Vickery, City Hall, engr.

BIDS RECEIVED

O., Cleveland—Opened bids Oct. 12, for 1,440 ft. 4-5 ft. circular and 380 ft. 12-14 in. vitr. tile sewer in (1) Bessemer Ave., 1,000 ft. 3 ft. circular sewer in (2) Dugway Brook, 275 ft. 24 in. vitr. tile sewer in (3) Lake Shore Blvd., from P. W. Graham, 1274 West 108th St., (1) $46,67 Amato Constr. Co., 335 The Arcade, (1 46,926; J. C. Kenny, 6817 Bridge Ave., ($7,208; Kassouff Co., 3182 West 25th St. 2) $9,500 (3) $4,168. Noted Oct. 5.

O., Maple Heights (Worthingto O.)—Opened bids Oct. 5 for (1) Bw Sewer (2) Outfall Sewer, from Manson Engineers Bldg., Cleveland. (1) 6,287; Hadded Mall Co., Schofield Bldg., veland. (1) $166,954 (2) $37,629; C. W. ckson. 10714 Amor Ave., Cleveland, (2) $39,851. Noted Sept. 28.

Neb., Omaha—Storm sewers in Dist. 649, from 33rd St and Redman Ave. to 36th and Fort Sts., 276 lin.ft. 18-30 in. vitr. pipe, 116 lin.ft. 7 ft. 3 ring brick. 24 lin. ft. 7 ft. to 8 ft. 3 ring brick funnel, 1,469 lin.ft. 8 ft. 3 ring brick, 118 lin.ft. 5 ft. 3 in. 8 ft. to 8 ft. x 8 ft. brick and rein.-con. funnel, 52 vertical ft. 9 ft. manhole, 4,185 lb. cast iron, 50 cu.yd. foundation concrete, from J. J. Hanighen Co., 617 South 14th St., $38,973; H. J. Petersen Co., 403 Farnham Bldg., $41,545; Hanson & Willadsen Co., $42,623.

Calif., Oakland—Sewers in Melrose Acres, (1) 17,960 ft. 8 in. vitr. pipe, (2) 36 manholes (3) 21 standpipes (4) 63 lampholes, from W. J. Schmidt, 2025 Shattuck Ave., Berkeley, (1) $1.50 (2) $100, (3) $10 (4) $10; Heafey, Moore-McNair, 2030 High St., (1) $1.60 (2) $85 (3) $30 (4) $25; Bates & Borland, Oakland Savings Bank Bldg., (1) $1.88 (2) $90 (3) $45 (4) $25; R. D. Downer, Richmond, (1) $2.25 (2) $124 (3) $20 (4) $18; Oakland Paving Co., 5000 Bway., (1) $3.75 (2) $130 (3) $30 (4) $35. Noted Sept. 21.

Que., Montreal—Opened bids 2 x 3 brick sewer in (1) Sherbrooke St. (2) Bellechasse St. (3) Cote Des Neiges Rd., from C. Frascarelli & Co., 654 Berri St., (1) $21,805 (2) $1,619 (3) $5,182; P. Desantis, 3292 St. Hubert St., (1) $21,989 (2) $1,662 (3) $5,266; Rondou, Corlier & Co., 3506 Christophe Colomb St., (1) $29,312 (2) $1,372 (3) $4,377; Boyd, Rossi & Devito, 409 St. James St., (3) $4,707. Noted Sept. 28.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, sewer in Gravesend Ave., etc., to J. F. Cogan, 17th Ave. and 60th St., $417,000. Engrs. est. $425,000. Noted Oct. 19.

N. Y, Syracuse—Syracuse Intercepting Sewer Bd., 104 City Hall, machinery and equipment for sewage pumping station and grit chamber, to Roberts Filter Mfg. Co., 6th and Columbia Sts., Darby, Pa., (slip ring), $76,100.

La., Cedar Grove—See "Waterworks."

Ia., Carroll—For 9,000 lin.ft. 8 in. sanitary sewers, 2 pumping stations, 8 combination manholes, etc., to Sorenson Drainage Co., Slayton, Minn., $22,174. Noted Oct. 12.

Ia., Cascade—For 32,000 ft. sewers and disposal plant, to W. B. Carter, 606 United Bank Bldg., Sioux City, $46,543 and $24,046 respectively.

Que., Hull—Building sewers in various streets, to Laflamme & Laflamme, 40 Langevin St., $42,695.

Waste Disposal

PROPOSED WORK

Pa., Harrisburg—Nov. 7 to vote on $85,000 bonds for 1 story and basement, 44 x 54 ft. incinerator, 85 ton daily capacity. R. R. Seaman, clk.

BIDS DESIRED

Tex., Waco—Nov. 6, by R. L. Stribbling, city comptroller, 20 ton incinerator. H. R. Seward, Waco, engr.

Bridges

PROPOSED WORK

N. Y., Hoosick Falls—Making plans for steel bridge. $40,000. G. S. Thompson, town engr.

N. Y., Millersport — Town of Amherst plans new steel bridge with concrete floor to replace present structur on Transit Rd., here. To exceed $30,000. J. Wehrle, Williamsville, superv.

Tenn., Lawrenceburg—State Hy. Comn., Nashville, plans 200 ft. rein.-con. and steel bridge over Shoals Creek, here. D. Q. McComb, ch. engr.

Ia., Ft. Dodge — Webster Co. making plans and takes bids about Jan. 1. rein.-con. bridge, three 390 ft. spans $40,000. J. L. Parson, Court House, engr.

Missouri—State Hy. Dept., Jefferson City, takes bids about Nov. 21, 3,072 ft. rein.-con. and steel bridge, 20 ft., across Missouri River in city of Lexington, Lafayette and Ray Counties. $900,000. Waddell & Son, 800 Graphic Arts Bldg., Kansas City, engrs. Noted Oct. 19.

Bridges (Continued)

Tex., Newton—See "Streets and Roads."

Ore., Astoria — State Highway Comn., Salem, plans bridge over Columbia River, here. $3,000,000. C. B. McCullough, state bridge engr.

BIDS DESIRED

Mass., Bridgewater—Oct. 31 by Towns of Bridgewater and Middleboro and State Dept. Pub. Wks., Div. Highways, at State House, Boston, 150 ft. rein.-con. beam bridge, 40 ft. wide, between here and Middleboro. $35,000. A. W. Dean, State House, Boston, engr.

Louisiana—See "Streets and Roads."

Tennessee—Nov. 10, by State Dept. Highways, Nashville, 202 ft. rein.-con. and steel bridge on Federal Aid Project 62, sta. 68-77, to have three 26 ft. and one 114 ft. spans. D. Q. McComb, Nashville, ch. engr.

Tennessee—See "Streets and Roads."

Illinois—Oct. 31, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, substructure for steel, Project 25, Sect. 6-B, Grundy Co.; superstructure for steel, Project 25, Sect. 6-C, Grundy Co.; 1 steel complete, Project 25, Combination R, Grundy Co. C. H. Older, ch. engr.

Illinois—Oct. 31, by Dept. Pub. Wks. and Buildings, Div. Highways, 2 concrete bridges Route 16, Sect. 13-B, Shelby Co., 4 concrete approach spans, Route 2, Sect. 52-B, De Witt Co., 1 steel superstructure Route 2, Sect. 52-C, De Witt Co. Two last projects incorrectly noted as Clinton Co., Oct. 19 issue.

Ill., Sterling—Oct. 30, at City Hall, Sterling, for 1st Ave. Bridge over Rock River, rein.-con. open spandrel, arch bridge, twelve 80 ft. 6" spans, 28 ft. roadway, two 7 ft. sidewalks, in Sterling Twp. $185,000. E. O. Hills, Morrison, supt. highways of Whiteside Co. Noted March 2.

Kan., Ottawa—Nov. 2, at office of Clerk Franklin Co., Ottawa, Rattlesnake Hill Bridge in Osage and Franklin Counties, on New Santa Fe Trail Rd., Sects. 3 and 34, Twp. 16 and 17, Range 17 East, 1 mi. northeast of Lomax or 3 mi. west of Pomona, alternate plans, one for 183 ft. 4 in. steel span with 20 ft. roadway, other for 120 ft. steel span with 20 ft. roadway. S. Olcott, Lyndon, clk. Osage Co.

Missouri—State Hy. Dept., Jefferson City, takes bids about Nov. 11, for 600 ft. rein.-con. and steel bridge, 20 ft., across Gasconade River, Gasconade Co. $115,000. Waddell & Son, 800 Graphic Arts Bldg., Kansas City, engrs. Noted Oct. 19.

Tex., Ft. Worth — Nov. 2, by W. E. Yancy, aud. Tarrant Co., 3 rein.-con. bridges over Little Fossil, Walnut and Marys Creeks $58,827. R. V. Glenn, co. engr.

BIDS RECEIVED

Pennsylvania—See "Streets and Roads."

Idaho, Wallace—W. I. Bassett, dist. engr. Bureau Highways, Coeur d'Alene, four 90 ft. steel bridges, concrete substructures between here and Kellogg, from W. A. Byers, 1204 Mansfield St., Spokane, Wash., $45,030; McGuire & Blakesley, Great Falls, Mont., $45,711. Noted Oct. 12.

Calif., Sacramento—Bd. Supervs. Sacramento Co., constructing (1) Paintersville Bridge, 1,019,500 lb. structural steel, 55,500 lb. machinery, 308 cu.yd. concrete for counterweight, 15,000 lb. reinforced steel, 1,060 sq.yd. flooring, 110 cu. yd. Class A concrete 1-2-4, 500 cu.yd. earth fill, 1,124 yd. Class A concrete 1-2½-5 mix, etc., (2) Steamboat Slough Bridge, 601,000 lb. structural steel, 49,530 lb. machinery for bascule span, 294 cu.yd. 1-3-6 mix concrete for counterweights, 14,400 lb. reinforced steel, 936 cu.yd. concrete 1-2½-5 mix, in piers and abutments, etc., (3) both bridges, from Jenkins & Elton, 36th and Y Sts., (1) $197,400 (2) $143,600 (3) $333,346; A. W. Kitchen, 110 Market St., San Francisco, (1) $204,000 (2) $155,000 (3) $355,000; Healy-Tibbitts Constr. Co., 9 Main St., San Francisco, (1) $208,690 (2) $161,554 (3) $359,254. Noted Sept. 14.

CONTRACTS AWARDED

Virginia—See "Streets and Roads."

La., New Orleans — H. A. Klorer, city engr., rolling lift bridge over new basin canal, South Broad St., to Scherzer Bridge Co., 53 West Jackson Blk., $75,000. Bids will be taken in about 2 months for substructure, $12,000-$15,000.

Ia., Centerville—Supervs. Appanoose Co. to Ellis Constr. Co., Centerville, 7 box culverts $3,080; Alexander & Highbie, 2733 6th Ave., Des Moines, 23 box culverts, one 110 ft. and one 120 ft. steel high truss bridge, $45,838. Noted Oct. 19.

Ia., Fairfield—Jefferson Co., 66 rein.-con. box culverts, 7 extensions, one 40 x 20 ft. deck girder, one 40 x 20 ft. and one 24 x 24 ft. I beam bridges, to Ottumwa Supply & Constr. Co., Ottumwa, $19,638; O. Holm, Everly, $11,200; O. Jorstad, Wallingford, $14,000, and C. H. Kearns, Fairfield, $10,816. Noted Oct. 5.

Ia., Waterloo—Supervs. Washington Co., for 322 ft. steel deck truss bridge, one 100 ft. and two 70 ft. main spans, two 40 ft. I beam approach spans, over English River near Kalona, to Iowa Bridge Co., 1263 East 19th St., Des Moines, $29,999. Noted Oct. 19.

Kan., Coffeyville—Montgomery Co. (Independence) bridge over Verdigris River, Project 37-1, here, to Western Bridge Co., Harrisonville, Mo., $34,612.

Colorado—See "Streets and Roads."

Calif., Los Angeles—Bd. Harbor Comrs., Room 312, Byrne Bldg., superstructure of double leaf bascule bridge on concrete piers, Badger Ave., incl. 3 truss double leaf heel trunnion type Strauss bascule span, 220 ft. centre to centre of main trunnions with 50 ft. tower at each end, 2 railroad tracks, 2 roadways and 1 sidewalk, to Ross Constr. Co., Van Nuys Hotel, $542,400. Noted Sept. 14.

Dams

PROPOSED WORK

Ore., Bend—See "Industrial Works."

Ont., Paisley—See "Industrial Works."

Calif., Long Beach—Soon takes bids incinerator. $125,000.

Railways

PROPOSED WORK

Washington—J. H. Hall, Wilcox Bldg., Portland, Ore., filed articles of incorporation for Yakima Southern Ry., with headquarters at Vancouver. Company plans railroad between Yakima and Underwood, to connect with Spokane, Portland & Seattle Ry. at Underwood. $1,000,000 capital stock. E. E. Lytle, 634 Tillamook St., and H. E. Reed, 465 Montgomery Dr., both of Portland, Ore., incorporators.

Ontario—Grand Trunk Ry., McGill St., Montreal, Que., plans new railway yards at Kitchener. $95,000. C. Forrester, London, div. supt.

South Africa—Government plans 22 extensions aggregating 850 miles of 3 ft. 6 in. gage except two 24 in. lines, 60 lb. rails or lighter, $22,000 and $8,000 per mi. respectively. Address W. W. Hoy, genl. mgr. Railways & Harbors, Johannesburg, South Africa.

Excavation, Drainage, Irrigation

PROPOSED WORK

Ark., Texarkana—Index—Sulphur D. D., Miller Co., had plans prepared for floodway consisting of 36.8 mi. levees and 14.35 mi. open channel, interior drainage system includes 89.47 mi. channels and 34.7 mi. bayou clearing, also 1,000 hp. pumping plant, area of district 111,340 acres, 177 sq. mi., 6,021,000 cu.yd. earth excav. in levees and channels, for draglines, dredges and dry land machines. $1,658,000. Morgan Eng. Co., Goodwin Institute Bldg., Memphis, Tenn., engrs.

BIDS DESIRED

N. J., Newark—Nov. 13, at office of T. L. Raymond, dir. Dept. Streets & Pub. Impvts., City Hall., dredging portion of City of Newark Channel at Port Newark Terminal; adv. this issue.

Ont., Lions Head—Nov. 1, by J. H. Cook, clk. Eastnor Twp., draining and excav. for Judges Creek Drain, incl. 24,000 cu.yd. earth and 900 cu.yd. rock excav. $30,000.

CONTRACTS AWARDED

Fla., Kissimmee—City will fill in Lake front, 300,000 cu.yd., by day labor. J. R. Gilbert, city clk.

Ill., Carrollton—Hartwell Levee & Drainage Dist., extension and improvement in Hartwell Levee and Sanitary Dist., comprising 12,000 acres, incl. 350,000 ft. hydraulic dredgework and straightening 3 mi. Apple Creek, to McWilliams Dredging Co., 332 South Michigan Ave., Chicago, $177,000.

Colo., Ordway—Ordway D. D. 1, Crowley Co., 600,000 cu.yd. excavation in 10 mi. open ditch, to M. R. Amerman, 248 North Market St., Wichita, Kan., $0.07 per yd., total $42,000. Noted Sept. 7.

Wash., Aberdeen—See "Miscellaneous."

Streets and Roads

PROPOSED WORK

N. Y., Little Valley — Cattaraugus Co. plans election to vote on $150,000 bonds constructing roads throughout county.

Virginia—Falls Church and Providence Dists. near Alexandria, will vote on $275,000 bond issue Nov. 2, to defray portion cost building 8 mi. Lee Highway from Broad and Washington Sts., Falls Church to Fairfax Court House, Fairfax Co. Address G. P. Coleman, Richmond, state highway comr.

Fla., Gainesville—Alachua Co. soon receives bids paving 80,000 sq.yd. Gainesville-Archer Rd.; 150,000 sq.yd. Gainesville-Fairbanks-Waldo Rd.

La., Ruston—Having plans prepared paving work. $200,000. E. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., engrs.

Ky., Earlington—City soon takes bids concrete curbing and guttering, laying sewers and paving with rock asphalt or bituminous macadam, various streets. $125,000. R. C. Griffin, consult. engr.

O., Cleveland Heights (Warrensville P. O.)—Plans resurfacing with tar and macadam Grandview Ave., Chestnut Hill Dr., Fairmoun , Euclid, Lincoln and Washington Blvds., Clarkson, Corydon, Coleridge, Scarborough, Sillman, Edgehill, Yorkshire, Lamberton, East Overlook, Woodward, Redwood, Hampshire, Wilton, Coldwell, Hyde Park, Bellfield, Stratford, Guilford, Wellington, Dartmoor, North Woodland, Arlington and Elandon Rds. $300,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Ind., New Albany—Floyd Co. plans paving 11,180 ft. Mount Tabor Rd., 16 ft., stone macadam. $25,412. M. M. Boland, New Albany, engr.

Ind., Valparaiso—Porter Co. plans grading and gravel surfacing 0.697 mi. Sederberg Rd., 18 ft. $28,900. F. R. McNeice, Valparaiso, engr.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and gravel surfacing 12 mi. Federal Aid Project 80, Sect. F, Machinac Co., 18 ft. wide, 4½ mi. State Trunk Line Rd. 22-6, Sect. B, Benzie Co., 16 ft. wide. F. F. Rogers, state highway comr.

Kan., Wichita — Resolutions passed excavating, curbing, guttering and paving Wellington Pl. from 18 to 20th Sts., Douglas Ave from Madison to Spruce Sts., Market St. from Boston to Hary Sts., Harrison Ave. from Woodrow to Coolidge Sts., and alley west of Water St. from English to Waterman Sts. P. L. Brockway, City Bldg., Engr.

Neb., Pawnee City—Plans paving streets, various types to be considered. E. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., engrs.

Wyo., Casper—Plans paving 6 or 8 blocks South Beech St., 34 and 44 ft., $60,000; paving and sewers in West 14th and South Willow Sts., Railroad Ave. and adjoining cross streets, 34 ft., $100,000. Alternate bids will probably be asked on concrete and bitulithic types of pavement. F. S. Knittle, Box 1143, city engr.

Montana — State Hy. Comn., Helena, making plans grading, surfacing and building structures on 13.5 mi. Billings-Hardin Rd., Federal Aid Project 187, Yellowstone Co., 81,500 cu.yd. excav., 16,500 cu.yd. crushed gravel, $70,000, 15 mi. Broadus North Rd., Federal Aid Project 198, Powder River Co., $120,000, 14.5 mi. Cascade-Ulm Rd., Federal Aid Project 182, Cascade Co., 150,000 cu.yd. common and 3,300 cu.yd. rock and intermediate excav., 26,000 cu.yd. crushed gravel, $139,000, 47 mi. Glacier Park Trail, Sects. C, L F and H, Federal Aid Project 84, Roosevelt Co., 282,000 cu.yd. excav., 64,000 cu.yd. gravel, $360,000, 7 mi. Medicine Lake-Reserve Rd., Federal Aid Project 193, Sheridan Co., 68,000 cu.yd. excav., 12,600 cu.yd. gravel, $57,000, 16.5 mi. Hardin-Crow Agency Rd., Federal Aid Project 188, Big Horn Co., 48,000 cu.yd. excav., 24,000 cu.yd. gravel, $106,000, 5.8 mi. Ravalli-St. Ignatius Rd., Federal Aid Project 194, Missoula Co., 45,000 cu.yd. earth and 5,000 cu.yd. rock excav., 7,850 cu.yd. crushed gravel, $45,000; takes bids during winter for 31.5 mi. Pablo-Rollins Rd., Federal Aid Project 191, Flathead Co., 246,650 cu.yd. earth and 43,000 cu.yd. rock excav., 37,800 cu.yd. surfacing and one 30 ft. bridge, $287,000, 15 mi. Nashua-Frazer Rd., Federal Aid Project 189, Valley Co., 75,000 cu.yd. common excav., 27,000 cu.yd. crushed gravel, $163,000, 16.5 mi. Browning-Carlow Rd., Federal Aid Project 196, Glacier Co., 116,000 cu.yd. excav., 22,400 cu.yd. gravel, $112,000, 40 mi. Dupuyer-Glacier Park Rd., Federal Aid Project 190, Glacier Co., 373,000 cu.yd. earth and 27,000 cu.yd. rock excav., 72,000 cu.yd. crushed gravel, $425,000, 12 mi. Arlee-Ravalli Rd., Federal Aid Project 192, Missoula Co., 97,600 cu.yd. earth, 6,800 cu.yd. intermediate and 9,600 cu.yd. rock excav., $136,000, 12 mi. McDonald-Knowles Rd., Federal Aid Project 186, Sanders Co., 98,700 cu.yd. earth, 10,600 cu.yd. intermediate and 19,300 cu.yd. rock excav., 14,400 cu.yd. crushed gravel, one 30 ft. and one 24 ft. bridge, $167,000, 8.8 mi. Dixon East Rd., Federal Aid Project 197, Sanders-Missoula Co., 50,000 cu.yd. earth and 12,500 cu.yd. rock excav., 12,000 cu.yd. crushed gravel, $100,000. All foregoing 21-24 ft. J. N. Edy, ch. engr.

Streets and Roads (Continued)

Missouri—State Hy. Dept. at div. office Greenfield, rejected bids opened Aug. 28, 4.029 mi. road from Lamar to Springfield, 24 ft., Federal Aid Project 159 A, Dade Co., 15,229 cu.yd. earth and 297 cu.yd. rock excav., 3,050 cu.yd. borrow, 125.4 cu.yd. concrete masonry, 8,408 lb. reinforcing for concrete masonry, 28,481 sq.yd. specification C gravel pavement, etc. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans 5.062 mi. road from McKittrick S.R.D., 24 ft., Federal Aid Project 141, Montgomery Co., 26,423 cu.yd. earth and 1,201 cu.yd. rock excav., 6,399 cu.yd. borrow, 301.6 cu.yd. concrete masonry, 29,313 sq.yd. specification C gravel pavement, etc. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans 2.061 mi. road from Cairo to Poplar Bluff, State Rd. Route 16, Sect. 94, Mississippi Co., 5,564 cu.yd. earth excav., 15,703 cu.yd. borrow, 2,176 cu.yd. gravel, 2,176 cu.yd. gravel ¼ mi. haul, 3,970 cu.yd. gravel additional ¼ mi. haul, 10,882 sq.yd. 1 course concrete pavement, etc.; 5 mi. road from Milan to Green City, 24 ft., State Project 6, Sect. 34, Sullivan Co., 50,906 cu.yd. earth excav., 660 cu.yd. borrow, 83.2 cu.yd. concrete masonry, etc.; 2.886 mi. road from Sante Fe Trail, State Project Route 20, Sect. 10, Lafayette Co., 10,092 cu.yd. earth excav., 17,349 cu.yd. borrow, 30,561 sq.yd. concrete pavement, 18 ft. wide, 7 in. at center and edges, 209.4 cu.yd. concrete masonry, etc.; 4,896 mi. road from Bolivar to Buffalo, State Project Route 15, Sect. 80, Dallas Co., 18,876 cu.yd. earth and 441 cu.yd. rock excav., 15,879 cu.yd. borrow, 11,743 cu.yd. gravel surface ¼ mi. haul, 69,943 cu.yd. gravel surface course additional ¼ mi. haul, 254.2 cu.yd. concrete masonry, etc.; 5 mi. road from Douglas Co. line to Howell Co. line, 26 ft., State Project 5, Sect. 95, Ozark Co., 35,077 cu.yd. earth excav., 800 cu.yd. borrow, 31.5 cu.yd. concrete masonry, etc.; 4.061 mi. road from Vienna to Osage Co. line, State Project Route 7, Sect. 55, Maries Co., 21,445 lin.ft. grading, 9,796 cu.yd. 1 course gravel surfacing ¼ mi. haul, 58,779 cu.yd. gravel surfacing additional ¼ mi. haul, 16 ft. wide, 9 in. at center and edges, etc.; 5 mi. road on Capitol Highway, State Project Route 12, Sect. 30, Moniteau Co., 10,418 cu.yd. earth excav., 76.5 cu.yd. concrete masonry, 11,880 cu.yd. 1 course gravel surfacing ¼ mi. haul, 108,066 cu.yd. gravel surfacing additional ¼ mi. haul, 13,960 lin.ft. grading, etc.; 4.991 mi. road from Jefferson City to Eldon, 24 ft., State Project 15, Sect. 56, Miller Co., 23,937 cu.yd. earth excav., 3,997 cu.yd. borrow, 228.3 cu.yd. concrete masonry, etc.; 1.403 mi. McBride Hill Relocation, State Project Route 51, Sect. 3, Perry Co., 7,409 lin.ft. grading, 2,644 cu.yd. gravel surfacing 16 ft. wide, 9 in. at center and edges, 2,644 cu.yd. 1 course gravel ¼ mi. haul, 10,377 cu.yd. gravel additional ¼ mi. haul, etc.; 3.078 mi. road from Jefferson City to Eldon, 24 ft., State Project Route 15, Sect. 57, Miller Co., 10,493 cu.yd. earth and 1,320 cu.yd. rock excav., 2,470 cu.yd. borrow, 106.4 cu.yd. concrete masonry, etc.; 2.322 mi. road on Capitol Highway, 24 ft., State Project Route 12, Sect. 29, Moniteau Co., 6,514 cu.yd. earth and 200 cu.yd. rock excav., 101.2 cu.yd. concrete masonry, etc.; 4.866 mi. road from Centerville to Ellington, 24 ft., State Project Route 21, Sect. 25, Reynolds Co., 50,056 cu.yd. earth and 610 cu.yd. rock excav., 5.498 cu.yd. borrow, 164 cu.yd. concrete masonry, etc.; 2.585 mi. road on Kings Highway from Jackson to Perry Co. line, 26 ft., State Project Route 25, Sect. 19, Cape Girardeau Co., 17,856 cu.yd. earth and 3,144 cu.yd. rock excav., 4,413 cu.yd. borrow, 103.8 cu.yd. concrete masonry, etc.; 3.24 mi. road from Monett to Eureka Springs, State Project Route 37, Sect. 10, Barry Co., 161,798 cu.yd. earth and 2,185 cu.yd. rock excav., 7,756 cu.yd. 1 course gravel surfacing ¼ mi. haul, 38,784 cu.yd. 1 course gravel surfacing additional ¼ mi. haul, 210.5 cu.yd. concrete masonry, etc.; 4.914 mi. road from Monett to Eureka Springs, State Project Route 37, Sect. 7, Barry Co., 20,583 cu.yd. earth and 200 cu.yd. rock excav., 1,390 cu.yd. borrow, 11,702 cu.yd. 1 course gravel surfacing ¼ mi. haul, 58,510 cu.yd. 1 course gravel surfacing additional ¼ mi. haul, 16 ft. wide, 9 in. at edges and center, 363.3 cu.yd. concrete masonry, etc.; 4.375 mi. road from Douglas Co. line to Howell Co. line, 26 ft., State Project Route 5, Sect. 96, Ozark Co., 24,114 cu.yd. earth excav., 40.7 cu.yd. concrete masonry, etc.; 3.3 mi. road from Wright Co. line to Ozark Co. line, 24 ft., State Project Route 5, Sect. 94, Douglas Co., 18,577 cu.yd. earth excav., 19.4 cu.yd. concrete masonry, etc.; 2.01 mi. road from Wright Co. line to Ozark Co. line, 24 ft., State Project Route 5, Sect. 93, Douglas Co., 14,209 cu.yd. earth and 2,366 cu.yd. rock excav., 198 cu.yd. borrow, 45.6 cu.yd. masonry, etc. B. A. Piepmeier, state highway engr.

Mo., St. Louis—Bd. Pub. Serv. takes bids within 3 months paving and granite curbing 3,550 ft. Meramec St. from 38th to Gravois Sts., 14,290 sq.yd. trinidad asphalt, $67,850, 5,200 ft. Nebraska St. from Park to Magnolia Sts., 16,505 sq.yd. asphalt or warrenite, $60,900, 1,425 ft. Hebert St. from Parnell to Glasgow Sts., 4,965 sq.yd. warrenite, $24,600, 2,500 ft. Kossuth St. from Prairie to Fair Sts., 11,390 sq.yd. warrenite, $52,200, 425 ft. Soulard St. from 12th to 14th Sts., 4,160 sq.yd. trinidad asphalt, $17,900, 2,400 ft. 12th St. from Soulard to Chouteau Sts., 12,320 sq.yd. trinidad asphalt, $63,200, 1,850 ft. 12th St. from Russell to Soulard Sts., 9,530 sq.yd. trinidad asphalt, $47,500, 5,140 ft. West Florissant St. from Union St. to Kingshighway, N.W., 29,105 sq.yd. asphalt, $152,500, 2,250 ft. Taylor St. from Bway, to West Florissant St., 10,355 sq.yd. warrenite, $53,350, 550 ft. Wilson St. from Cooper to Edwards Sts., 1,695 sq.yd. brick, $10,150, 575 ft. Missouri St. from Keokuk to Chippewa Sts., 1,855 ft. asphalt, $8,800, 1,250 ft. East Virginia St. from Bates to Wilmington Sts., 3,040 sq.yd. brick, $17,300, 700 ft. Macklind St. from Southwest to Botanical Sts., 2,805 sq.yd. brick, $16,900, 1,250 ft. San Francisco St. from Kingshighway to Geraldine St., 4,395 sq.yd. brick, $35,600, 700 ft. Scott St. from Taylor St. westward, 1,950 sq.yd. brick, $15,600, 750 ft. McRee St. from Kingshighway westerly, 2,540 sq.yd. brick, $16,250, 1,250 ft. Madison St. from wharf to Bway., 4,375 sq.yd. granite, $34,600, 950 ft. Theresa St. from Market to Laclede Sts., 4,090 sq.yd. granite, $29,600, 6,400 ft. Choteau St. from Bway. to Jefferson St., 32,530 sq.yd. recut granite, $119,025; paving and concrete curbing 500 ft. Osceola St. from Ohio St. to Bway., 1,735 sq.yd. concrete, $7,500, 1,250 ft. Smiley St. from Ivanhoe to Frisco Sts., 3,630 sq.yd. concrete, $16,800, 525 ft. Emercon St. from Harney to Florissant Sts., 820 sq.yd. warrenite, $7,200, 550 ft. Garnet St. from Forest to McCausland Sts., 1,470 sq.yd. asphaltic concrete, $8,200, 950 ft. Smiley St. from Leola to Ivanhoe Sts., 3,255 sq.yd. asphaltic concrete, $14,500, 745 ft. Glasgow St. from Kossuth to 22nd Sts., 1,265 ft. brick, $8,000, 900 ft. Geraldine St. from Lillian to Thekla Sts., 3,435 sq.yd. warrenite, $17,400, 525 ft. Neosho St. from Kingshighway westerly, 1,625 sq.yd. warrenite, $7,500, 500 ft. Glase St. from Bway. to Kuhs. Sub., 1,530 sq.yd. concrete, $6,900, 700 ft. Wiesehan St. from Kingshighway to Korn St., 2,355 sq.yd. asphaltic concrete, $9,500, 750 ft. Beacon St. from Lillian to Prange Sts., 2,645 sq.yd. asphalt or warrenite, $11,700, 800 ft. Bancroft St. from point 240 ft. west of Brannon to Macklind Sts., 2,485 sq.yd. asphaltic concrete, $9,380, 275 ft. Brannon St. from Sutherland to Bancroft Sts., 1,100 sq.yd. warrenite, $4,600, 4,000 ft. Delor St. from Grand to Ray Sts., 20 ft., 8,985 sq.yd. concrete, $41,700, 1,300 ft. Delor St. from Ray to Gravois Sts., 6,145 sq.yd. warrenite, $32,650, 1,250 ft. Slevin St. from Kingshighway to Geraldine St., 3,740 sq.yd. brick, $25,300, 1,150 ft. Wilmington St. from Colorado to Grand Sts., 3,830 sq.yd. brick, $21,350, 750 ft. Schollmeyer St. from Korn St. to Kingshighway, 2,820 sq.yd. concrete, $13,500, 1,100 ft. Tyrolean-Elmer St. from Korn to Gravois Sts., Sts., 4,265 sq.yd. concrete, $20,500 900 ft. Gimblin St. from Halls Ferry to Newby St., 3,070 sq.yd. concrete, $16,100, 1,050 ft. Lansdowne St. from Macklind to January Sts., 3,295 sq.yd. bituminous macadam, $20,400, 1,100 ft. Lansdowne St. from January to Hampton Sts., 3,815 sq.yd. asphaltic concrete, $22,100, 1,470 ft. Saloma St. from Wren to Partridge Sts., 4,236 sq.yd. warrenite, $29,100, 1,000 ft. Sulpher St. from Columbia to Elizabeth Sts., 3,507 sq.yd. brick, $25,300; paving 1,725 ft. Shaw St. from Grand to 39th Sts., 6,750 sq.yd. asphalt or warrenite, $26,700, 1,100 ft. Utah St. from Louisiana to Grand Sts., 4,320 sq.yd. warrenite, $18,100, 2,700 ft. Enright St. from Kingshighway to Union St., 9,405 sq.yd. asphalt or warrenite, $20,800, 3,900 ft. Hamilton St. from Delmar to Plymouth Sts., 9,055 sq.yd. asphalt, $24,500, 4,700 ft. Chouteau St. from Manchester-Vandeventer St. to Kingshighway, 21,245 sq.yd. asphalt, $61,400, 1,900 ft. Chouteau St. from Compton to Grand Sts., 7,590 sq.yd. asphalt, $16,400, 5,600 ft. Clayton St. from Vandeventer St. to Kingshighway, 22,560 sq.yd. asphalt or warrenite, $57,200, 1,100 ft. Kingsbury St. from Laurel St. easterly, 2,625 sq.yd. warrenite, $6,050, 750 ft. Pershing St. from Euclid St. to Kingshighway, 3.240 sq.yd. warrenite, $14,700, 2,740 ft. Page St. from Kingshighway to Union St., 13,120 sq.yd. warrenite, $30,800, 5,850 ft. Bates St. from Grand to Gravois Sts., 20 ft., 13,300 sq.yd. concrete, $52,200, 2,100 ft. Forest Park from Grand to Vandeventer Sts., 15,000 sq.yd. asphalt or warrenite, $42,250, 3,800 ft. Forest Park from Boyle St. to Kingshighway, 11,100 sq.yd. asphalt or warrenite, $63,000, 1,700 ft. Pershing St. from Wabash to Des Peres Sts., 5,175 sq.yd. asphalt or warrenite, $14,650, 1,000 ft. Kingsbury St. from Rosedale to Skinker Sts., 2,850 sq.yd. asphalt or warrenite, $8,150, 950 ft. McPherson St. from DeBaliviere to Laurel Sts., 3,250 sq.yd. asphalt or warrenite, $9,000, 2,300 ft. McPherson St. from Nina to Skinker Sts., 6,510 sq.yd. asphalt or warrenite, $19,300, 900 ft. Washington St. from Laurel to De Giverville Sts., 2,275 sq.yd. asphalt or warrenite, $6,360, 600 ft. Washington St. from Des Peres to Skinker Sts., 4,455 sq.yd. asphalt or warrenite, $13,000, 1,525 ft. Westminster St. from Hamilton to De Baliviere Sts., 4,620 sq.yd. asphalt or warrenite, $13,200, 1,750 ft. Westminster St. from Skinker to Des Peres Sts., 4,635 sq.yd. asphalt or warrenite, $13,200, 200 ft. Compton St. from Lucas to Morgan Sts., 1,470 sq.yd. asphalt, $3,900, 1,750 ft. Leonard St. from Morgan to Easton Sts., 7,875 sq.yd. asphalt or warrenite, $14,800, 5,600 ft. Arsenal St. from 59th St. to tracks of Frisco R.R., 17,365 sq.yd. 7 in., rein.-con., $80,400, 3,100 ft. 7th St. from Chouteau to Market Sts., 12,115 sq.yd. recut granite, $82,700, 1,090 ft. Beacon St. from Prange St. to Kingshighway, 3,300 sq.yd. brick, $19,000, 2,350 ft. Arsenal St. from 13th to Jefferson Sts., 8,615 sq.yd. asphalt or bitulithic, $49,400, 1,200 ft. Arsenal St. from Bway. to 13th St., 4,650 sq.yd. recut granite, $11,800; grading 800 ft. Cutter St. from Plateau to Dale Sts., 4,130 cu.yd., $3,450, 1,450 ft. Kraft St. from Dale to Clayton Sts., 21,760 cu.yd., $14,550, 650 ft. McDonald St. from Russell to Oak Hill Sts., 3,330 cu.yd. $2,200, 860 ft. Esther St. from Elizabeth to Wilson Sts., 5,600 cu.yd., $7,250, 3,000 ft. O'Dell St. from point 474 ft. west of Clifton St. to tracks of St. Louis and San Francisco R.R., 21,280 cu.yd., $17,600, 2,000 ft. Geraldine St. from Brown to Bircher Sts., 15,695 cu.yd., $20,000, 700 ft. Tennessee St. from Iron to Fillmore Sts., 5,035 cu.yd., $5,200, 3,000 ft. Goodfellow St. from Maffitt St. to Natural Bridge, 28,100 cu.yd., $17,400, 1,950 ft. McCune St. from Tamm St. to tracks of St. Louis & San Francisco R.R., 5,645 cu.yd., $7,500. W. M. Horner, City Hall, engr.

Tex., Brownsville — Brown Co. election Nov. 18 to vote on $1,185,000 bond issue constructing and resurfacing roads. M. Nichols, Georgetown, engr.

Tex., Corpus Christi—Nueces Co. making plans surfacing road already graded with 5 in. shell base, 5 in. gravel surface and 1 in. bituminous topping, 11.17 mi. State Highway 12 from Texas Mexican Railroad Crossing to west line Precinct 4; 18 ft., $192,174; 11.74 mi. State Highway 12, 18 ft., $211,914; 10.42 mi. Corpus Christi-Bishop Rd., 18 ft., $183,430. C. E. Cocke, co. engr.

Tex., Meridian—Bosque Co. soon lets contract gravel surfacing 14.35 mi. State Highway 2, 16 ft. $27,500. C. H. Van Eman, Glen Rose, engr.

Tex., Newton—Newton Co. making plans grading, gravel surfacing and building 580 ft. creosoted pile trestle bridge on 20.5 mi. Jasper-Newton Rd., 18 ft. $230,006. W. T. Bolton, co. engr.

Tex., San Angelo—Tom Green Co. making plans grading 23.44 mi. Ballinger-Sherwood Rd., 28 ft., $50,000; 16.44 mi. Wall-Van Court-Eden Highway, 28 ft., $53,138. G. Gilchrest, San Angelo, engr. in charge.

Okla., Tulsa—Tulsa Co. plans constructing ⅞ mi. Skiatook Rd., $15,309; 2 mi. Jinks Rd., $57,383. D. Patton, co. engr.

Colorado—State Hy. Dept., Denver, rejected bids concrete paving 1.003 mi. road, Federal Aid Project 225, Adams and Arapahoe Counties. $36,000. L. D. Blauvelt, state highway engr. Noted Oct. 5.

California—State Hy. Dept., Sacramento, takes bids latter part of November, grading 3 mi. highway from point 500 ft. northeast from west portal of Southern Pacific R.R. tunnel at Donner Summit extending easterly over new rights of way to point on present State road at west end of Donner Lake, (Sta. 20 plus 00 to Sta. 173 plus 00), Nevada Co. A. B. Fletcher, state highway engr.

Calif., Arcata — Having plans prepared paving 40 blocks, asphaltic concrete, 3 in. base, 2 in. surface. W. S. Farley, Monadnock Bldg., San Francisco, engr.

Calif., San Anselmo—Had plans prepared improving streets in Barber Tract, 2,050 cu.yd. grading, unclassified, 86,770 sq.yd. grading surface, 86,770 sq.ft. 4 in. asphaltic macadam, 2 course, 9,900 lin.ft. concrete curb, 15,540 sq.ft. concrete gutter, 390 cu.ft. concrete curbwall, etc. J. J. Jessup, San Anselmo, engr.

Calif., Stockton— Supervs. San Joaquin Co., rejected bids opened Oct. 3, paving with oil macadam 2 mi. Mt. Diablo Ave., 20 ft. F. E. Quail, co. surv. Noted Oct. 19.

Streets and Roads (Continued)

Ont., Hamilton—Plans 2,500 ft. asphalt pavement on Napier St., incl. 8,500 sq.yd. asphalt. $40,000. E. R. Gray, city engr.

BIDS DESIRED

Massachusetts—Nov. 14, by Dept. Pub. Wks. Div. Highways, Boston, paving 39,940 ft. road in towns of Otis and Sandisfield, bituminous macadam, 18-20 ft. A. W. Dean, ch. engr.

N. Y., New York—Oct. 31, by J. Miller, pres. Manhattan Boro, Municipal Bldg., repaving roadway of Manhattan Ave. from Cathedral Parkway to 116th St. also roadway of Amsterdam Ave. (curb to rail) from 79th to 86th Sts., sheet asphalt on concrete.

N. J., Avon—Oct. 31, by Boro Council, Boro Hall, reconstructing Ocean Blvd., warrenite bitulithic and sheet asphalt on concrete. G. K. Allen, 60 Broad St., Red Bank, civil engr.; adv. this issue.

N. J., Mays Landing — Nov. 8, by Bd. Freeholders Atlantic Co., Guarantee Trust Bldg., Atlantic City, reconstructing Sect. 6 of Route 14, Hamilton Twp., warrenite bitulithic on 6 in. concrete. A. H. Nelson, 636 Guarantee Trust Bldg., Atlantic City, co. engr.; adv. this issue. Noted Aug. 31.

N. J., Mays Landing—Nov. 8, by Bd. Freeholders Atlantic Co., Guarantee Trust Bldg., Atlantic City, reconstructing Cedar and Landis Aves. from Mays Landing-Downstown Rd. in Richland to line between Atlantic and Cumberland Counties. F. W. Willetts, clk; adv. this issue.

S. C., Columbia—Nov. 1, by Richland Co., improving 11.15 mi. Monticello Rd., 120,000 cu.yd. common excav., 33,000 cu.yd. gravel or top soil surfacing, 14,000 cu.yd. solid rock excav., 480 lin.ft. 15 in. corrugated metal culvert, 880 lin.ft. 18 in. plain concrete culvert, 670 lin.ft. 24 in., 200 lin.ft. 30 in., and 105 lin.ft. 36 in. rein.-con. pipe culverts, 930 cu.yd. concrete, 138,800 lb. reinforcing. Cost to exceed $75,000. R. Pennell, Arcade Bldg., engr.

Ga., Decatur—Nov. 3, by J. S. Looney, city mgr. improving 1,216 ft. 3rd Ave., 2,431 lin.ft. granite curb, 850 sq.yd. rubble gutter, 3,260 sq.yd. slag macadam, 3,300 sq.yd. asphaltic concrete. B. F. Williams, City Hall, engr.

Fla., Tampa—Nov. 17, by Comrs. Hillsborough Co., paving with brick, asphalt block, sheet asphalt, asphaltic concrete, cement concrete or bituminous macadam, 14.74 mi. road from Hopewell to Tampa, 9 or 15 ft., 42,055 or 77,815 sq.yd. paving, 35,000 cu.yd. excav., 165,630 lin.ft. concrete or granite curbing, $250,000; 4.78 mi. road from Seffner to Thonotosassa, 9 or 15 ft., 25,233 or 42,055 sq.yd. paving, 15,000 cu.yd. excav., 50,466 lin.ft. concrete or granite curbing, $75,000; 6.06 mi. Lake Magdalene Rd., 9 or 15 ft., 32,000 or 53,332 sq.yd. paving, 12,000 cu.yd. excav., 64,000 lin.ft. granite or concrete curbing, $150,000; 6.75 mi. Temple Terraces, 9 or 15 ft., 34,650 or 57,750 sq.yd. paving, 20,000 cu.yd. excav., 69,300 lin.ft. concrete or granite curbing, $150,000; 10.91 mi. road from Plant City to Thonotosassa, 9 or 15 ft., 57,580 or 95,966 sq.yd. paving, 33,000 cu.yd. excav., 115,160 lin.ft. curbing, $200,000; 6.65 mi. Midway Rd., 9 or 15 ft., 35,113 or 58,521 sq.yd. paving, 25,000 cu.yd. excav., 70,266 lin.ft. concrete or granite curbing, $100,000; 11.16 mi. Lithia Rd., 9 or 15 ft., 58,907 or 98,179 sq.yd. paving, 45,000 cu.yd. excav., 117,814 lin.ft. curbing, $200,000; 28.02 mi. Bayshore Rd. to Manatee Co. line, 147,937 or 246,561 sq.yd. paving, 150,000 cu.yd. excav., 295,874 lin.ft. curbing, $500,000; 17.11 mi. road from Plant City to Picnic, 9 or 15 ft., 90,321 or 150,535 sq.yd. paving, 70,000 cu.yd. excav., 180,642 lin.ft. concrete or granite curbing, $230,000; 2.35 mi. Wimanma Rd., 9 or 15 ft., 12,440 or 20,714 sq.yd. paving, 8,000 cu.yd. excav., 24,880 lin.ft. concrete or granite curbing, $50,000; 15.13 mi. Citrus Park Rd., 9 or 15 ft., 79,906 or 133,176 sq.yd. paving, 159,812 lin.ft. granite or concrete curbing, $250,000; 3.56 mi. Armenia Ave., 15 ft., 31,333 sq.yd. paving, 8,000 cu.yd. excav., 37,600 lin.ft. curbing, $75,000; 2.02 mi. Waters Ave., 15 ft., 17,752 sq.yd. paving 6,000 cu.yd. excav., 21,302 lin.ft. concrete or granite curbing, $50,000; 14.74 mi. Interbay Rd., 15 ft., 129,627 sq.yd. paving, 40,000 cu.yd. excav., 165,630 lin.ft. concrete or granite curbing, $250,000; widening from 9 to 16 ft. and paving with brick, asphalt, sheet asphalt, asphaltic concrete or cement concrete 12.23 mi. River View Brick Rd., 16 ft., 61,832 sq.yd. old brick relayed 46,366 sq.yd. new paving, 24,000 cu.yd. excav., 125,200 lin.ft curbing, $200,000. A. Pimm, Court House, co. engr. Noted May 11.

Ala., Birmingham—Nov. 7, by C. Rogers, engr. Jefferson Co., resurfacing present brick pavement on 1 mi. 3rd Ave. from 13th to 18th Sts., 45 ft., 22,000 sq.yd. asphalt, $33,000; grading Toadvine Hill, 12,000 cu.yd. excav., $6,000.

Miss., Pascagoula — Nov. 21, by Bd. Supervs. Jackson Co. at office of Chancery Clerk, improving 8.444 mi. State Trunk Rd. between Moss Point and Alabama State Line, Federal Aid Project 126, Sect. A, 12.2 acres clearing, 7,052 cu.yd. common and 83,457 cu.yd. borrow excav., 177.12 cu.yd. concrete in culverts, 31.2 cu.yd. concrete in headwalls, 146.32 cu.yd. concrete in bridges, 89,038 sq.yd. concrete paving on concrete base course, 84,084 sq.yd. brick sheet asphalt, rock asphalt or asphaltic concrete. H. C. Dietzer, Jackson, state highway engr.

Louisiana—Nov. 7, by State Hy. Comn., Redmond Bldg., Baton Rouge, grading and gravel surfacing 14.5 mi. Ruston-Arcadia Highway, incl. 100 ft. steel span on concrete piers near Ruston.

Tennessee — Nov. 10, by State Dept. Highways, Nashville, improving 9.8 mi. road between Newport, Tenn., and North Carolina State Line, Federal Aid Project 23, 108,292 cu.yd. common, 37,067 cu.yd. solid rock, 3,480 cu.yd. borrow and 1,112 cu.yd. dry excav., 2,900 sq.yd. scarifying old macadam, 93,645 sq.yd. hand placed base course C, 1,949.92 cu.yd. concrete, 182,322 lb. deformed steel bars, bridges over 20 ft. span located as follows, sta. 565-57.5 two 20 ft. spans, sta. 799-10, three 18 ft. spans; 4.8 mi. road between Jacksboro and La Follette, Federal Aid Project 37, Sect. B, Campbell Co., 21,622 cu.yd. common, 7,913 cu.yd. solid rock and 956 cu.yd. dry excav., 1,184 sta.yd. overhaul, 50,669 sq.yd. one course plain cement concrete pavement, 676.11 cu.yd. concrete, 61,583 lb. deformed steel bars, etc. D. Q. McComb, Nashville, ch. engr.

Tenn., Altamont—Oct. 30, by Grundy Co. Hy. Com., grading 5½ mi. Pelham Valley Rd. from Franklin Co. line to foot of mountain in Paynes Cove. J. B. Cochran, co. engr. Noted Sept. 28.

O., Cleveland—Oct. 28, by Comrs. Cuyahoga Co., paving Brookpark Rd., $58,636; Short, Crossview and Chestnut Rds., $107,855. F. Lander, Court House, engr.

Illinois—Oct. 31, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving 6.82 mi. Route 4, Sect. 5 Grundy-Will Co., 6.29 mi. Federal Aid Project 25, Sect. 6, Grundy Co., 13.11 mi. Route 4 and Federal Aid Project 25, Combination Q, Grundy-Will Co.; grading 46,700 yd. Route 16, Sect. 13-A, Shelby Co. C. H. Older, ch. highway engr. Noted Oct. 19.

Illinois—Oct. 31, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving 5.2 mi. Route 3, Sect. 18, Rock Island Co., 18-20 ft.; 2.5 mi. Federal Aid Project 38, Sect. 47, Schuyler Co., 6.14 mi. Federal Aid Project 38, Combination S, Schuyler Co., 6.14 mi. Federal Aid Project 38, Combination T, Schuyler Co., incl. grading 1 section; all 18 ft.; grading 15,267 yd. Project 25, Sect. 6-A, Grundy Co., C. H. Older, ch. highway engr.

Ind., Evansville—Nov. 2, by aud. Vanderburgh Co., grading and graveling 15,400 ft. E. I. Smith Rd., 16 ft. $26,947. A. Pfafflin, Evansville, engr.

Ind., Ft. Wayne—Nov. 2, by aud. Allen Co., grading and paving with crushed stone and tarvia, 1.81 mi. Pruesse Rd., 16 ft. $29,235. A. W. Grosvenor, Ft. Wayne, engr. Noted Oct. 19.

Ind., Goshen—Nov. 2, by aud. Elkhart Co., grading and graveling 31,700 ft. County Unit Rd. 37, 16 ft., $35,805; graveling 15,883 ft. County Unit Rd. 11, 16 ft., $30,650. C. L. Kinney, Goshen, engr. Noted Oct. 19.

Ind., Goshen — Nov. 3, by aud. Elkhart Co., grading and paving 13,840 ft. Grimes Rd., 18 ft., 31,680 sq.yd. concrete on concrete, $74,460. C. L. Kinney, Goshen, engr.

Ind., Laporte—Nov. 4, by Auditor Laporte Co., grading and gravel surfacing 15,150 ft. Schumaker Rd., 16 ft. $28,964. P. Summy, Laporte, engr.

Ind., Logansport—Nov. 18, by aud. Cass Co., graveling 21,300 ft. John Long Rd., 16 ft. $31,974. J. Bennett, Logansport, engr. Noted Oct. 19.

Ind., Monticello—Nov. 8, by aud. White Co., grading and graveling 15,555 ft. Burley Rd., 16 ft. $33,509. G. A. Thomas, Monticello, engr. Noted Oct. 19.

Ind., Warsaw—Nov. 6, by aud. Kosciusko Co., grading and graveling 13,740 ft. Perry Dull Rd., $26,172; 12,200 ft. Shroyer Rd., $25,855; 15,150 ft. Welty Rd., $28,056; 14,100 ft. Baugher Rd., $25,344; 14,280 ft. Shook Rd., $27,442; all foregoing 18 ft. S. S. Boggs, Warsaw, engr.

Ia., Ft. Madison—Oct. 31, by Auditor Lee Co., grading 23.553 mi. Primary Rd. Project 149, from Keokuk northwest, also branch to Montrose, 233,431 cu.yd. excav.

Minn., Duluth—Nov. 9, by F. W. Borgen, aud. St. Louis Co. graveling 20 mi. State Rd. 35 between Tower and Ely., 30 ft. R. W. Acton, Courthouse, engr.

Kan., Great Bend—Oct. 30, grading and paving Washington St., 7,500 sq.yd. paving, 3,250 ft. curb and gutter and 3,120 ft. curb. Bids on brick, asphaltic concrete and concrete.

Kan., Topeka—Nov. 7, by Comrs. Shawnee Co. paving 4.3 mi. Capitol Highway, Federal Aid Project 46, Sect. A, 43,031 yd. concrete, brick or bituminous macadam, 6,000 yd. excav.; 43,298 yd. Meridian Spur Rd., Federal Aid Project 86, concrete, brick or bituminous macadam, 6,000 yd. excav. A. C. Legerwall, co. engr. Noted Oct. 12.

Mo., Lamar—Oct. 30, by Comrs. Barton Co., grading and laying Joplin chats, etc., on 1½ mi. road from Missouri state line to Minden Mines, 16 ft. R. Dunlap, Lamar, div. engr.

Tex., Austin—Oct. 31, by G. S. Mathews, judge Travis Co. surfacing 1½ in. bituminous topping, 5½ in. crushed stone base, 3.2 mi. State Highway 20 between here and Manor, 16 ft., 2,608.6 cu.yd. concrete, 686 cu.yd. earth excav., 4,602.6 cu.yd. stone, quarried, crushed and hauled, 28,183.3 sq.yd. bituminous macadam, 18,902 lb. reinforcing and 83,270 lb. structural steel. $53,000. O. Leonard, co. engr.

Tex., Daingerfield—Oct. 31, by J. W. Cason, judge Morris Co. clearing, grading and gravel surfacing 2.81 mi. State Highway 1 from Naples to county line, 16 ft., 26,510 cu.yd. earth excav., 3,667 cu.yd. borrow, 388.7 cu.yd. concrete, 34,740 lb. reinforcing, 5,859 cu.yd. gravel furnished by county. $37,200. J. V. Curnutte, Sims, engr.

Okla., Marietta—Nov. 2, by C. W. Cameron, mayor, 25,100 sq.yd. paving, 16,200 ft. curb and gutter, 10,160 cu.yd. excav., 1,320 ft. headers, 240 ft. c.i. culverts. Elrod Eng. Co., Interurban Bldg., Dallas, Tex., engrs.

Utah—Nov. 6, by State Rd. Comn., Salt Lake City, grading and gravel surfacing 7.8 mi. road from Morgan to Patterson, Federal Aid Project 41, 18 ft., Morgan Co., 61,530 cu.yd. excav. $62,000. H. C. Means, state highway engr.

California—Nov. 6, by State Hy. Comn., Sacramento, surfacing 0.5 mi. highway through Tipton, Tulare Co., 850 ton asphaltic concrete. A. B. Fletcher, state highway engr.

Calif., Fresno—Nov. 6, by Supervs. Fresno Co., improving 1.053 mi. Ventura Ave., alternative bids for 5 in. cement concrete pavement and 3½ in. asphaltic concrete base with warrenite and Fresno County Type A surface, Proposition 1, includes 7,165 cu.yd. excav., 1,729 cu.yd. 5 in. concrete pavement, 112,023 sq.ft. surfacing for above paving, 1½ in. thick, Proposition 2, 7,165 cu.yd. excav., 112,023 sq.ft. 3½ in. concrete base with 1½ in. warrenite bitulithic or Fresno County Type A surface; grading and paving with gravel macadam, to be oiled, rolled, 2 grades of oil 60 per cent and 90 per cent and topped with screenings, 4.97 mi. road through Riverdale, 8,020 cu.yd. excav., 14,633 ton gravel macadam; grading and paving with asphaltic concrete base, 1½ in. warrenite bitulithic or Fresno County Type A surface, 2.494 mi. road from Camden to Riverdale, 4,420 cu.yd. excav., 210,970 sq.ft. pavement, etc. C. Jensen, Cory Bldg., engr. Noted Aug. 24.

Calif., Santa Rosa—Nov. 14, by Supervs. Sonoma Co., improving 3.05 mi. Petaluma-Sonoma Highway, Sect. B, 9,000 cu.yd. excav., 2,680 cu.yd. crushed rock, 32,166 sq.yd. asphaltic surfacing, etc.; 13.35 mi. Guerneville-Jenner Highway, 89,000 cu.yd. excav., 500 cu.yd. concrete, 2,000 sq.ft. R. W. log cribbing, incl. ⅜ in. drift pins, 2,000 lin.ft. 12 in., 1,000 lin.ft. 18 in., 2,000 lin.ft. 15 in. and 100 lin.ft. 24 in. corrugated metal pipe, 3,000 cu.yd. crushed rock or gravel. E. A. Peugh, co. surv. Noted Sept. 28.

Calif., Santa Rosa—Nov. 14, by Supervs. Sonoma Co., improving 1.79 mi. road from Sonoma to State Highway Rd., Sect. B, 19,000 sq.yd. asphalt surfacing, 3,500 cu.yd. excav., 1,580 cu.yd. crushed rock, etc.; 1.04 mi. Dry Creek Rd., Sect. B, 4,000 cu.yd. excav., 9,780 sq.yd. asphalt surfacing, etc.; 0.58 mi. Geyserville-Kimtown Rd., Sect. A, between State Highway and Russian River, 1,400 cu.yd. excav., 510 cu.yd. crushed rock, 6,110 sq.yd. asphalt surfacing, etc. E. A. Peugh, co. surv.

Calif., Stockton—Nov. 7, by Supervs. San Joaquin Co., improving 2½ mi. Rd. Dist. Impvt. 4, near town of Victor, 3,060 cu.yd. grading, 5,500 ton crushed rock, 830 ton pea gravel, 700 bbl. asphaltic oil, 10 cu.yd. concrete, $25,000; improving road in Dist. 5 near town of Victor, 1,000 cu.yd. grading, 2,200 ton road gravel, 360 ton pea gravel, 300 bbls. asphaltic oil. F. E. Quail, co. surv.

Que., Pointe Claire—Oct. 31, at Town Hall, 9,500 lin.ft. macadam road and grading 12,500 lin.ft. various streets, also 3,700 ft. macadam road on part of Sources Rd. within limits of Dorval and Pointe Claire. O. Beaudouin, 71a St. James St., Montreal, civil engr.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids Oct. 19, grading, curbing and flagging (1) Bay Ridge Ave. (2) Clinton Pl. (3) Ave. H (4) Kings

Streets and Roads (Continued)

Highway (5) East 19th St (6) 76th. St. (7) Rutland Rd. (8) 76th St. (9) 58th St. (10) 77th St. (11) Narrows Ave. (12) 88th St. (13) 77th St. paving (14) Kingston Ave. (15) East 12th St. (16) Kings Highway (17) East 37th St. (18) East 8th St. (19) Clinton Pl. (20) Midwood St. (21) East 8th St. (22) East 7th St. (23) Newport St. (24) New Utrecht Ave. (25) Ave. R, grading and paving (26) Rutland Rd. (27) Ave. S (28) Sneideker Ave. (29) Montgomery St. (30) 77th St. (31) 77th St. (32) 78th St. (33) 86th St. (34) 88th St. (35) 83rd St., all foregoing permanent asphalt on 6 in. concrete, from

Grimm Constr. Co., 170 McKinley Ave., (1) $4,366 (2) $1,289 (3) $2,475 (4) $3,488 (6) $4,020 (7) $5,393 (9) $1,100 (10) $1,019.

F. Persicano, 350 Fulton St., (1) $4,396 (2) $1,383 (3) $2,253 (4) $3,676 (5) $3,745 (6) $3,877 (10) $802 (13) $3,054.

L. Mangeri, 190 31st St., (1) $4,537 (6) $3,969 (9) $1,282 (11) $16,094 (12) $7,351 (13) $3,197.

T. B. Scott, 671 Halsey St., (2) $1,382 (9) $1,227 (12) $7,813 (13) $3,090.

J. F. Winter, Jr., (2) $1,521 (10) $974.

G. M. Mandatto, 129 29th St., (3) $2,417 (5) $3,689 (6) $4,027 (7) $5,689 (8) $5,256 (9) $1,271.

C. Gallagher, 745 Dean St., (4) $3,426 (12) $7,677.

Castle Bros., Inc., Johnson Pl., (5) $3,435 (7) $5,696 (11) $16,580.

Caponi Contg. Co., 1320 25th St., (11) $15,445.

Sicilian Asphalt Paving Co., 41 Park Row, New York City, (14) $10,792 (20) $13,080 (23) $5,191 (26) $14,202 (28) $5,382 (29) $7,919.

Cranford Co., 52 9th St., (14) $11,273 (15) $8,145 (16) $18,649 (17) $4,040 (18) $8,094 (19) $2,378 (20) $13,561 (21) $15,663 (22) $7,548 (23) $5,314 (24) $6,520, (25) $3,892, (27) $2,982, (28) $5,438 (29) $8,239 (30) $4,202 (31) $5,547 (32) $6,766 (33) $31,714 (34) $17,772 (35) $7,062.

Cleveland Trinidad Paving Co., Flushing, (14) $11,342 (19) $2,387 (24) $6,291 (26) $14,936 (28) $5,561.

Borough Asphalt Co., 1301 Metropolitan Ave., (15) $8,354 (16) $19,104 (17) $4,447 (18) $8,299 (19) $2,357 (20) $14,003 (21) $16,061 (22) $7,755 (23) $5,491 (24) $6,629 (25) $4,047 (27) $3,100 (30) $4,106 (31) $5,421 (32) $7,192 (33) $31,872 (34) $17,813 (35) $7,004.

Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (15) $8,482 (16) $19,381 (17) $4,212 (18) $8,423 (20) $13,693 (21) $16,303 (22) $7,870 (25) $4,047 (26) $14,817 (27) $3,055 (29) $8,316 (30) $4,146 (31) $5,473 (32) $6,683 (33) $31,060 (34) $17,3[illegible]3 (35) $6,824. Noted Oct. 12.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., opened bids Oct. 23, grading, (1) Hallett St., paving (2) 101st St. (Jerome Ave.), (3) 115th St. (4) 5th St., grading, curbing and laying sidewalks on (5) 126th St. (6) 115th St. (7) Beach 25th St., from J. Condon, 241 Carmelia Ave., Astoria, (1) $12,670; Welsh Bros. Contg. Co., 32 Queens St., Astoria, (1) $15,347; Peconca Eng. & Contg. Co., (1) $17,612; Boro Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (2) $28,105 (3) $11,810; Cranford Co., 52 9th St., Brooklyn, (2) $28,894 (3) $12,455; W. P. McDonald, Inc., 17 West 42nd St., New York, (3) $13,330; F. J. Clancy, 460 Lockwood St., Astoria, (4) $22,090 (6) $6,725; Peace Bros., Inc., 20 Main St., Flushing, (4) $23,255 (6) $6,995; Kennedy & Smith, 93 Amity St., Flushing, (4) $23,840; Soviero & Britten, 10111 114th St., Richmond Hill, (5) $4,296 (6) $6,790; H. J. Mullen Contg. Co., Jamaica Ave. and 144th St., Jamaica, (5) $4,348; Galeor Contg. Co., (5) $4,580 (7) $6,920; R. A. Hess, Inc., 14 Queens St., Astoria, (7) $6,305; E. Block, (7) $7,960. Noted Oct. 19.

N. Y., New York—Dept. Parks, Municipal Bldg., opened bids Oct. 19, furnishing and setting curb-stones and paving with sheet asphalt roadway of Morningside Dr., from C. D. Beckwith, 2875 Bway., $62,150; Asphalt Constr. Co., 208 Bway., $63,076; Interboro Asphalt Co., 233 Bway., $71,476. Noted Oct. 12.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, opened bids Oct. 17, repaving (1) Castleton Ave. from Burgher to Bard Aves. (2) Castleton Ave. from Bard to Cebra Aves. (3) Richmond Ave. from John St. to Washington Ave., all bituminous concrete, from J. E. Donovan, 2205 Richmond Terrace, Port Richmond, (1) $32,352 (2) $53,486 (3) $28,335; W. P. McDonald, 342 Madison Ave., New York, (1) $32,568 (2) $54,001 (3) $28,211; J. Johnson Sons, 455 Bway., West New Brighton, (1) $35,945 (2) $59,681 (3) $32,500. Noted Oct. 12.

N. Y., Syracuse—Bd. Contract & Supply, opened bids Oct. 16, paving with (a) asphalt (b) bituminous concrete (c) concrete, (1) Jasper St. from Highland St. to end of street (2) Kellogg St. from Slocum to Delaware Sts. (3) Merriman Ave. from Messena to Geddes Sts. (4) Shuart Ave. from Sedgwick to Teall Aves. (5) Teall Ave. from James to Peck Sts. (6) Shotwell to Melrose Aves. (7) Highland St. from Highland to Park Aves. (8) Grand Ave. from Delaware St. to city line (9) Coleridge Ave. from Wilbur to Whittier Aves. (10) East Castle St. from South State St. to Renwick Ave., resurfacing (11) Walnut St. from Harrison to University Pl. (12) South Crouse St. from Fayette St. to University Pl., from G. B. Dickison, Union Bldg., (1a) $24,009 (1b) $23,429 (3a) $20,488 (3b) $20,007 (7a) $27,612 (7b) $26,912 (10a) $21,004 (10b) $20,570 (12a) $43,385 (12b) $44,768; C. T. Hookway, Bastle Bldg., (1a) $25,222 (1b) $24,646 (2a) $31,136 (2b) $30,528 (3a) $19,992 (3b) $19,629 (4a) $31,695 (4b) $31,104 (5a) $24,105 (5b) $23,585 (6a) $17,114 (6b) $16,800 (9a) $46,426 (9b) $45,522 (10a) $20,596 (10b) $20,168 (11a) $38,880 (12a) $42,840 (12b) $43,141; Dale Eng. Co., Mann Bldg., Utica, (1a) $25,414 (1b) $24,937 (2a) $31,385 (2b) $30,711 (5a) $25,189 (5b) $24,611 (7a) $29,135 (7b) $28,554 (9a) $46,418 (9b) $45,323; J. H. Gallup, Union Bldg., (2a) $30,731 (2b) $29,743 (3a) $19,215 (3b) $18,620 (4a) $32,483 (4b) $31,626 (6a) $17,448 (6b) $16,930 (7a) $28,763 (7b) $27,792 (8c) $38,867 (10a) $25,352 (10b) $19,727 (11a) $41,609 (11b) $41,680 (12a) $46,935 (12b) $47,291; F. J. Baker, University Blk., (4a) $31,226 (4b) $30,514 (5a) $24,202 (5b) $23,516 (6a) $16,839 (6b) $16,522 (9a) $45,758 (9b) $44,467 (11a) $41,828 (11b) $38,911; J. C. Dempsey, 308 East Kennedy St., (8c) $42,372; Mondo Constr. Co., City Bank Bldg., (8c) $44,187. Noted Oct. 5.

Pennsylvania—State Hy. Dept., Harrisburg, opened bids Oct. 17, building 29,200 ft. one course rein-con. and hillside vitr. brick, on Route 187, Wilkins, Penn and Patton Twps., Allegheny Co., from R. H. Cunningham & Sons Co., 617 Penn Ave., Turtle Creek, $383,216, H. W. Horst Co., Horst Bldg., Rock Island, Ill., $418,211, Corrado & Galiardi, Colonial Natl. Bank, Connellsville, $488,029; 5,621 ft. one course rein.-con. on Routes 70 and 72, Shaler Twp., Allegheny Co., from Burgess & Dorrier, Scottsville, Va., $151,443, Fort Pitt Constr. Co., 207 Martin Bldg., Federal St., Pittsburgh, $163,970, W. H. Wilkey, 317 Fayette Title & Trust Bldg., Uniontown, $270,171; 22,107 ft. one course rein.-con., Route 214, Bradys Bend Twp., Armstrong Co., from D. Schoentag, Inc., 68 Ulster Ave., Saugerties, N. Y., $206,762, R. V. Baldwin, 1361 4th Ave., Coraopolis, $214,436, S. Gamble Co., Glass St., Carnegie, $214,596; 2,689 ft. one course rein.-con. and Hillside vitr. brick, Route 77, Homewood Boro, Beaver Co., from A. Dahl, 425 Wayne Ave., Ellwood City, $56,184, McQuiston Paving & Constr. Co., 514 Spearman Ave., Farrell, $56,339, M. J. Scanlon, 16 Cherry St., New Castle, $67,919; 21,978 ft. one course rein.-con. or bituminous surface on concrete, Route 243, Industry Twp., Beaver Co., from H. Renick, Williamsport, O., $207,672, Connell, Laub & Bracht, Zelienople, $209,859, D. Schoentag, Inc., 68 Ulster Ave., Saugerties, N. Y., $211,330; 16,500 ft. one course rein.-con. or bituminous surface on concrete, Route 243, Borough and Industry Twps., Beaver Co., from D. Schoentag, 68 Ulster Ave., Saugerties, N. Y., $177,231, Connell, Laub & Bracht, Zelienople, $178,766, H. Renick, Williamsport, O., $178,811; 11,237 ft. one course rein.-con., Application 1664, Richmond Twp., Berks Co., from Juniata Co., 410 Empire Bldg., 13th and Walnut Sts., Phila., $75,995, Peconco Eng. & Contg. Corp., 1170 Bway., New York City, $79,559, Fish-Rutherford, Inc., 702 Real Estate Trust Bldg., Phila., $82,126; 26,506 ft. one course rein.-con. or bituminous surface on concrete, Route 4, Scott and Center Twps., Columbia Co., from Trinidad Asphalt Paving Co., Larksville, $185,688, Highway Constr. Co., 1835 Land Title Bldg., Phila., $197,965, H. B. Sproul Constr. Co., Inc., 218 Adams Ave., Scranton, $203,136; 21,788 ft. one course rein.-con. or bituminous surface on concrete, Route 4, Center Twp. and Briar Creek Boro., Columbia Co., from Trinidad Asphalt Paving Co., Larksville, $161,746, B. G. Coon Constr. Co., 274 Union St., Luzerne, $172,317, Highway Constr. Co., 1835 Land Title Bldg., Phila., $173,189; 1,921 ft. one course rein.-con. and Hillside vitr. brick, Application 1958, Brookville Boro., Jefferson Co., from W. C. Quick & Co., Brookville, $43,511, L. H. Hileman Constr. Co., 217 First Natl. Bank Bldg., New Kensington, $47,192, Minns Bros., 601 First St., DuBois, $47,763; 5,861 ft. one course rein.-con. or bituminous surface on concrete, Application 1975, Old Forge Boro., Lackawanna Co., from M. Rosato & Son Co., 1145 Sloan Ave., Scranton, $40,224, Boyle Constr. Co., 401 Bennett Bldg., Wilkes-Barre, $44,256, B. G. Coon Constr. Co., 274 Union St., Luzerne, $46,091; 1,452 ft. one course rein.-con., Application 2095, Route 344, Quarryville Boro., Lancaster Co., from Swanger-Fackler Constr. Co., Inc., 2nd and Canal Sts., Lebanon, $14,801, Teinleavy Bros. Co., 9 Penegar Bldg., Coatesville, $14,830, Souder Constr. Co., 349 Woolworth Bldg., Lancaster, $14,878; 2,893 ft. one course rein.-con. Route 77, New Castle City, North Beaver Twp., Lawrence Co., from Jamieson & Narlee, Fredonia, $26,2[illegible], H. V. Kirker Co., Beaver Falls, $26,67[illegible], M. J. Scanlon, 16 Cherry St., New Castle, $27,073; 24,077 ft. one course rein.-con., Route 226, Application 1523, North Whitehall and Heidelberg Twps., Lehigh Co., from Juniata Co., 410 Empire Bldg., Phila., $170,478, Peconco Eng. & Contg. Corp., 1170 Bway., New York City, $172,016, W. C. Guncheon & Co., Smethport, $175,174; 2,023 ft. one course rein.-con., Application 2107, Hickory Twp., Mercer Co., from Jamieson & Narlee, Fredonia, $18,088, McQuiston Paving & Constr. Co., Inc., 514 Spearman Ave., Farrell, $18,997, Minteer & Anderson, New Wilmington, $22,121; 7,051 ft. bituminous macadam on broken stone, Application 1963, Pocono and Paradise Twps., Monroe Co., from H. B. Sproul Constr. Co., Inc., 218 Adams Ave., Scranton, $37,680, Boyle Constr. Co., 401 Bennett Bldg., Wilkes-Barre, $46,005, W. R. Wolfinger, Norristown, $49,279; 4,786 ft. one course rein.-con. and Hillside vitr. brick, Route 165, Bangor Boro., Northampton Co., from Neumyer Bros., 1416 East 4th St., Bethlehem, $62,315, H. B. Sproul Constr. Co., Inc., 218 Adams Ave., Scranton, $70,836, McInerney & McNeal, Inc., 702 Northampton Natl. Bank Bldg., Easton, $74,428; 4,108 ft. one course rein.-con., Application 1981, Rouseville Boro., Venango Co., from F. S. Wilson, Kittanning, $44,434, H. P. Streicher Co., 319 Terminal Bldg., Toledo, O., $57,274; 20,274 ft. one course rein.-con. and Hillside vitr. brick, Routes 250 and 333, Fairview and Newberry Twps., York Co., from Kumer & Graeber, Shamokin, $215,365, Souder Constr. Co., 349 Woolworth Bldg., Lancaster, $225,957, W. C. Guncheon & Co., Smethport, $227,781; 22,640 ft. one course rein.-con. and Hillside vitr. brick, Routes 250 and 333, Fairview Twp., York Co., from Kumer & Graeber, Shamokin, $261,549, W. C. Guncheon & Co., Smethport, $273,678, W. H. Murphy & Sons, 2100 State St., Harrisburg, $280,376; rein.-con. bridge with four 38 ft. clear spans, Sta. 1112, Sugar Creek Twp., Venango Co., from Trimpey & Whipkey, Casselman, $20,188, Milliron Constr. Co., DuBois, $26,463, A. C. Bailey, 210 9th St., Philipsburg, $27,271.

Florida — State Hy. Dept., Tallahassee, surfacing (1) highway between Sharpes and Titusville, Brevard Co., (2) road between Bonaventure and Eau Gallie, Brevard Co., (3) road between Lake City and Welborn, Columbia and Suwannee Counties, 16 ft., (a) bituminous macadam, (b) sheet asphalt, from Maule Paving Co., Orlando, (1a) $243,637 (2a) $239,307; J. F. Morgan Paving Co., Jacksonville, (street address not available), (1a) $246,607 (1b) $271,735 (2a) $241,518 (2b) $266,683 (3a) $292,084 (3b) $322,571; J. Y. Wilson, Clark Bldg., Jacksonville, (1a) $256,296; W. P. McDonald, Orlando, (1b) $246,281 (2b) $243,263 (3a) $301,883 (3b) $308,689; E. C. Langston, Palatka, (1b) $282,644; Noll & Noll, Crescent City, (2a) $251,737 (2b) $274,681; Barber-Fortin Co., Gainesville, (3a) $295,486. Noted Oct. 12.

O., Cleveland—Cuyahoga Co. grading Royalton Rd., from Petro Di Giorio, Irene Ave., $9,583; Cedar Rd. from J. W. Chapman, Cleveland Heights, $11,004; Chardon Rd. from J. Lehman, Pavers Exch., Society for Savings Bldg., $7,000. Work involves 19,000 cu.yd. earth excav.

O., North Olmsted—Opened bids Oct. 14, grading and laying (a) stone (b) concrete sidewalks on (1) Lorain Rd. (2) Clague Rd., from Cleveland Stone Co., 1836 Euclid Ave., Cleveland, (1a and 2a) $49,220; E. Cesa, 2462 Baldwin Rd., Cleveland (1b) $40,331. Noted Oct. 5.

O., Wickliffe—Opened bids Oct. 2, grading and laying 52,500 sq.ft. (a) concrete or (b) stone sidewalks on Taylor Rd. and Euclid Ave., from F. B. Stein, Euclid, (a) $19,947, Cleveland Stone Co., 1836 Euclid Ave., Cleveland, (b) $22,318. Noted Sept. 28 under "Waterworks."

Ind., Princeton—Gibson Co. crushed stone surfacing 36,187 ft. Graper Rd. and grading and gravel surfacing 20,086 ft. Barrett Rd., both 16 ft., from Thomas & Knowles, Princeton, $62,874 and $41,100 respectively. Noted Oct. 5.

Mich., Detroit—Opened bids 3½ in. sheet asphalt pavement on 18 in. concrete, (1) Broadstreet Ave. (2) Cherrylawn Ave. (3) Davison Ave. (4) Dumbarton Rd. (5) Greendale Ave. (6) Goddard Ave. (7) Leuschner Ave. (8) Rochester Ave., from Detroit Asphalt Paving Co., 20 McGraw Bldg., (1) $44,260 (2) $9,806 (3) $48,689 (4) $26,908 (5) $37,923 (6) $13,255 (7) $20,692 (8) $42,856; Cleveland Trinidad

Streets and Roads (Continued)

Paving Co., 402 Hammond Bldg., (1) $47,-459 (2) $10,334 (3) $51,840 (4) $28,432 (5) $38,619 (6) $13,534 (7) $21,505 (8) $41,716; G. R. Cooke, 1260 Penobscot Bldg., (3) $49,322 (5) $36,885 (6) $13,072.

Missouri—State Hy. Dept. at div. office Chillicothe, opened bids Oct. 6, 6.015 mi. road from Chillicothe, northerly, 24 ft., State Project 20.190, Livingston Co., (a) 41,362 cu.yd. earth excav., (b) 17,680 cu.yd. borrow, etc., from E. P. Olson, 2901 Monterey St., St. Joseph, (a) $0.30 per cu.yd., (b) $0.26, total, $25,144; A. L. Cook, Ottawa, Kan., (a) $0.31 (b) $0.31, $25,232; Diemer Williamson Constr. Co., Brookfield, (a) $0.30 (b) $0.30, $25,842. Noted Sept. 28.

Missouri—State Hy. Dept. at div. office Gallatin, opened bids Sept. 26, 12.32 mi. road from Winston-Gallatin to Trenton, 24 ft., State Aid Project 20.206, Daviess Co., (1) 54,497 cu.yd. earth excav. (2) 10,261 cu.yd. borrow, etc., from Capitol Constr. Co., 1207 Cherry St., Des Moines, Ia., (1) $0.30 per cu.yd. (2) $0.30, total $38,539; G. E. Sampson, Pickett Rd., St. Joseph, (1) $0.35 (2) $0.35, $42,032; Cook-O'Brien Constr. Co., 305 Ry. Exch., Kansas City, (1) $0.36 (2) $0.34, $42,388. Noted Sept. 14.

Missouri—State Hy Dept. at div. office Liberty opened bids Sept. 25, 10.6 mi. road north of Kansas City to Liberty, Federal Aid Project 99, Clay Co., (1) concrete paving (2) waterbound macadam paving, from Amer. Paving Co., 411 Finance Bldg., Omaha, Neb., (1) $315,196; Capitol Constr. Co., 1207 Cherry St., Des Moines, Ia., (1) $316,182; Carterville Constr. Co., Carterville, (1) $316,476; Unit Constr. Co., Title Guarantee Bldg., St. Louis, (2) $269,566. Noted Sept. 14.

Tex., Dallas—Dallas Co. grading, surfacing and topping 14.12 mi. State Highway 6, Lancaster Pike, 20-22 ft., (a) 2 in. modified Topeka mixture, (b) Uvalde rock asphalt, (c) Oklahoma rock asphalt, (d) Amiesite, (e) bitulithic, (f) warrenite, (g) sheet asphalt, from Wear & Thomas, Rogers, and Texas Road Co., Southwestern Life Bldg., a) $380,023 (b) $407,538 (c) $391,352 (d) $375,167 (e) $376,786 (f) $436,961 (g) $418,868; Smith Bros., Sumpter Bldg., (a) $398,879 (b) $419,920 (c) $403,735 (d) $387,549 (e) $389,168 (f) $439,343 (g) $431,242; Hill, Wilson & Watson, 503 Slaughter Bldg., (a) $411,333 (b) $424,282 (c) $408,096 (d) $391,910 (e) $393,529 (f) $443,703 (g) $435,611.

Tex., Johnson City — Blanco Co. clearing, grading and gravel surfacing 5.99 mi. Austin-Fredericksburg Highway, 18 ft., from H. J. Evans, 602 West 6th St., Austin, $46,-691; C. F. Tom, Gonzales, $48,148; G. Alvis, Winnsboro, $50,896. Noted Oct. 5.

Tex., Orange—Orange Co. opened bids grading and surfacing (a) gravel, (b) shell, (c) does not include surfacing, (1) 4.25 mi. Lower Beaumont Rd., 14-18 ft. (2) 10.66 mi. East Texas Highway 8, 18-24 ft. (3) 7.3 mi Mauriceville Rd., 16 ft. (4) 4.15 mi. Oil Field Rd., 18 ft. (5) 3.12 mi. city street extensions 18 ft., from Walling, Havalson & Adams, Carter Bldg., Houston, (1c) $14.333 (2c) $12,527 (3) $21,460 (4c) $13,874 (5) $84,087; Houston Constr. Co., 3102 McKinney Ave., Houston, (1a) $43,306 (1b) $43,615 (2a) $37,778 (2b) $38,862 (3a) $78,499 (3b) $80,848 (4a) $41,061 (4b) $41,971 (5) $115,662; Smith Bros., Crockett, (1a) $44,446 (1b) $44,949 (2a) $39,353 (2b) $40,398 (3a) $80,924 (3b) $82,959 (4a) $42,371 (4b) $43,431 (5) $119,449. Noted Sept. 28.

Tex., Palo Pinto—Palo Pinto Co. grading and surfacing 3.99 mi. Bankhead Highway, State Highway 1, 18 ft., from T. J. Green, Mineral Wells, $72,474; Tibbetts Constr. Co., 209½ West 8th St., Ft. Worth, $75,598; McClung Constr. Co., Cleburne, $77,757. Noted Oct. 5.

Oregon—State Hy. Comn., Salem, grading and surfacing (1) Lamms Mills Mill-Fort Klamath Sect., Dalles-California Highway, Klamath Co., Unit 1, 9.57 mi. grading, 44,000 cu.yd. common, 250 cu.yd. intermediate and 250 cu.yd. solid rock excav., etc., Unit 2, 9.47 mi. grading and surfacing, 45,000 cu.yd. excav., 18,500 cu.yd. broken stone, etc., (2) 2.8 mi. bituminous resurfacing Rice Hill Sect., Pacific Highway, Douglas Co., 28,500 sq.yd. bituminous concrete, etc., (3) grading 3 mi. Bear Creek Sect., Oregon Caves Highway, Josephine Co., 13,700 cu.yd. common, 7,300 cu.yd. intermediate and 2,000 cu.yd. solid rock excav., etc., (4) grading and surfacing 2.63 mi. Unit B, Clatsop Co. Line, Mohler Sect., Coast Highway, Tillamook Co., 21,600 cu. yd. common, 6,200 cu.yd. intermediate and 2,000 cu.yd. solid rock excav., 6,000 cu.yd. broken stone, etc., (5) 4.73 mi. grading Parkersburg Sect. Coast Highway, Coos Co., 117,000 cu.yd. common, 19,000 cu.yd. intermediate and 4,000 cu.yd. solid rock excav., from K. K. Hodgman, Cleveland, O., (street address not available), (1) Unit 1 for concrete pipe $51,924, corrugated $51,-203; W. D. Miller, Klamath Falls, (1) Unit 1 concrete $59,351, corrugated $57,939, Unit 2, concrete $97,287, corrugated $95,744, Units 1 and 2 combined concrete $153,414, corrugated $150,452; J. L. Calvert, Grants Pass (1) Unit 1 concrete $65,052, corrugated $64,793, Units 1 and 2, concrete $168,-801, corrugated $168,485; Dunn & Baker, Oretown, (1) Unit 2, concrete $83,097, corrugated $82,834; Warren Constr. Co., Park Rose, Portland, (1) Unit 2 concrete $102,-196, corrugated $100,665 Units 1 and 2 combined, concrete $174,254, corrugated $171,-223 (2) $46,545; V. R. Dennis Constr. Co., McMinnville, (2) $41,625; J. H. Crane (address not available), (2) $35,175; Wolke & Schroeder, Grants Pass, (3) $27,763; J. L. Logan, Grants Pass, (3) $28,508; J. C. Kincaid, Grants Pass, (3) $31,478; Tillamook Co. Court, Tillamook, (4) $38,207; Solem & Gustafson, Astoria, (4) $42,771. D. B. Plymate, Bandon, (5) concrete $73,662, cedar $68,468; Hagquist & Bjorquist, Marshfield, (5) concrete $76,500, cedar $74,-515; Payne & Padrick, Marshfield (5) concrete $75,950, cedar $72,470.

California—State Hy. Comn., Sacramento, grading and 5 in. gravel surfacing 13.5 mi. road between Sneath Rd. and Half Moon Bay Rd., (1) 272,400 cu.yd. excav. (2) 34,290 cu.yd. gravel surfacing (3) 1,155 cu.yd. Class A portland cement concrete (culverts and monuments) (4) 210 cu.yd. Class C portland cement concrete (retaining walls), etc., from P. L. Burr, 512 Mission St., San Francisco, (1) $0.68 (2) $3.25 (3) $24 (4) $20, total $336,814; J. P. Holland, San Francisco, (street address not available) (1) $0.69 (2) $3.24 (3) $25 (4) $25, total $341,577; J. Phillips, 1909 4th Ave., Sacramento, (1) $0.65 (2) $3.65 (3) $25 (4) $25, total $345,783. Noted Sept. 28.

Calif., Fresno—Supervs. Fresno Co., improving 2.14 mi. Mountain Rd., 3 mi. north east of Auberry, in Canyon of San Joaquin River, from Isbell Constr. Co., Bank of Italy Bldg., $31,749; M. J. Bevanda, Auburn, $41,955; Frederickson & Shannon, Cory Bldg., $48,226. Noted Oct. 5.

Calif., Oakland—Improving 14th St. between Peralta and Pearl Sts., (a) 61,924 sq.ft. grading (b) 229 ft. concrete curb with steel guard (c) 2,217 ft. concrete curb without steel guard (d) 2,632 ft. concrete gutter (e) 59,292 ft. asphaltic concrete pavement, etc., from Warren Constr. Co., Bacon Bldg., (a) $0.07 (b) $1.45 (c) $1.25 (d) $0.35 (e) $0.315; Hutchinson Co., 1706 Bway., (a) $0.06 (b) $1.60 (c) $1.30 (d) $0.39 (e) $0.31; Oakland Paving Co., 5000 Bway., (a) $0.06 (b) $1.38 (c) $1.20 (d) $0.315 (e) $0.311; Bates & Borland, Oakland Bank of Savings Bldg., (a) $0.06 (b) $1.35 (c) $1.30 (d) $0.30 (e) $0.30. Noted Sept. 21.

Que., Montreal — R. Bauset, city clk., opened bids asphalt pavements (a) grading (b) concrete foundation (c) 3 in. asphalt, (1) Casgrain St. from Maguire St. to Canadian Pacific Ry., 8,300 sq.yd., (2) Lacasse St. from St. Jacques to Richilieu Sts., 2,100 sq.yd., (3) Dechateaubriand St. from Gaston to Mistral Sts., 6,300 sq.yd., (4) Des Erables St. from Mt. Royal to Gilford Sts., 3,500 sq.yd., (5) Regent St. from St. James St. to Canadian Pacific Ry., 3,643 sq.yd., (6) Belmore St. from Sherbrooke to Terrebonne Sts., 2,600 sq.yd., (7) Bordeaux St. from Gauthier to Rachel Sts., 2,066 sq.yd., from Sicily Asphaltum Paving Co., 60 St. Viateur St., (1a) $0.80 (1b) $1.65 (1c) $1.65, total $38,242, (2a) $1 (2b) $1.70 (2c) $1.80, total $11,925, (3a) $1 (3b) $1.70 (3c) $1.62, total $37,836, (4a) $1 (4b) $1.65 (4c) $1.75, total $18,941, (7a) $1.10 (7b) $1.65 (7c) $1.62, total $10,748; B. Brault Ltd., 2855 Rosemount Blvd., (1a) $0.90 (1b) $1.75 (1c) $1.71, total $39,967, (2a) $1,05 (2b) $1.75 (2c) $1.80, total $12,325, (3a) $0.90 (3b) $1.75 (3c) $1.55, total $35,855, (4a) $0.90 (4b) $1.70 (4c) $1.65, total $18,160, (5a) $1.20 (5b) $1.80 (5c) $1.80, total $17,486, (6a) $1.20 (6b) $1.80 (6c) $1.80, total $13,-830, (7a) $0.90 (7b) $1.70 (7c) $1.45, total $9,912; Quinlan, Robertson & Janin Ltd., 52 Duluth Bldg., (2a) $1.25 (2b) $1.75 (2c) $1.80, total $12,480, (5a) $1.15 (5b) $1.80 (5c) $1.75, total $17,122, (6a) $1.25 (6b) $1.75 (6c) $1.75, total $13,550; concrete sidewalks incl. (a) grading (b) stone foundation (c) concrete foundation (d) wearing surface, 8) Notre Dame de Grace Ave. from Girouard to Hingston Aves., 1,550 sq. yd., (9) Belmore St. from St. James St. to Canadian Pacific Ry., 480 sq.yd., (10) Old Orchard Ave. from St. James St. to Canadian Pacific Ry., 1,211 sq.yd., (11) Laverdure St. from Kelly St. to Lot 256-47, 1,250 sq.yd., (12) De LaRoche St. from Gouin Blvd. to city limits, 4,400 sq.yd., (13) Lacosse St. from Notre Dame St. to Canadian Pacific Ry., 130 sq.yd., (14) Jeanne Mance St. from Beaumont to North Sts., 300 sq. yd., (15) Rosemount Blvd. from Papineau to Iberville Sts., 1,200 sq.yd., (16) 9th Ave. from Masson to St. Jerome Sts., 1,000 sq.yd., (17) Regent St. from St. James St. to Canadian Pacific Ry., 1,172 sq.yd., (18) Laverdure St. from existing sidewalk to Lamarche St., 235 sq.yd., (19) St. Zotique St. from DeLaRoche to Boyer Sts., 900 sq. yd., (20) Florence St. from Gouin Blvd. to Summerville Sts., 139 sq.yd., (21) Perras St. from St. Charles to Peloquin Sts., 175 sq.yd., (22) Christophe Colomb St. from Defleurimont St. to Des Carrieres Rd., 1,200 sq.yd., (23) Bellechasse St. from Christophe Colomb to DeNormanville Sts., 430 sq.yd., from Duranceau & Duranceau, 152 Hamilton St., (8a) $1 (8b) $1 (8c) $1.70 (8d) $1.30, total $9,550, (10a) $1 (10b) $1 (10c) $1.70 (10d) $1.30, total $7,055, (12a) $0.80 (12b) $0.80 (12c) $1.40 (12d) 0.90, total $17,160; Quinlan, Robertson & Janin, Ltd., 52 Duluth Bldg., (9a) $1 (9b) $1 (9c) $1.75 (9d) $1.35, total $2,448, (17a) $0.60 (17b) $1 (17c) $1.60 (17d) $1.40, total 6,871; Boyd, Rossi & Devito, 409 St. James St., (10a) $0.67 (10b) $0.72 (10c) $1.54 (10d) $1.76, total $6.543, (12a) $0.60 (12b) $0.755 (12c) $1.56 (12d) $0.83, total $16,-478; Leger & Lamoureux, 78 Bernard St., (11a) $1.25 (11b) $1.25 (11c) $1.25 (11d) $1, total $6,688, (12a) $1 (12b) $1 (12c) $1 (12d) $0.70, total $16,280, (13a) 1.50 (13b) $1.50 (13c) $1 (13d) $1, total $750, (14a) $1 (14b) $1 (14c) $1 (14d) $1, total $1,410, (18a) $1 (18b) $1 (18c) $1 (18d) $1, total $11,279, (19a) $1 (19b) $1 (19c) $1 (19d) $0.75, total $3,375, (20a) $1.50 (20b) $1 (20c) $1 (20d) $1, total $626, (21b) $1 (21c) $1 (21d) $1, total $1,655, (22a) $1 (22b) $1 (22c) $1 (22d) $0.75, total $5.300, (23a) $1 (23b) $1 (23c) $1 (23d) $0.75, total $3.710; Rondou, Corlier & Co., 3506 Christophe Colomb St., (11a) $1.23 (11b) $1 (11c) $1.60 (11d) $1, total $6,938, (12a) $1 (12b) $0.50 (12c) $1.50 (12d) $1, total $17,600, (18a) $0.85 (18b) $0.50 (18c) $1.50 (18d) $1, total $11,755, (19a) 0.55 (19b) $0.50 (19c) $1.50 (19d) $1, total $3,195, (20a) $0.85 (20b) $0.50 (20c) 1.50 (20d) $1, total $535, (21b) $0.50 (21c) $1.50 (21d) $1, total $1,388, (22a) $0.63 (22b) $0.50 (22c) $1.50 (22d) $1, total $4,956, (23a) $0.60 (23b) $0.50 (23c) $1.50 (23d) $1, total $2,658; F. Lapan, 601 Lacordaire St., (15a) $0.70 (15b) $0.70 (15c) $1.69 (15d) $0.60, total $4,428, (16a) $0.70 (16b) $0.70 (16c) $1.60 (16d) $0.60, total $3,690; B. Brault Ltd., 2855 Rosemount Blvd., (17a) $0.70 (17b) $1.10 (17c) $1.80 (17d) $1.50, total $7,457; P. Desantis, 3929 St. Hubert St., (18a) $1 (18b) $1 (18c) $2.50 (18d) $0.40, total $10,975; A. and R. Billett, 6158 Peloquin St., (21b) $1 (21c) $1.15 (21d) $0.55, total $1,249; A. Kelly, 2310 St. Denis St., (23a) $0.97 (23b) $0.97 (23c) $1.46 (23d) $0.97, total $2,604. Noted Sept. 28.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, repaving Furman St., etc., to M. J. O'Hara Contg. Co., 717 65th St., $94,080; Flatbush Ave. extension, to Utilities Contg. Co., $12,389; South 9th St., to F. Donovan, $4,749 all foregoing grade 1 granite; Utica Ave., to Borough Asphalt Co., 1301 Metropolitan Ave., $13,588; Neptune Ave., to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., $54,942, both asphalt on 6 in. concrete. Noted Oct. 12.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., curbing, flagging, reflagging and asphalt paving West 163rd St. and Isham Ave., to Asphalt Paving Co., 1301 Metropolitan Ave., Brooklyn, $8,173 and $7,672 respectively; grading, curbing and asphalt paving West 157th St. and laying sidewalks on Park Ave., to Burnside Contg. Co., 270 Burnside Ave., $11,070 and $10,397 respectively; repaving 24th St., wood block, to P. J. Kearns, 2306 Creston Ave., $18,747. Noted Oct. 19.

N. J., Bradley Beach—Bd. Boro Comrs., Boro Hall, paving Ocean Ave., 30 ft., bituminous concrete, to Newark Paving Co., 308 Adams St., Newark, $73,261. Noted Oct. 5.

Pa., Phila.—Asphalt and granite block pavement on Lancaster Ave., to Barber Asphalt Paving Co., Land Title Bldg., $33,-568; asphalt pavements on Clearfield and Diamond Sts., and Anderson, Etting and Sansom Sts., to Eastern Paving Co., Colonial Trust Bldg., $24,524 and $28,045 respectively; grading Algar St. to J. McCool, 124 Albanus St., $31,151. Noted Oct. 19.

Virginia — State Hy. Dept., Richmond, constructing 3.434 mi. road between Martinsville and Daniels Creek, Project 170, Route 3, 18 ft., concrete, to W. W. Boxley, Roanoke, $119,484, (this contract is conditional upon the people of locality raising 50 per cent of money); 1.99 mi. road between Burkes Garden Siding and Tazewell, Project 256, Route 11, 16 ft., bituminous macadam, incl. 3 bridges, to G. T. Franklin & Co., Bassetts, $45,593; 3.86 mi. road between Greenville and Fairfax Rd., Project 192-A, Route 3, 18 ft. macadam, to Pace Constr. Co., Roanoke, $137,661; 1.03 mi.

Streets and Roads (Continued)

road between Clintwood and Fremont, Project 217, Route 11-2, 12 ft. wide, macadam, to Clintwood Constr. Co., Clintwood; 1.84 mi. streets in Halifax, Halifax Co., Project S-219, Route 18, 18 and 24 ft., concrete, to Southern Constr. Co., Petersburg, $58,745; 9.28 mi. road between Greenwich and Milford Mills, Project 130, Route 25, 12 ft., waterbound macadam, and 1.405 mi. road between New Baltimore and Greenwich, Project 203, 12 ft., waterbound macadam, to L. J. Chandler, Virgilina, $20,352 and $32,663 respectively. Noted Sept. 28.

Ga., Savannah — Resurfacing 6 streets with Lake Asphalt, to Dixon Contg. Co., Real Estate Bldg., $59,662; Jefferson St., to Hutton Eng. & Constr. Co., Kelley Bldg., $40,774.

Tennessee—State Hy. Comn., Nashville, improving Project 87, Davidson Co., bituminous surface on concrete, to G. B. Howard Co., 148-B 4th Ave., Nashville, $99,420.

Tenn., Manchester—Coffee Co. Hy. Comn. grading and surfacing 7.42 mi. road to Grundy Co. line, to Smith, Pitts & Sons, Lawrenceburg, 20,433 cu.yd. excav. $0.35, 8,703 cu.yd. borrow $0.35, 60,973 sq.yd. hand placed base $0.59, 69,973 cu.yd. 2½ in. crushed stone surface $0.23, 36.78 cu.yd. Class A concrete $29, 79.28 cu.yd. Class B concrete $19, etc., total $63,381. Noted Oct. 12.

Ohio—Dept. Highways and Pub. Wks., Columbus, widening and surfacing 5.54 mi. Sect. "A" Elyria-Lorain Rd., Lorain Co., bituminous concrete and sheet asphalt, to Highway Constr. Co., Elyria, $92,220. Noted Oct. 19.

O., Cleveland—Paving Baltic Rd., 3,356 lin.ft. stone curb, 3,600 cu.yd. earth excav., 3,350 sq.yd. asphalt, etc., to Cleveland Trinidad Paving Co., The Arcade, $47,376.

O., West Park (Cleveland P. O.)—For concrete walks on various streets, to B. J. Fay, Cleveland (street address not available), $19,604; stone walks, to Cleveland Stone Co., 1836 Euclid Ave., Cleveland, and Ohio Quarries Co., Citizens Bldg., Cleveland, $45,825 and $18,384 respectively. Work involves 500,000 lin.ft. stone and concrete sidewalks.

Ind., Princeton—Gibson Co., to Lefter & Wirth, Francisco, concrete paving 5,858 ft. Montgomery Rd., 16 ft., 10,414 sq.yd. concrete, $26,818, crushed stone surfacing 13,200 ft. Englehart Rd., 16 ft., $25,906, 13,200 ft. Townsley Rd., 16 ft., $25,836, 2.5 mi. Lemme Rd., 16 ft., $25,335; to C. C. James, Francisco, crushed stone surfacing 15,450 ft. Chappel Rd., 16 ft., $27,098. Noted Oct. 5.

Ind., Winamac — Pulaski Co., to Kain Bros., Winamac, paving 2.75 mi. Redline Rd., 18 ft., gravel and stone, $31,995, engrs. est. $29,000; grading and graveling 15,800 ft. Burns Rd., 16 ft., $27,000, engrs. est. $28,000. Noted Oct. 19.

Mich., Detroit—To Detroit Asphalt Paving Co., 20 McGraw Bldg., paving Bordeau Ave. $16,509, Indiana Ave. $26,549, Seminole Ave. $23,169, St. John St. $36,740, Six Mile Rd. $72,477, Wyoming Ave. $22,476; to Otis Cement Constr. Co., 806 Hammond Bldg., Alley 1599, $10,584, Alley 1606, $6,373, Alley 1594, $4,130; to G. Nunn, 6409 3rd Ave., Alley 1600, $4,152, Alley 1602, $3,551, Alley 1595, $1,536, Alley 1598, $2,142; to R. J. Powelson Co., 6415 Iroquois Ave., Alley 1601, $4,840, Alley 1603, $5,555, Alley 1607, $5,148; to DeLisle & Cooper, 402 Ford Bldg., Alley 1604, $2,122; to A. F. Lester, 309 Sun Bldg., Alley 1605, $2,094, Alley 1608, $1,927, Alley 1609, $2,095; to Smith Trucking Co., 3325 West Euclid St., Alley 1610, $3,093; to Bishop & Weir, 400 Penobscot Bldg., Alley 1589, $2,609, Alley 1590, $4,632, Alley 1591, $5,305, Alley 1592, $4,807, Alley 1593, $4,742; to J. Porath, 34 McGraw Bldg., Alley 1597, $2,728.

Ill., Chicago—Grading and paving 9,000 sq.yd. Narragansett Ave., asphalt and binder course on 6 in. portland cement concrete, 3,634 cu.yd. grading, 1,400 cu.yd. filling, 5,500 lin.ft. concrete curb and gutter, to White Constr. Co., 17 North La Salle St. Engrs. est. $64,500.

Ia., Des Moines — Removing old brick pavement and repaving with Class B concrete, 11,270 sq.yd. Woodland Ave. from 15th to 19th Sts., to Wright Constr. Co., 211 Flynn Bldg., $2.64 per sq.yd.

Ia., Sioux City—Sioux Co. grading 8.5 mi. Primary Rd. Project 223, south of Maurice and northeast of Rock Valley to C. F. Betz, 2909 Pierce St., 109 263 cu.yd. excav. $0.207 per cu.yd.; P. Zee and G. Vander Mheen, Alton, 35,023 cu.yd. excav., $0.20.

Kan., Caney—Vitr. brick paving various streets, to J. K. Shinn, Independence, Mo., $26,654.

Kan., Peabody—Vitr. brick paving various streets, to Kaw Paving Co., 506 N. E. Bldg., Topeka, $71,034.

Mo., St. Louis—Bd. Puo. Serv., recutting old granite block and supplying new granite where needed, etc., on 5,000 ft. Bway. from Chippewa to Arsenal Sts., 40 ft., to F. A. Stiers Constr. Co., 4500 Enright St., $120,698. Noted Oct. 12.

Tex., Brownsville—Cameron Co. 2 course rein.-con. pavement on 10.48 mi. Sect. F. incl. 110,650 sq.yd. concrete, and 10.32 mi. Sect. G, 109,221 sq.yd. concrete, both 18 ft. wide, to F. P. McElwrath, Corsicana, $343,754 and $337,453 respectively.

Tex., Coleman — Coleman Co. clearing, grading and graveling 17.72 mi. State Hy. 7, Federal Aid Project 194, 16, 20 and 50 ft., 2,867.6 cu.yd. concrete, 41,256 cu.yd. roadway excav., 31.2 acres clearing, 90,312 cu.yd. borrow, 315,583 lb. reinforcing and 83,270 lb. structural steel, etc., to Womack Constr. Co., Sherman, $135,857. Engrs. est. $149,443. County to furnish 38,880 cu.yd. shipped gravel at $58,000.

Tex., Dallas—To Central Bitulithic Co., Deere Bldg., paving with 2 in. bitulithic on 5 in. concrete, 3,585.6 sq.yd. Prescott St. from Lemmon to Cedar Springs Sts. $3.20 per sq.yd.; 3,780.5 sq.yd. Vandalia St. from Wycliffe to Hawthorne Sts. $3.20; 5,073.2 sq.yd. Rawlins St from Wycliffe to Hawthorne Sts. $3.20; 2,773.2 sq.yd. Hawthorne St. from Lemmon to Vandalia Sts. $3.20; 3,487.8 sq.yd. Herschell St. from Lemmon to Cedar Springs Sts. $3.20; 4,428.7 sq.yd. Douglas St. from Cedar Springs to Lemmon Sts., $3.20, 2,713.6 lin.ft. curb and gutter $1.15 per lin.ft., etc., total $20,256; 23,679 sq.yd. Travis St. from Browser to Hester Sts., $3.20, 12,731.5 lin.ft. curb and gutter $1.15 per lin.ft., etc., total $105,690; 17,577 sq.yd. Junius St. from College to Fitzhugh Sts., $3.25, 10,000 lin.ft. curb and gutter $1.15, total $77,054.

Tex., San Benito — Paving, curbing and guttering, Sam Houston, Travis, Bowie, Regan, Robertson, Stenger, Batts and Rowson Sts., 36-38-54 ft., to Dodds & Wedegartner, San Benito, 38,000 sq.yd. concrete $3.35 per sq.yd., total $127,300. Noted Oct. 5.

Tex., Sherman—Concrete paving, curbing and guttering 5 mi. Cleveland, East Lamar and Loving Sts., 20-24 ft., 46,500 sq.yd. paving, 34,000 lin.ft. curb and gutter, 11,000 cu.yd. excav., to McGuire & Cavender, Kansas City, Kan., (street address not available) $2.50 and $2.52 per sq.yd. Engrs. est. $150,000.

Colorado—State Hy. Dept., Denver, grading 1.453 mi. road beginning north of Dillon and extending toward Kremmling, Federal Aid Project 190, Summit Co., incl. 100 ft. steel truss bridge over Blue River, to Colorado Bridge & Constr. Co., Gas & Electric Bldg., Denver, $36,504, engrs. est. $39,045; concrete paving 1.519 mi. road beginning at Broomfield and extending north toward Lafayette, Federal Aid Project 222B, Boulder Co., to Miller, Douglas & Haines, 100 South York St., Denver, $56,885, engrs. est. $72,000; gravel surfacing 5.375 mi. Sante Fe Trail, Grenada State Line, Federal Aid Project 219A, 18 ft., Prowers Co., to W. A. Colt & Son, Las Animas, $52,607, engrs. est. $58,900; 83 ft. concrete girder bridge over St. Charles River on Rye Rd. to Walsemburg, with gravel approaches, Federal Aid Project 173, Pueblo, to J. R. Donaghy, Colorado Springs, $24,650, engrs. est. $20,786. Noted Oct. 19.

Colorado—State Hy. Dept., Denver, grading 10.731 mi. road beginning 2 mi. north of Platteville and extending toward Greeley, Federal Aid Project 226-C, Weld Co., 16 ft., to C. R. Conover & Bro., 305 Bank Bldg., Denver, $32,997; 7.474 mi. road beginning 6 mi. west of Saguache and extending west toward Cochetopa, Federal Aid Project 119-B, to Girardet & Hotchkiss, Delta, $44,654. Noted Oct. 5

New Mexico—State Hy. Comn., Santa Fe, improving roads, incl. structures, 26.18 mi. Guam-Bluewater Rd., Federal Aid Project 75, McKinley Co., to O. C. McElrath Constr. Co., Mesa, Ariz., $137,007; 21.082 mi. Cliff-Mogollon Rd., Federal Aid Project 84, Grant Co., to C. A. Cunningham, Reserve, $137,055; 4.259 mi. Pankeys Gate-Canoncita Rd., Federal Aid Project 90, Santa Fe Co., to Peterson, Shirley & Gunther, Woodmen of the World Bldg., Omaha, Neb., $47,303; 10.18 mi. Willard-Lucy Rd., Federal Aid Project 95, Torrance Co., to McClure & Dobson, Magdalena, $44,031. All foregoing exclusive of 10 per cent for engineering and contingencies.

Idaho—Director of Highways, grading 6.2 mi. Lewis and Clark Highway, between Orofino and Greer, Federal Aid Project 50, 56,000 cu.yd. earth and 73,200 cu.yd. rock excav., etc., to Triangle Constr. Co., Realty Bldg., Spokane, Wash., $84,604 plus 10% for engineering and contingencies; 13.7 mi. Yellowstone Highway from Blackfoot to Bonner Co. Line, Federal Aid Project 61, 51,000 cu.yd. earth and 20,000 cu.yd. rock excav., 33,000 cu.yd. gravel, etc., also 3.1 mi. Custer Co.-Salmon City Rd., Federal Aid Project 56, 26,700 cu.yd. earth and 28,800 cu.yd. rock excav., 4,900 cu.yd. crushed rock, etc., to Gleim & Sh[illegible], Pocatello, $50,827 and $52,478 respectively.

Utah, Salt Lake City—Concrete curbing and guttering 54,000 ft. in Capitol Hill Dist., to Gibbons & Reed, Kearns Bldg., $154,335. Noted Sept. 28.

Wash., Aberdeen—See "Miscellaneous."

Wash., Seattle—Paving Orcas St. et al. 5,450 lin.ft. asphaltic concrete curb, 7,250 cu.yd. earth excav., 2,000 sq.yd. subgrading, 9,675 sq.yd. 6 in. concrete, to J. D. Stilwell, Inc., 3220 9th Ave., $37,721, engrs. est. $38,911; Findlay St. et al, 9,350 lin.ft. asphaltic concrete curb, 4,000 cu.yd. earth excav. and 16,225 sq.yd. 6 in. concrete, to V. Ramaglia, 4415 Corliss Ave., $47,051, engrs. est. $44,702.

Oregon—State Hy. Comn., Salem, grading 12.12 mi. Hayden Creek-Keno Sect. Ashland-Klamath Falls Highway, Klamath Co., 17,000 cu.yd. common, 19,000 cu.yd. intermediate and 26,500 cu.yd. solid rock excav., etc., to J. Hampshire, Ashland; surfacing Keene Creek-Hayden Creek Sect., Ashland-Klamath Falls Highway, Unit 1, 12.34 mi. Jackson Co., 24,000 cu.yd. broken stone, etc., to S. S. Shell, Ashland, $79,210, Unit 2, 9.83 mi. Klamath Co., 19,000 cu.yd. broken stone, etc., to W. C. Stone, 654 East Alder St., Portland, $65,110; grading 9.35 mi. and surfacing 15.65 mi. Madras-Wasco Co. Line Sect., The Dalles-California Highway, Jefferson Co., 36,000 cu.yd. common, 6,000 cu.yd. intermediate and 7,500 cu.yd. solid rock excav., 16,500 cu.yd. broken stone, 17,500 cu.yd. crushed gravel, etc., to Moore & Anderson, Heppner, $81,843; 6 mi. grading Alsea Mountain Sect., Alsea Highway, Benton Co., 43,000 cu.yd. common, 93,000 cu.yd. intermediate and 110,000 cu.yd. solid rock excav., to Joplin & Eldin, Portland (street address not available).

Calif., Stockton — Supervs. San Joaquin Co., to C. Moreing & Sons, Commercial & Savings Bank Bldg., improving Thomas Wall Rd. $15,550, 4 mi. Peters Rd. $22,235, 3.39 mi. Willow Glenn Rd. $18,230, 3 mi. Morrison Rd. $21,130, 8 mi. road 2½ mi. east from Jack Tone Rd. $26,988; to C. O. Holden, 433 East Locust St., Lodi, 1½ mi. Jack Tone Rd. $12,465, 2½ mi. Kettleman Rd. and Quimby Ave., $20,710, 3.04 mi. Brackharshner Rd. $21,677. Noted Oct. 19.

Calif., Tracy—Bd. Trustees, grading, paving, curbing, guttering and laying sewers Taft, 6th, 9th, Roosevelt Sts., etc., to J. E. Johnston, 315 Savings & Loan Bank Bldg., Stockton, $59,787. Noted Oct. 19.

Ont., Toronto—To Constr. & Paving Co., Confederation Life Bldg., 25,000 sq.yd. asphalt pavements on Yonge St. from Farnum Ave. to Heath St., $32,237, and from Craighurst to Lawrence Aves., $89,482, 8,000 sq.yd. Annette St., $39,000; to Warren Bituminous Paving Co., 54 University Ave., 20,000 sq.yd. bitulithic pavement on Yonge St. from Lawrence Ave. to city limits, $96,761, 1,000 sq.yd. Pincrest and Clendenau Rds., $5,242; to Godson Contg. Co., Manning Chambers, 7,000 sq.yd. asphaltic concrete pavement, Yonge St. from Glen Elm to Merton Aves., $36,877, 19,000 sq.yd. asphalt on concrete, Yonge St. from Heath to Hillsdale Aves., $85,118; to Kilmer & Barber, 24 Adelaide St. W., 24,000 sq.yd. asphalt pavement Yonge St. from Hillsdale to Craighurst Aves., $113,736.

Industrial Works

PROPOSED WORK

N. H., Plaistow—Merrimack Clay Products Co., 185 Devonshire St., Boston, soon lets contract 1 and 2 story, 200 x 600 ft. plant, steel and wood, plain foundation. $200,000. Noted June 15.

Mass., Worcester—Queensbury Mills, Inc., Quinsigamond Ave., plans several large additions to plant, brick and steel. Architect not selected.

N. Y., Brooklyn — C. D. Strang, 105 South Portland St., soon takes bids 5 story, 64 x 115 ft., brick, steel and concrete warehouse addition, plain foundation, Coney Island Ave. $250,000. A. Goldberg, 164 Montague St., archt. and engr.

N. Y., Niagara Falls—T. K. Thomson, 50 Church St., New York, and P. A. Porter, 414 Delaware Ave., Buffalo, engrs., making tentative plans for hydro-electric developments in Niagara Gorge to develop 2,000,000 hp. This corrects report in Oct. 5 issue.

Pa., Bloomsburg—Bloomsburg Paper Co., plans to rebuild factory recently destroyed by fire. $75,000.

Pa., Phila.—Cocoanut Specialty Co., 1214 North Crese St., soon takes bids 4 and 6 story, 80 x 180 ft. rein.-con., brick and steel factory, plain foundation, Wayne Junction, $250,000. Lachman & Murphy, Drexel Bldg., archts.

Pa., Phila.—J. B. Stetson Co., 5th St. and Columbia Aves., having plans prepared by J. O. Potts, archt., 5th and Montgomery Aves., 8 story, 62 x 75 ft. factory, 1 story,

Industrial Works (Continued)

114 x 114 ft. garage and work shop, 1 story 75 x 124 ft. machine and repair shop, 4th and Columbia Aves.

D. C., Wash. — Milburn-Heister Co., archts., 710 14th St., N. W., preparing plans service station. $70,000. Owner's name withheld.

La., New Orleans—Lukens Steel Co., Coatesville, Pa., having plans prepared by A. M. Shaw, consult. engr., Hibernia Bank Bldg., 4 unit plant here along Navigation Canal, incl. 75 x 250 ft. warehouses, etc., $300,000.

O., Caldwell—Caldwell Colleries Co., plans rebuilding generating and hoisting plant at Florence Mine, destroyed by fire. $70,000.

O., Cleveland—Denby Wire & Iron Co., 5119 Euclid Ave., had plans prepared 1 story, 40 x 105 ft., brick and steel factory, 3005 East 81st St. $40,000. Private plans.

Ohio, Cleveland—Lees Bradner Co., 6210 Carnegie Ave., plans 3 story, brick factory addition. $100,000. E. J. Lees, pres. Private plans.

Ill., Chicago — L. G. Hallberg & Co., archts., 116 South Michigan Ave., soon receives bids 1 story, 68 x 190 ft. top addition, rein.-con., brick and steel, 908 Gary St., for Huguelet Bros. $50,000.

Wis., Chilton—Hingiss & Bissler, c/o A. Hingiss, Kiel, plans 2 story, 60 x 100 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation, here. $45,000.

Wis., Fond du Lac—Model Laundry Co., 66 Macy St., plans 2 story, 60 x 90 ft., addition to laundry, rein.-con. and brick, plain foundation. $40,000. Architect not selected.

Wis., Green Bay—E. J. Bolza Co., 327 Main St., having plans prepared 2 story, 50 x 95 ft. factory, brick, rein.-con. and steel, plain foundation. $40,000. E. J. Bolza, mgr. Private plans.

Wis., Racine—Belle City Malleable Iron Co. plans 1 story, 45 x 50 ft. brick, rein.-con. and steel gas plant. $40,000. Architect not selected.

Mo., Kansas City — H. Von Unwerth, engr., Finance Bldg., soon takes bids for 1 story and basement, 160 x 220 ft., rein.-con., brick and steel manufacturing building, plain foundation, for Electric Storage Battery Co., 19th St. and Allegheny Ave., Phila. $120,000.

Mo., Paris—See "Waterworks."

Tex., Cuero—Cuero Light & Power Co. plans $75,000 bond issue for extensions and improvements to plant and lines.

Colo., White River (Meeker P. O.)—Rio Blanco Carbon Co., 818 Symes Bldg., Denver, having plans prepared by O. D. Horton, engr., 714 Commerce Bldg., Erie, Pa., 1 story, 12 x 16 ft., 2 story, 20 x 40 ft. and 1 story, 14 x 110 ft., manufacturing plant, corrugated sheet metal and steel, here. $60,000.

Ore., Bend—Bend Water, Light & Power Co. takes bids early in spring, power development on Deschutes River, incl. concrete dam 270 ft. high, 800 ft. long at top, 120 ft. long at base, to develop 106,000 hp. power house, penstocks, power line, turbines, generators, transmsision lines, etc. T. H. Foley, vice-pres., in market for power and electrical equipment for above. V. H. Reineking, Spaulding Bldg., Portland, engr.

Calif., Fresno—See "Buildings."

Ont., Paisley—Plans power plant and concrete dam, on Little Saugeen River. $60,000. A. James, 36 Toronto St., Toronto, engr.

B. C., Powell River—Powell River Co. Ltd., having plans prepared by R. Bell-Irving, archt, Powell River, 2 story, 40 ft. high, 80 x 360 ft. plant, rein.-con. and steel. $200,000

BIDS DESIRED

Conn., Hartford—Frisbie Pie Co., 363 Kossuth St., Bridgeport, receiving bids 2 story, 90 x 100 ft. bakery and warehouse, brick and steel, here. $50,000. Private plans.

N. Y., New York—S. M. De Pasquale, c/o S. J. Kessler, archt. and engr., 529 Courtland Ave., 2 story, brick, steel and concrete garage, plain foundation, Webster Ave. and Mosholu Parkway. $120,000. Work will be done by separate contracts.

Pa., Phila. — Neubauer & Supowitz, archts., 929 Chestnut St., taking bids 2 story and basement, 50 x 100 ft. rein.-con., brick, steel and stone garage, plain foundation, Wyoming Ave. and Mascher St., for P. Randolph, 41st and Poplar Sts. $100,000.

Ind., Crawfordsville — Nov. 6, by City Clerk, 1 story, 40 x 60 ft. power and light plant, brick, also 200 ft. radial brick stack. $50,000. H. C. Carroll, 511 Traction Terminal, Indianapolis, engr.

Ill., Chicago—E. E. McClellan, archt., 7441 Cottage Grove Ave., receiving bids 1 story, 100 x 100 ft. garage, rein.-con., brick and steel, Halsted and 76th Sts. $40,000. Owner's name withheld.

Ill., Chicago—E. E. McClellan, archt., 7441 Cottage Grove Ave., receiving bids 1 and 2 story, 200 x 200 ft. factory addition, rein.-con., brick and steel, 15th St. and Keeler Ave., for Victory Ice and Ice Cream Co. $100,000.

Ill., Chicago.—A. S. Alschuler, archt., 28 East Jackson Blvd., receiving bids 3 story, 105 x 175 ft., rein.-con., brick and steel printing plant, Congress and Laflin Sts. $250,000. Owner's name withheld. Noted Sept. 28 under "Buildings."

Wis, Chippewa Falls—Chippewa Valley Auto Co., 16 River St., taking bids 2 story, 124 x 130 ft. garage and repair shop, brick, rein.-con. and steel. $75,000. E. J. Hancock, Laycock Bldg., Eau Claire, archt.

Wis., Milwaukee—Leenhouts & Guthrie, archts., 424 Jefferson St., taking bids 1 story, 120 x 120 ft., brick and concrete garage, plain foundation, for Luick Ice Cream Co., 183 Ogden Ave. $60,000. Noted Oct. 5.

Wis., Milwaukee—C. F. Ringer & Son, archts., 432 Bway., taking bids 1 story and basement, 50 x 150 ft., brick and concrete garage, plain foundation, 9th St., for O. Jaeger Baking Co., 914 Central Ave. $40,000.

Wis., Milwaukee—H. G. Lotter, archt., 427 Milwaukee St., taking bids 2 story, 60 x 135 ft., brick and timber factory, plain foundation, for A. C. Beck Co., 1 East St. Noted Oct. 12.

Wis., Waukesha—M. H. Blake, archt., Andrews Blk., taking bids and will open same about Oct. 30, on structural steel for 1 story, 65 x 200 ft., brick and concrete garage addition, plain foundation, for Spring City Auto Co. Total $50,000. Noted July 27.

Wash., Tacoma—Northern Furniture Co., South Water St., Sheboygan, Wis., taking bids 4 story, 110 x 150 ft., brick, rein.-con. and steel factory, plain foundation, Edison St., here. $60,000. W. C. Weeks, 720 Ontario Ave., Sheboygan, Wis., archt.

BIDS RECEIVED

D. C., Wash.—Corby Baking Co., Georgia Ave. and Trumbull Sts., N. W., addition to bakery, from A. L. Smith Co., Woodward Bldg., (1) $143,292 (2) $195,000 (3) $45,774; P. F. Gormley Co., Union Trust Bldg., (1) $148,105 (2) $206,298 (3) $54,707; F. L. Wagner, 1413 H St., N. W. (1) $149,191 (2) $203,270 (3) $49,300.

O., Cleveland—Bd. Educ., East 6th St. and Rockwell Ave., opened bids Oct. 16, 4 story, 104 x 144 ft., brick, steel and concrete warehouse, East 63rd St. and Waterman Ave., from F. Hohloch, 311 Federal Bldg., Youngstown, $228,000; W. Moore Co., 1276 West 4th St., $232,000. Noted Sept. 28.

CONTRACTS AWARDED

Mass., Somerville—J. W. Knowles, 660 Bway., 1 story, 15 ft. high, 90 x 150 ft. garage, etc., brick and concrete block, plain foundation, Highland Ave. and Eastman Rd., to Brayley & Knowles, 660 Bway. Archts.' est. $40,000.

Mass., Worcester—A. A. Wheeler, 159-163 Mechanic St., 2 story, 30 ft. high, garage and service station, brick and concrete, Mechanic St., to J. Miles & Sons Co., 393 Main St. Archts. est. $100,000.

R. I., Providence—Olneyville Realty Co., Inc., 18 Plainfield St., 1 story, 60 x 175 ft. garage and service station, brick and steel, plain foundation, Plainfield St., to C. I. Bigney Constr. Co., 357 Westminster St. Archts. est. $40,000. Noted Oct. 5.

Conn., Bridgeport—Huber Ice Cream Co., 800 Seaview Ave., 3 story and basement, 60 x 102 ft. factory addition, rein.-con. and brick, Eagle St. and Seaview Ave., to T. J. Pardy Constr. Co., 1381 Seaview Ave. Archts. est. $100,000. Noted Oct. 12.

Conn., New Britain—Landers, Frary & Clark, Commercial St., 6 story factory addition, brick and timber, plain foundation, Stanley St., to Torrington Bldg. Co., 197 Water St., Torrington. Archts. est. $75,000.

N. Y., Buffalo—Pillsbury Flour Mills Co., 302 Metropolitan Life Bldg., Minneapolis, Minn., general contract, 10 story and basement, 100 x 268 ft., concrete and steel mill, here, to Fegles Constr. Co., 706 1st Ave. N., Minneapolis, Minn. $1,000,000. Noted Oct. 19.

N. Y., New York—Cantor Constr. Corp., c/o F. Parker, archt. and engr., 44 Court St., Brooklyn, 2 story, 150 x 195 ft., brick, steel and concrete garage, plain foundation, Park Ave. and 164th St., by day labor. $150,000.

N. Y., New York — Four Twenty Five West 54th St. Realty Co., c/o F. A. Rooke, archt. and engr., 15 East 40th St., 6 story, 75 x 90 ft., brick, steel and concrete garage and service station, plain foundation, 421 West 54th St., by day labor. $125,000.

N. Y., New York—W. F. Harving, c/o J. P. Whiskeman, archt. and engr., 153 East 40th St., will build 1 story, 135 x 150 ft., brick, steel and concrete garage, plain foundation, Webster Ave., by day labor. $75,000.

Pa., Pittsburgh—Harmony Creamery Co., 407 Liberty Ave., 2 story, 56 x 115 ft. concrete and steel garage, Reedsdale Ave., to Lawrence Steel Constr. Co., 3324 Smallman St. Archts. est. $40,000.

W. Va., Huntington — Armstrong Mfg. Co., 1 story, 108 x 201 ft. addition to plant, brick and steel, to C. H. Smith, Robson-Prichard Bldg.

Tenn., Kingsport — Mead Fibre Co., 2 story, 75 x 275 ft. paper mill, brick, etc., to W. A. Allen, Kingsport. Engrs. est. $350,000. Noted Oct. 5.

O., Cleveland—F. Svoboda, 5377 Bway., 2 story, 45 x 139 ft. garage, steel girders, Bway. and Mumford Ave., to Cleveland Cuyahoga Constr. Co., 110 Engineers Bldg. Archts. est. $60,000. Noted Sept. 14.

O., Cleveland Heights (Warrensville P. O.)—Heights Battery Co., c/o J. Herman, 2777 Mayfield Rd., 2 story, 50 x 100 ft., brick and steel garage, 2770 Mayfield Rd., to T. H. Walker, 3131 Washington Blvd. Archts. est. $40,000.

O., Euclid—Municipal Realty Co., c/o A. Bloom, supt. of construction, Hanna Bldg., Cleveland, will build warehouse and lumber mill, 1 story each, brick and steel, Bliss Rd. and St. Clair Ave., by day labor. $150,000. Private plans.

O., Salem—Deming Co., Etna St., 1 story, brick and steel foundry, to Austin Co., 16112 Euclid Ave., Cleveland. Archts. est. $50,000.

Mich., Detroit—Dept. Street Rys., Shoemaker and St. Jean Aves., will build 1 story, 100 x 200 ft. paint shop, brick and steel, plain foundation, Woodward Ave., by day labor. $100,000. W. C. Markham, 312 Marquette Bldg., engr.

Ill., Chicago—McDonald Loose Leaf Co., 638 Federal St., 1 story, 95 x 125 ft. factory, rein.-con., brick and timber, 1809-17 Summerdale Ave., to J. Christensen, 1250 East 69th St. Archts. est. $50,000. Noted Sept. 7.

Ill., Chicago—E. J. Brach & Sons, 215 West Ohio St., 3 story, 100 x 300 ft. factory, rein.-con., brick and steel, Kinzie and Cicero Sts., masonry and carpentry to H. Erickson Co., 139 North Clark St. Archts. est. $1,000,000. Noted Oct. 19.

Wis., Baraboo—G. McCarthur & Sons Co. will build 1 story, 50 x 65 ft. brick, rein.-con. and steel power plant, plain foundation, by day labor. $40,000. C. N. Ward, c/o University of Wisconsin, Madison, archt.

Wis., Delavan—State Bd. Control, Madison, 1 story, brick and rein.-con. cold storage plant, to Lipman Mfg. Co., Beloit. Engrs. est. $40,000.

Wis., Green Bay—Brown Co., c/o H. F. Wittig, clk., Court House, will build 2 story, 70 x 95 ft., brick and rein.-con. laundry, plain foundation, by day labor. $40,000. Foeller & Schoeber, Nicolet Bldg., archts. Noted Sept. 14.

Wis., Milwaukee—F. Kraning, 1147 Forest Home Ave., 2 story and basement, 30 x 80 ft. garage addition, brick and concrete, plain foundation, to Klupp Bros., 860 14th Ave. Archts. est. $40,000. Noted Oct. 12.

Wis., Milwaukee—Milwaukee Air Power Pump Co., 886 3rd St., 1 story, 130 x 150 ft. factory and office building, brick and concrete, plain foundation, Keefe Ave., to Universal Constr. Co., 915 Chestnut St. Engrs. est. $50,000.

Wis., Milwaukee—Waukesha Dairy Co., 342 6th St., 4 story and basement, 48 ft. high, 50 x 78 ft. addition to dairy, brick and concrete, plain foundation, 6th St., to E. S. Steigerwald Co., 3603 Vliet St. Engrs. est. $50,000.

Wis., Mosinee—Wausau Sulphite Fibre Co. will build 1 story, 60 x 100 ft. brick, rein.-con. and steel, power plant, plain foundation, will also raise rein.-con, and steel dam incl. 2 steel and concrete gates, by day labor. $50,000. Private plans.

Wis., New Holstein—New Holstein Canning Co. will build 1 story, 60 x 160 ft., brick, rein.-con., and tile canning factory, plain foundation, by day labor. $40,000. W. C. Weeks, 720 Ontario Ave., Sheboygan, archt.

Wis., Oconto—Elmore Veneer Co. will build 1 story, 90 x 150 ft., brick and rein.-con. factory, plain foundation, by day labor. $40,000. Private plans.

Wis., Racine—Wisconsin Gas & Electric Co., 305 6th St., 1 story, 50 x 95 ft., brick, rein.-con. and steel addition to gas plant, plain foundation, to Nelson & Co., Inc., Janes Bldg. Archts. est. $40,000. Noted Aug. 10.

Wis., Rhinelander—Wisconsin Regrinding Co., Sheboygan Falls, will build 1

Industrial Works (Continued)

story, 50 x 90 ft., brick, rein.-con. and steel machine shop, plain foundation, here, by day labor. $40,000. Private plans. Noted Oct. 12.

Wis., Union Grove—State Bd. Control, Madison, 1 story, 50 x 90 ft., brick, rein.-con. and steel laundry, plain foundation, at State Home for Feeble Minded, here, to Bonnett Constr. Co., 808 South Pierce St., Milwaukee. Archts. est. $40,000. Noted Sept. 21.

Wis., West Bend—West Bend Concrete Products Co. 2 story, 50 x 65 ft., brick, rein.-con. and steel factory, plain foundation, to L. J. Yohr, West Bend. Archts. est. $40,000.

Ia., Sioux City — Hanford Produce Co., 1st and Court Sts., 3 story, 100 x 150 ft. cold storage warehouse and ice plant, brick and concrete, 1st and Virginia Sts., to Younglove Constr. Co., United Bank Bldg., est. cost $100,000.

Minn., Minneapolis—Ives Ice Cream Co., 2nd and University Aves., S.E., general contract 3 story, 40 x 76 x 117 ft. addition, also adding 3rd stor yto present 41 x 117 ft. building, rein.-con., brick and tile, to S. M. Klarquists Sons Co., Inc., 750 Security Bldg., $74,000.

Calif., Pittsburg—Pioneer Rubber Mills, 68 Sacramento St., San Francisco, 1 story, rein.-con. factory, here, to Cahill Bros., 110 Sutter St., San Francisco, $141,000. Noted Aug. 17.

Calif., Taft—Taft High School Dist., 1 story garage, rein.-con., to Campbell Constr. Co., 3325 J St., Sacramento, $45,000. Noted July 20, under "Buildings."

Buildings

PROPOSED WORK

Conn., Bloomfield — Club House — See "Miscellaneous."

N. Y., Geneva—High School—Bd. Educ. soon takes bids 2 story, 200 x 200 ft., brick, steel and stone, plain foundation, Pultney St. $300,000. W. Potter, 22 East 17th St., New York, archt. and engr. Noted June 1.

N. Y., New York—Apartment—S. Rosenberg, 605 West 170th St., soon takes bids 6 story, 100 x 100 ft., brick, steel and stone, plain foundation, 41 University Pl. $225,000. D. S. Lang, 110 West 34th St., archt. and engr.

N. Y., New York—Loft—G. A. Bagge & Sons, archts. and engrs., 299 Madison Ave., soon take bids 10 story, 45 x 100 ft., brick, steel and stone, plain foundation, William St. Owner's name withheld.

N. J., Trenton—High School—Bd. Educ. soon takes bids for Junior High School No. 3, 2 and 3 story, 385 x 410 ft., West State St. $1,000,000. J. O. Hunt, 219 East Hanover St., archt. E. Sibley, Edgewood Lane, Palisade, engr. Noted Sept. 14.

D. C., Wash.—Theatre and Office—Cosmos Theatre having plans prepared by C. H. Crane, archt., 400 Huron Bldg., Detroit, Mich., theatre and office building, 13th and E Sts., N. W., $1,750,000. A. J. Bryloski, mgr.

Fla., Orlando—Bank—Orlando Bank & Trust Co., soon receives bids brick, stone and steel, plain foundation. $250,000. W. L. Stoddart, 9 East 40th St., New York City, engr. and archt.

Ala., Birmingham—Apartment Hotel—G. L. Miller & Co., Hurt Bldg., Atlanta, Ga., had plans prepared by J. E. Salie, archt., 1129 Cullom St., 7 story, 133 x 240 ft. steel, brick and tile, South Highlands Ave. and Iroquois St. $1,300,000.

O., Canton—Temple—Osgood & Osgood, archts., Fine Arts Bldg., Grand Rapids, Mich., take bids about Dec. 15, 5 story and basement, 100 x 140 ft., brick and stone, here, for Masonic Assn., c/o W. R. Zollinger, 205 Market Ave. $650,000. W. H. Adams, Campau Bldg., Detroit, Mich., engr. Noted Aug. 24.

O., Cleveland—Schools—Bd. Educ., East 6th St. and Rockwell Ave., plans 3 story and basement, East 108th St. and Sandusky Ave., $900,000; 1 story addition to Glenville School, $150,000; 3 story and basement, 22 room, East 146th St. and Harvard Ave., $500,000, all brick, steel and concrete. W. R. McCormack, East 6th St. and Rockwell Ave., archt.

Mich., Coldwater — High School — R. A. Leroy, archt., Pratt Bldg., Kalamazoo, takes bids about Nov. 15, 2 or 3 story, 90 x 120 ft. rein.-con., brick and stone, for Bd. Educ. $150,000. Noted Aug. 17.

Mich., Detroit—Hotel—Hotel Tuller Co., Park and Adams Aves., having plans prepared by W. H. Adams, archts., 431 Griswold St., 14 story and basement, 60 x 120 ft., rein.-con., brick, steel and terra cotta addition, plain foundation, Bagley Ave.

Mich., Detroit—Office—Detroit Bd. Commerce, Lafayette Ave. and Wayne St., plans 20 story, 100 x 120 ft. rein.-con., brick and steel, Lafayette Ave. H. E. Coffin, dir. Architect not selected.

Ill., Chicago—Apartment—P. F. Olsen, archt., 127 North Dearborn St., soon receives bids 3 story, 100 x 170 ft., rein.-con., brick and steel, Estes and Paulina Sts., for L. A. and A. N. Strohm, c/o architect. $175,000.

Ill., Winnetka—Temple—A. P. Allen, archt., 225 North Michigan Ave., Chicago, soon receives bids 2 story and basement, 100 x 100 ft., rein.-con., brick and steel, Elm St. near Maple St., here, for Winnetka Lodge A. F. & A. M., c/o architect. Archts. est. $150,000.

Ia., Atlantic—Hotel—C. R. Jones, soon receives bids 3 story and basement, 25 x 100 ft., rein.-con., brick and stone, $165,000. F. L. Body, 723 Plymouth Bldg., Minneapolis, Minn., archt.

Ia., Des Moines—Schools—Bd. Educ. rejected bids for Adams School, 29th and Douglas Sts., and Monroe School 30th and Hickman Sts. Both 2 story, brick and concrete. Noted Oct. 19.

Ia., Ft. Dodge—Hotel—T. G. Warden, c/o Hotel Wahkonsa, having plans prepared by Damon, O'Meara & Hills, archts., E. Moson Bldg., 8 story and basement addition to Hotel Wahkonsa, 140 x 180 ft., rein.-con., brick and stone. $700,000.

Minn., Minneapolis — Auditorium, etc. — State Bd. Control, Capitol, St. Paul, plans 4 story and basement, auditorium and athletic stadium, rein.-con., brick and stone. $1,500,000. Architect not selected.

Kan., Wichita — Club — E. Forsblom, archt., 405 Sedgwick Bldg., soon takes bids 5 story and basement 140 x 150 ft., rein.-con. and brick, plain foundation, on Market St. between 1st and 2nd Sts., for B.P.O.E., c/o G. Boyd. $300,000.

Mo., Kansas City—Office—S. E. Chamberlain, archt., Ridge Bldg., preparing preliminary plans for brick and stone, 10th and Oak Sts. $3,000,000. Owners name withheld.

Tex., San Antonio — School — City Com. takes bids about Nov. 10, 1 story, brick and concrete, plain foundation. $180,000. Phelps & Dewees, Gunter Bldg., archts.

Colo., Denver—Schools—Denver School Dist., Mercantile Bldg., voted $2,000,000 bonds for elementary schools, $2,400,000 bonds for senior high schools and $1,750,000 for junior high schools. Equipment to cost an additional $2,400,000. Architect not selected.

Wash., Seattle—Apartment—E. Guenther, archt., Ry. Exch. Bldg., opens bids about Nov. 1, 5 story and basement, 60 x 120 ft., rein.-con., 7th and Olive Sts., for Williams & Co., Ry. Exch. Bldg. $175,000.

Calif., San Francisco—Hall, etc.—Knights of Columbus, California Council 880, 1428 Golden Gate Ave., plan hall, auditoriums, etc. $1,000,000.

BIDS DESIRED

N. Y., Attica—High School—Nov. 1, by Bd. Educ., 3 story, 80 x 150 ft., rein.-con. and brick, Prospect St. To exceed $150,000. Miller & McNeil, Root Bldg., Buffalo, archts. Noted Sept. 7.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, taking bids and opens same about Nov. 1, P. S. 190, 5 story, 105 x 125 ft., brick, steel and stone, plain foundation, Georgia and Sheffield Aves. $300,000. C. B. J. Snyder, Concord St. and Flatbush Ave., archt. and engr.

N. Y., Freeport—High School—Bd. Educ. receiving bids and opens same about Nov. 15, brick, steel and stone, plain foundation, Pine St. $600,000. W. Adams, 15 W. 38th St., New York, archt. and engr. Noted Oct. 12.

N. Y., Larchmont—Store and Apartment—Directors Building Corp., 55 Edgwood Rd., 5 story, hollow tile and stucco, plain foundation, Larchmont Ave. corner Post Rd. $175,000. Work will be done by separate contracts under supervision of F. A. Moore, archt. and engr., 109 East 29th St., New York.

N. Y., New York—Apartment—Glick-Rose Holding Corp., c/o D. S. Lang, archt. and engr., 110 West 34th St., 6 story, brick, steel and stone, plain foundation, West 141st St. $200,000. Work will be done by separate contracts under supervision of architect.

N. Y., New York — Apartment — M. Paterno, 200 West 72nd St., 14 story, 100 x 135 ft., brick, steel and stone, plain foundation, Park Ave. and 89th St. $850,000. Work will be done by separate contracts. R. Candella, 200 West 72nd St., archt. and engr.

N. Y., New York—Hotel—Allerton House, Inc., 132 East 57th St., 16 story, brick, steel and stone, plain foundation, Madison Ave. and 38th St., $2,250,000. Work will be done by separate contracts. Murgatroyd & Ogden, 369 Lexington Ave., archts. and engrs.

N. Y., Theills—Assembly Hall, etc.—Nov. 14, by M. B. Patterson, pres. Bd. Mgrs. Letchworth Village, 7 Wall St., New York, for attendents' home, assembly hall and industrial building, at Letchworth Village, here. L. F. Pilcher, Albany, state archt.; adv. this issue.

N. J., Jersey City—Y. M. C. A., 2 West 45th St., New York City, taking bids and open same about Nov. 1, 6 story, brick, steel and stone, plain foundation, Bergen Ave., here. $500,000. J. Jackson, 181[illegible] Bway., New York City, archt. and engr. Noted May 11.

N. J., Maywood—School—Nov. [illegible], by Bd. Educ. in Public School Bldg., Grove St., for new school. E. Sibley, archt. G. F. Reeke, associated archt., Edgewood Lane and Bluff Rd., Palisade; adv. this issue. Noted Sept. 14.

N. J., Trenton—School—Nov. 9, by Bd. Educ., 2 story, 150 x 350 ft., school for negroes, brick and steel, Montgomery St. $600,000. E. Sibley, Edgewood Lane, Palisade, engr. W. Slack & Son, St. Regis Bldg., archt. Noted Nov. 24.

N. J., West Orange—School—Oct. 30, by A. Wench, secy. Bd. Educ., 2 story, 40 x 114 ft., brick, steel and stone, plain foundation, Gregory Rd. $200,000. Guilbert & Bettelle, 2 Lombardy St., Newark, archts. and engrs.

Pa., Butler—Hospital—Nov. 15, by E. L. Tilton and E. P. Mellon, archts., 52 Vanderbilt Ave., New York City, 3 story and basement, brick and stone, Brady St., for Butler Memorial Hospital, c/o T. Shufflin, Butler. $500,000.

Pa., Oil City—School—Dec. 1, by Bd. Educ., new junior high school, brick. $500,000. E. E. Bailey, Oil City, archt.

Pa., Phila.—Laboratory—J. T. Windrim, archt., Commonwealth Bldg., taking bids 4 story and basement, 57 x 110 ft. rein.-con., brick, steel and stone, plain foundation, 19th and Cherry Sts., for Franklin Institute, 15 South 7th St. $250,000.

Pa., Pittsburgh — Hospital — Oct. 30, by City, 1 story, brick and steel addition to hospital and power plant, Leech Farms. $179,000. J. P. Brennan, Municipal Bldg., archt.

Pa., Pittsburgh—School—Nov. 2, by Bd. Educ., Fulton Bldg., 3 story, basement and sub-basement, 135 x 160 ft. rein.-con., brick, steel and stone addition, East Carson and 10th Sts. $250,000. E. Stotz, Monongahela Bank Bldg., archt.

Pa., Pittsburgh—School—Nov. 9, by Bd. Educ., Fulton Bldg., 2 story and basement, 76 x 298 ft. rein.-con., brick and tile addition, Rockland St. $250,000. P. C. Dowler, Magee Bldg., archt.

D. C., Wash.—Junior High Schools—Nov. 14 by Dist. Comr., 509 Dist. Bldg., for 2 junior high schools, one at Gage, Emery and Rockingham Sts., other at 14th and Taylor Sts., N. W., each $300,000. Noted Oct. 19.

D. C., Wash.—Theatre—H. Crandall, c/o Metropolitan Theatre, 934 F St., N. W., brick, steel and stone theatre, 14th St. and Park Rd. Work will be done by separate contracts under supervision of T. W. Lamb, archts. and engrs., 644 8th Ave., New York City. $500,000. Noted Oct. 19.

O., Akron — Hotel and Theatre — J. E. Eberson, archt., 64 East Van Buren St., Cleveland, taking bids 10 story and basement, 132 x 190 ft., brick, steel and concrete, East Market St., here, for Akron Prospect Co., Commodore Perry Hotel, 32 North Prospect St. $2,500,000. Former contract rescinded. Noted Dec. 15.

Mich., Marquette—School—Oct. 28, by State Bd. Educ., 3 story, 44 ft. high, 64 x 228 ft., rein.-con., brick and steel, plain foundation. $250,000. Smith, Hinchman & Grylls, 800 Marquette Bldg., Detroit, archts.

Ill., Chicago—Apartment—P. Ram, 2220 West Division St., receiving bids 3 story, 107 x 110 ft., rein.-con., brick and steel, Division and Spaulding Sts. $150,000. E. Steinborn, 111 North Dearborn St., archt.

Ill., Chicago—Bank, Store and Office—Loewenberg & Loewenberg, archts., 111 West Monroe St., receiving bids 2 story, 100 x 124 ft., rein.-con., brick and steel, Roosevelt Rd. and Central Park, for Central Park State Bank, c/o architects.

Wis., Milwaukee—Church—F. Howend, archt., 69 Wisconsin St., taking bids 2 story, 95 x 160 ft., brick, concrete and steel, plain foundation, Sherman Blvd., for First Church of Christ Scientist, c/o W. B. Drescher, 1179 16th St. $165,000. Klug & Smith, 69 Wisconsin St., engrs.

Wis., Milwaukee—Theatre and Business—M. Tullgren & Sons, archts., 425 East Water St., taking bids on 1,300 ton structural steel and 25,000 cu.yd. excav., for 7 story and basement, 150 x 205 ft., brick, steel and concrete, plain foundation, Grand Ave. and 6th St., for Grand & Sixth Bldg., Inc., 425 East Water St. Total cost $2,000,000.

Minn., Chisholm—Municipal—Nov. 2, 2 story and basement, 142 x 241 ft., brick, concrete, tile and stone. $180,000. Puck

Buildings **(Continued)**

& Gilliuson, 600 Torrey Bldg., Duluth, archts.

Minn., Minneapolis—High Schools—Nov. 9, by Bd. Educ., City Hall, 3 story and unfinished basement, 45 x 250 x 300 ft., with 1 story, 60 x 300 ft. wing, 5th St. S. E. and 13th Ave., $650,000; 3 story and unfinished basement, 45 x 250 x 300 ft. with 1 story, 60 x 80 ft. wing, 26th St. and Emerson Ave., $600,000; both rein.-con., brick, stone and tile. G. F. Womrath, business supt. E. H. Enger, 245 9th Ave., N., archt.

Kan., Winfield—College—Nov. 1, by Southwestern College, and H. S. Conrow. archt., 623 Beacon Bldg., Wichita, 3 story and basement, 150 x 170 ft., rein.-con. and brick. $200,000. H. A. Noble, Reliance Bldg., Kansas City, Mo., engr. Noted Oct. 5.

Mo., St. Joseph—Hospital—Methodist Hospital Assn., receiving bids 7 story and basement. 120 x 180 ft., rein.-con., brick and steel, 8th and Farson Sts. Steel structure erected. $750,000. W. Boschen, Tootle Lacy Bank Bldg., archt. W. E. Gilham, 319 Mutual Bldg., Kansas City, engr.

Calif., Redwood City—High School—Nov. 18, by Trustees Sequoia Union High School Dist., three 1 story, rein.-con., school buildings, State Highway and Bway. $300,000. Coffey & Werner, Humboldt Bank Bldg., San Francisco, archts. Noted June 22.

Ont., Kitchener—City Hall—Nov. 8, by Schmalz & Jones, archts., 15 Queen St., 2 story, brick and sand stone. $250,000. Prices wanted on materials. A. Harttung, chn. building com.

BIDS RECEIVED

Pa., Altoona—School—School Dist. opened bids 3 story and basement, 224 x 232 ft., 6th Ave. and 15th St., general contract from H. J. Conrath Co., Ariel Bldg., Erie, $551,714. Prahl Constr. Co., Marine Bank Bldg., Erie, $556,462, P. H. Kelly Co., Presser Bldg., Phila., $564,340; heating from Sanitary Eng. Co., Anderson, Ind., $116,947, Freyn Bros., 31 West Michigan Ave., Indianapolis, Ind., $126,752, Becker-Siedel Co., 324 Prospect Ave., Cleveland. O., $129,000; plumbing from R. T. Withers Co., 24 North Mercer St., New Castle, $49,923, Freyn Bros., 31 West Michigan Ave., Indianapolis, Ind., $51,947, T. H. Williams, Harrisburg, (street address not available.) $54,500. Noted Sept. 21.

O., Athens—Gymnasium—Bd. Trustees Ohio University, opened bids Oct. 19, 2 story and basement, 107 x 160 ft., brick, stone and concrete, on campus, from E. H. Latham Co., 60 East Broad St., Columbus, $219,358; Wood Constr. Co., Lima. $220,400; C. P. Kircher, Athens, $234,000. Noted Sept. 28.

O., Logan—High School—R. Bright, clk. Bd. Educ., opened bids Oct. 20, 2 story and basement, 106 x 136 ft., brick and concrete, from J. S. Isabell, Bexley (Columbus P. O.), $127,830; J. H. and C. R. Anderson, Piqua, $130,717; C. P. Kircher, Athens, $132,200. Noted Sept. 28.

Wis., Superior—High School—Bd. Educ. 2 story and basement, 105 x 256 ft., rein.-con., brick, tile and stone, from Lindhart-Bayer Constr. Co., Eau Claire, $165,000; A. E. Rydlun, 2719 Lyndale Ave. N., Minneapolis, Minn., $198,000. Noted Oct. 5.

Ore., Portland—High School—Bd. Educ. opens bids about January, U. S. Grant High School, 2 story, brick and terra cotta. $430,000. Knighton & Howell, U. S. Natl. Bank Bldg., archts.

CONTRACTS AWARDED

Me., Lewiston—Auditorium—Auditorium Com., 1 story and basement, 180 x 200 ft., brick and rein.-con., plain foundation, Lisbon St., to T. F. Moreau & Co., Chestnut St. Archts. est. $150,000.

Mass., Boston—Apartment—Washington Heights Building Corp., 1607 Commonwealth Ave., will build 4 story and basement, brick, stone and steel, plain foundation, 1619 Commonwealth Ave., by day labor. $150,000. Private plans.

Conn., Winsted—Church—St. James Episcopal Church, Main St., 1 story and basement, 45 x 115 ft., stone, brick and steel, plain foundation, Main and Walnut Sts., to J. F. Carey, Winsted. Archts. est. $150,000. Noted Jan. 12.

N. Y., Brooklyn—Apartment—E. E. Lignante, c/o Slee & Bryson, archts. and engrs., 154 Montague St., 6 story, 50 x 125 ft., brick, steel and stone, plain foundation, 76 Remsen St., by day labor. $175,000.

N. Y., New York—Court House—H. Bruckner, pres. Bronx Boro, Tremont and 3rd Aves., brick, steel and stone, plain foundation, East 161st St. between Washington and Brook Aves., to L. M. Neckerman, Inc., 103 Park Ave., $255,000. Noted Oct. 12.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., 12 story, brick, steel and stone addition, plain foundation, West 36th St., to Tidewater Bldg. Co., 16 East 33rd St. Archts. est. $1,200,000. Noted Sept. 28.

N. J., Atlantic City—Bank—Equitable Trust Co., 2024 Atlantic St., 2 story and basement, 48 x 96 ft., granite and limestone, to F. V. Warren & Co., 132 South 17th St., Phila. Archts. est. $180,000. Noted Oct. 19.

N. J., West Orange—School—Bd. Educ. brick, steel and stone, plain foundation, to J. Christianson, 270 Tremont Ave. Archts. est. $350,000. Noted Sept. 21.

Pa., Phila.—School—C. J. McCummisky, archt., 118 West Sharpnack St., 3 story and basement, 100 x 184 ft. brick, steel and stone, plain foundation, 24th and Wallace Sts., to W. R. Dougherty, 1610 Sansom St., for Roman Catholic Church. Archts. est. $200,000. Noted Aug. 24.

D. C., Wash.—Convention Hall—Convention Hall Assn. Co., Dist. Natl. Bank Bldg., convention hall, seating capacity 5,000, 19th and 20th Sts., N. W. and E St., to Parson & Hyman, 816 14th St. Archts. est. $375,000. Noted Sept. 21.

D. C., Wash.—Monastery—Sisters of the Visitation. monastery, to P. F. Gormley Co., Union Trust Bldg., $250,000. Noted Sept. 14.

D. C., Wash.—Study Hall—Roman Catholic Order of Minor Conventuales, Syracuse, N. Y. (street address not available) study hall, Michigan Ave. and Monroe St., N. W., here, to Boyle-Roberston Constr. Co., Evans Bldg., $150,000. Noted Oct. 12.

Ala., Birmingham—Market House—City, 2 story, 140 x 200 ft., steel and hollow tile, 3rd Ave. and 23rd St., to Inglenook Constr. Co., Realty Bldg., $195,000.

Tenn., Memphis—Office—Al Chymia Masonic Lodge, 10 story, brick and terra cotta, South Front St. and Monroe Ave., to Kaucher, Hodges & Co., Exch. Bldg., $600,000. Noted Sept. 21.

Ind., Ft. Wayne—Hotel—Keenan Hotel Co., 14 story and basement, 100 x 120 ft., rein.-con., steel, brick and terra cotta, Harrison St., to Fleisher Constr. Co., 608 Builders' Exch., Minneapolis, Minn. Archts. est. $1,000,000. Noted July 13.

Ind., Indianapolis—Hospital and Nurses' Home—City Bd. of Health, 3 story and basement, 44 x 136 ft. with 36 x 40 ft. wing, and 4 story and basement, 40 x 197 ft. with 38 x 48 ft. wing, brick, rein.-con. and hollow tile, to Cornell Eng. Co., Cornell St., $320,000. Archts. est. $400,000. Noted Oct. 19.

Mich., Royal Oak (Detroit P. O.)—Bank and Office—Royal Oak Savings Bank, 401 Main St., 2 story and basement, 40 ft. high, 85 x 110 ft., rein.-con., brick, steel and stone, plain foundation, Main and 4th Sts., to N. A. Starr, 112 Howarth Bldg. Archts. est. $150,000.

Ill., Champaign—Apartment—Co-operative Co., 3 story and basement, 140 x 165 ft., brick, to North-Raffin Constr. Co., 914 Chestnut St., Terre Haute, Ind. Archts. est. $200,000.

Ill., Chicago—Apartment—J. Hedman, c/o P. F. Olsen, archt., 127 North Dearborn St., 3 story and basement, 116 x 132 ft. rein.-con., brick and steel, Everett Ave. near 55th St., to Olson-Carlson Co., 5037 Dorchester Ave. Archts. est. $250,000.

Ill., Chicago—Bank—Logan Square Trust and Savings Bank, 2569 Milwaukee Ave., 1 story, 50 x 130 ft., rein.-con., brick and steel, 2561 Milwaukee Ave., to W. Hammerstrom, 3127 Fullerton Ave. Archts. est. $150,000.

Ill., Chicago—Home—Oak Haven Old People's Home, c/o R. A. White, pres., 140 South Dearborn St., 3 story, 90 x 96 ft., rein.-con., brick and steel, 113th St. and South Western Ave., to C. J. DeWitt, 11353 Edebrook Ave. Archts. est. $200,000. Noted Sept. 22, 1921.

Ill., Oak Park—Bank and Office—Oak Park Trust and Savings Bank, 3 story, brick, steel and stone, Lake and Marion Sts., to Hoggson Bros., 485 5th Ave., New York City. $450,000. Noted Sept. 14.

Ill., Oak Park—Club-House—Oak Park Club, c/o Holmes & Flinn, archts., 8 South Dearborn St., Chicago, 2 story, 160 x 165 ft., rein.-con., brick and steel, Ontario St. and Oak Park Ave., here, to Guy & McClintock, 107 North Park Ave. Archts. est. $300,000. Noted Aug. 3.

Ill., Oak Park—School—Bd. Educ. 2 story, rein.-con., brick and steel addition to William Bye School, Ontario and Cuyler Sts., to Guy & McClintock, 107 North Park Ave. Archts. est. $150,000.

Wis., Milwaukee—Apartment—Los Angeles Building Co., 373 Bway., 3 story and basement, 58 x 120 ft., brick and concrete, plain foundation, Summit Ave., to F. J. Hinton, 373 Bway. Archts. est. $150,000.

Ia., Des Moines—Schools—Bd. Educ. general contract Wallace School, East 13th and Cleveland Sts., to J. A. Benson Constr. Co., 422 Valley Natl Bank Bldg, $65,000; Elmwood School, 31st and Brattleboro Sts., to Western Constr. Co., 716 Park St., $66,500. Both 2 story, brick and concrete. Noted Oct. 12.

Ia., Lake City—High School—Bd. Educ., general contract, 2 story and basement, 80 x 140 ft., rein.-con., brick, tile and stone, to C. B. Campbell Co., Creston, $103,300. Noted Oct. 12.

Minn., Minneapolis—School—MacPhail School of Music and Dramatic Art, 804 Nicollet Ave., general contract, 4 story and basement, 50 x 55 x 157 ft., rein.-con., brick, tile and stone, 12th St. and La Salle Ave., to Carlsted Bros., 542 Builders Exch. Bldg., $146,204. Noted Sept. 28.

Calif., Exeter—High School—Exeter Union High School Dist., auditorium, gymnasium and domestic science buildings, for high school, general contract to Campbell Constr. Co., 3325 J St., Sacramento, $110,880; plumbing and heating to Latourette-Fical Co., 907 Front St., Sacramento, $6,750 and $22,300 respectively. Noted Oct. 5.

Calif., Oakland—School—Bd. Educ., Theodore Roosevelt school, general contract to R. W. Littlefield, 357 12th St., $365,300; brick and terra cotta, to H. Beckwith, 323 Newton Ave., $57,340. Noted Oct. 19.

Calif., Sacramento—Hospital—Sisters of Providence Hospital, c/o R. A. Herold, archt., Forum Bldg., rein.-con. hospital, to Mathews Constr. Co., Forum Bldg., $200,000.

Calif., Selma—Science—Selma Union High School Dist., 3 story, 145 x 151 ft., rein.-con., general contract to Olcester & Potter, Yuma, Ariz., $185,300. Noted Sept. 21.

Calif., Taft—School—Conley School Dist., 2 story, general contract including carpentry, millwork and glazing, to A. Johnson, Kingsburg Bank Bldg., Kingsburg, $65,635; concrete work to Frederickson & Shannon, Cory Bldg., Fresno, $17,800; brick work to P. Kindler, 145 North Van Ness St., Fresno, $42,000; lathing and plastering to McGruer & Simpson, 180 Jessie St., San Francisco, $34,943. Noted July 20.

Ont., Windsor—School—Bd. Educ., 2 story and basement, 100 x 220 ft. brick, steel and stone, Sandwich St., to Windsor Constr Co., Windsor, $256,041.

Federal Government Work

PROPOSED WORK

N. H., Portsmouth—Roof—Spec. 4711—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids re-roofing Marine Barracks and boiler house, here. Noted Oct. 5.

Va., Quantico—Storehouse—Spec. 4746—Bureau Yards & Docks, Navy Dept., plans storehouse, here.

Montana—Roads—Dept. Interior, Wash., D. C., takes bids in spring for Blackfoot Highway $120,000, North Fork Rd $243-000 gravel surfacing etc., Transmountain Rd., $650,000; bids in 1924 for Kintla Lake Rd. $25,000, Bowman Lake Rd. $30,000, Two Medicine Rd. $36,000. All foregoing in Glacier National Park and 16 ft. wide.

Calif., Richmond—Repairing Superstructure, etc.—U. S. Engineer, Custom House, San Francisco, plans repairing and reshaping existing superstructure, placing 9,000 ton rock riprap, building 800 ft. revetment, 10 ft. wide on top, slope of about 3 to 1, here.

H. T., Pearl Harbor—Remodeling—Spec. 4745—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans remodeling bachelor officers' quarters, here.

BIDS DESIRED

Pa., Pittsburgh—Steel Hull—Nov. 20 at office U. S. Engineer, 1 steel derrick boat hull; adv. this issue.

W. Va., Huntington—Horses and Props—Nov. 20 at Office U. S. Engineer, furnishing horses and props for Ohio River Dam 32; adv. this issue.

N. C., Moorhead City—Repairs—Spec. 4739—Nov. 15 by Bureau Yards & Docks, Navy Dept., Wash., D. C., repairs to radio buildings, here. Noted Oct. 12.

S. C., Charleston—Dredging—Nov. 25, at office U. S. Engineer, Charleston, dredging western channel and Sampit River, Winyah Bay; adv. this issue.

Ala., Montgomery—Barge—Dec. 1 at office U. S. Engineer, Montgomery, for 1 steel barge; adv. this issue.

La., Carville—Re-Roofing—Nov. 17, by Treas. Dept., Wash., D. C., re-roofing buildings and structures for U. S. Marine Hospital (Natl. Home for Lepers), here. J. A. Wetmore, acting superv. archt.

O., Toledo—Roof—Nov. 20, by Treas. Dept., Wash., D. C., for roof over extended mailing platforms, etc., U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Federal Government (Continued)

Mo., St. Louis—Earthwork—Nov. 23, at office Secretary Mississippi River Comn., 1311 International Life Bldg., 380,000 cu.yd. earthwork, Kings Lake D.D.; adv. this issue.

Okla., Chandler—Post Office—Nov. 24 by Treas. Dept., Wash., D. C., for U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Okla., Shawnee—Post Office—Nov. 16, by Treas. Dept., Wash., D. C., for U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Utah, Vernal—Post Office—Nov. 15, by Treas. Dept., Wash., D. C., for U. S. Post Office complete incl. mechanical equipment, here. J. A. Wetmore, acting superv. archt.

BIDS RECEIVED

Mass., Fall River—Extension to Workroom—Treas. Dept., Wash., D. C., extension to workroom at U. S. Post Office, here, from Pearce Bros., Inc., 220 West 42nd St., New York City, $9,350; Garber & Cissel, Inc., Bethlehem, Pa., (street address not available), $9,500; G. E. Wright, Inc., Monadnock Blk., Chicago, Ill., $11,400. Noted Oct. 5.

R. I., Providence—Dredging—U. S. Engineer, dredging in New Haven Harbor, Conn., 60,000 cu.yd. excav. from J. S. Packard Dredging Co., 1004 Turks Head Bldg., $0.194 per cu.yd.; Taylor Dredging Co., foot of Cummunipaw Ave., Jersey City, N. J., $0.1975; Columbia Dredging Corp., 30 Church St., New York City, $0.212. Noted Sept. 28.

CONTRACTS AWARDED

N. Y., Chelsea—Hospital—Treas. Dept., Wash., D. C., wings for U. S. Veterans Hospital, here, to Northeastern Constr. Co., 101 Park Ave., New York, $419,274 (8 months.) Noted Oct. 19.

Pa., Phila.—Foundations—Spec. 4736—Bureau Yards & Docks, Navy Dept., Wash., D. C., foundations for existing frame buildings at Navy Yards, here, to P. J. Carlin Constr. Co., Grand Central Terminal Bldg., New York City, $43,300. Noted Oct. 5.

W. Va., Charleston—Post Office—Treas. Dept., Wash., D. C. construction incl. mechanical equipment, U. S. Post Office, here, to E. G. Heflin, 23 Law Bldg., Fredericksburg, Va., $56,964 (12 mos.) Noted Oct. 19.

Tenn., Memphis—Levee Work—U. S. Engineer Office, 1st and 2nd Dists., levee work in White River, to Roach, Stansell, Lawrence Bros. & Co., North Memphis Savings Bank Bldg., $20,930.

Idaho—Roads—C. H. Purcell, dist. engr. U. S. Bureau Pub. Rds., Smead-Simons Bldg., Missoula, Mont., 4.84 mi. Wolf-Lodge-Squaw Bay Rd., from Harrison to Coeur d'Alene, here, 35,100 cu.yd. earth and 102,000 cu.yd. rock excav., 6,000 cu.yd. crushed rock or gravel surfacing, etc., H. H. Boomer, 515 Zeigler Bldg., Spokane, Wash., $0.096 per cu.yd. for rock excav., total $117,224.

Idaho—Roads—C. H. Purcell, dist. engr., Bureau Pub. Rds., Missoula, Mont., grading and surfacing 4.93 mi. Moyea Canyon Rd., Leonia to Buckhorn, Boundary Co., 41,200 cu.yd. earth and 43,550 cu.yd. rock excav., 8,900 cu.yd. rock or gravel, to Pacific Coast Paving Co., 910 Rust Bldg., Tacoma, Wash., $106,352.

Idaho—Roads—C. H. Purcell, dist. engr., Missoula, Mont., 7.36 mi. Kootenai-Cabinet, Hope Pack River Sect., 42,000 cu.yd. earth and 137,000 cu.yd. rock excav., etc., to Sloan Constr. Co., 210 Columbia Bldg., Spokane, Wash., $172,409. Noted Oct. 19.

Calif., Los Angeles—Dredging—U. S. Engineer, widening Los Angeles Inner Harbor entrance channel, to San Francisco Bridge Co., Nevada Bank Bldg., San Francisco, $190,000. Noted Aug. 24.

Calif., Mare Island—Remodeling—Spec. 4601—Bureau Yards & Docks, Navy Dept., Wash., D. C., remodeling Barracks Building 53 at Navy Yard, here, to F. H. Warren; 1032 California St., Vallejo, $19,595. Noted Oct. 19.

Calif., San Diego—Quarters, etc.—Spec. 4665—Bureau Yards & Docks, Navy Dept., Wash., D. C., for quarters, wings to mess hall, barracks, administration building and pump house at Naval Training Station and Barracks, here, to R. E. Campbell, 1190 State St., Salt Lake City, Utah, $193,352. Noted Oct. 19.

Miscellaneous

PROPOSED WORK

Golf Course, etc. — Bloomfield, Conn. — Bloomfield Club, c/o Touro Club, 553 Farmington Ave., Hartford, plans 18-hole golf course, club house, tennis courts, etc. $150,000. Engineer not announced.

Monument—Scranton, Pa.—United Mine Workers of America plan memorial monument here. N. J. Ferry, McAdoo, member of com. $50,000.

Wharf—New Orleans, La.—Bd. Port Comrs. having plans prepared by engineers of Dock Bd., for 2,000 ft. modern shedded wharf along Industrial Canal. $1,500,000.

Subway — Detroit, Mich. — Dept. Street Rys., Murphy Bldg., plans subway system in downtown section incl. dips on Woodward and Michigan Aves. Council appropriated $50,000 for preliminary plans.

River Wall—Waterloo, Ia.—River Front Comn., c/o H. R. Plowman, secy., making plans 300 ft. concrete river wall. $30,000. R. P. Slippy, Waterloo, engr.

Stadium — Minneapolis, Minn. — See "Buildings."

Transmission Lines — Cuero, Tex. — See "Industrial Works."

Transmission Line, Equipment, etc.—Bend, Ore.—See "Industrial Work."

Lighting System—Canby, Ore.—Takes bids about Nov. 14 electric lighting system. J. H. Ballneg, 512 Hancock St., Portland, engr.

Asphalt, etc.—Portland, Ore.—R. S. Dulin, supt. paving plant, takes bids in January, 2,000 ton grade D asphalt, one 5 ton motor truck, 1 asphalt storage tank and 1 steam roller.

Street Lights—Portland, Ore. — J. H. Mann, comr. Public Utilities, City Hall, takes bids in January, 200 street lights.

Electroliers—Berkeley, Calif.—City takes bids about Nov. 1, 151 electroliers, incl. transformer tops, underground conduits, etc., in University Ave. C. L. Huggins, city engr.

Electrolier System—Oakland, Calif.—G. E. Sheldon, secy. and mgr. of Up Town Assn., Albany Bldg., heads movement to install electrolier system on streets in uptown district. Cost 4.50 per front ft. To exceed $25,000. Property owners will finance.

Gas Mains — Montreal, Que. — Montreal Light, Heat & Power Co., Craig St. W., plans 211 ft. 4 in. pipe in Thornhill Ave., $397, 784 ft. 6 in. pipe in Papineau Ave., $2,508, 105 ft. 6 in. pipe in Notre Dame de Grace Ave., $239, 178 ft. 4 in. pipe in Troie Ave., $408, 105 ft. 4 in. pipe Holt Ave., $247, 50 ft. 6 in. pipe Christophe Colomb St., $137, 250 ft. 6 in. pipe in Marquette St., $6,271, 2,640 ft. 12 in. pipe in Davidson St. from Rouen to St. Catherine Sts., $13,366, 540 ft. 8 in. in Davidson St., from St. Catherine to Notre Dame Sts., $2,851. 2,640 ft. 12 in. pipe in Bourbonniere St., $18,628, 3,720 ft. 12 in. pipe in Bennett St., $26,141.

Electric Lighting and Power System—Sheddon, Ont.—Plans electric lighting and power distribution system, incl. line from St. Thomas. $40,000. Address W. Miller.

Electrification of Railway — Mexico — Mexican Government Natl. Rys. plans electrification of 276 mi. stretch of Tampico-San Luis Potosi Division. Address G. L. Trevino, Monterey, electrical engr. in charge.

BIDS DESIRED

Dock Wall—Buffalo, N. Y. — Nov. 2, by Commissioner Pub. Wks., Municipal Bldg., dock wall, low landing dock and rein.-con. bridged walk, foot of Porter Ave., crib construction, rein.-con., piles, earth excav., etc. To exceed $90,000. G. H. Norton, Municipal Bldg., city engr. Noted July 27.

Broken Trap Rock Stone, etc.—New York, N. Y.—Oct. 30, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., furnishing and delivering 4,000 cu.yd. broken trap rock stone and 2,000 cu.yd. broken trap rock stone screenings.

Coarse Aggregate—New York, N. Y.—Oct. 31, by J. Miller, pres. Manhattan Boro, Municipal Bldg., furnishing and delivering 1,000 cu.yd. coarse aggregate for concrete.

Jetties, etc.—Longport, N. J.—Nov. 4, by Bd. Boro Comrs., constructing or extending stone or slag jetties or stone sea walls, placing stone along toe of seawall, placing and sinking floats in position, bulkhead, or any or all of them on Atlantic Ocean, here. W. S. Gilmore, boro clk.; adv. this issue.

Concrete Culvert Pipe—South Carolina—Nov. 4, by State Hy. Comn., Columbia, furnishing and delivering 6,800 lin.ft. 15 in., 6,700 lin.ft. 18 in., 4,200 lin.ft. 24 in., 650 lin.ft. 30 in. and 900 lin.ft. 36 in. rein.-con. culvert pipe to contractors, for use in road work to be let during November, December and January. $20,000. C. H. Moorefield, state highway engr.

Steel Shed—New Orleans, La.—Nov. 16, by Bd. Port Comrs., New Court Bldg., furnishing erecting and painting structural steel for 7th St. shed; adv. this issue.

Foundation—Cleveland, O. — Nov. 8, by Cleveland Public Library Bd., c/o A. Whitlock, Kenney-Levan Bldg., concrete pile foundation for 1 story, 200 x 200 ft. concrete library, East 3rd St. and Superior Ave. Total cost $4,000,000. Walker & Weeks, 1900 Euclid Ave., archts.

Cement — Loretto, Mich. — Mead & Seastone, engrs., Journal Bldg., Madison, Wis. taking bids 5,000 bbl. cement, for Peninsular Power Co., Natl. Bank Bldg., Madison, Wis.

Spillway Gates—Turlock, Calif.—Nov. 3, by Dirs. Turlock Irrigation Dist., furnishing, fabricating and delivering spillway gates for Don Pedro Dam, Schedule 1, spillway gates, incl. 10 riveted steel drum type gates, 57 ft. long by 7 ft. 3 in. radius, each complete with hinge castings, hinge pins, end seals, etc., 10 c.i. gate seats each consisting of 14 sections with connecting bolts and anchor bolts, etc.; Schedule 2, plates, including 10 channel beams, foundation hinge plates, 57 ft. long with anchor bolts and hinge cover plates, 20 pier plates for gates, 10 right and 10 left hand, ten 24 x 36 in. trash racks with anchor bolts complete; Schedule 3, sluice gates, ten 24 x 24 in. bronze mounted direct pressure type sluice gates and ten 24 x 24 in. bronze mounted sluice gates, back pressure type, complete with gate frames and spigots, gate stairs, stem guides and gate hoists, also to gate hoists, stems and stem guides for siphon outlets; Schedule 4, siphon outlets, Schedule 5, ladders, etc. Bids may be submitted on any or all schedules but no proposals will be considered for any part of a schedule. R. V. Meikle, Turlock, engr. Noted June 22.

BIDS RECEIVED

Foundation, etc.—New York, N. Y.—Transit Comn., 49 Lafayette St., opened bids Oct. 20, foundations for 3rd addition to shops at Lenox Ave. and 148th St. Yard, from Rosenthal Eng. & Contg. Co., 226 Jackson St., Brooklyn, $295,000, M. Del Balso, 660 East 221st St., $305,000, O'Connell & Strada, 3318 Olinville Ave., $315,000; furnishing and erecting structural steel for above (1) 19 A (2) 19 B (3) 20 A (4) 20 B, from Jobson Gifford Co., 30 East 42nd St., (1) $84.90 (2) $84.90, Donnell-Zane Co., 233 Bway., (1) $87.40, McClintic & Marshall, 50 Church St., (1) $89.40 (2) $95.40 (3) $78,60 (4) $86.60 Bethlehem Steel Bridge Corp., 111 Bway., (2) $92.60 (4) $80.20, Phoenix Bridge Co., 132 Nassau St., (3) $79.60 (4) $79.60, Post & McCord, 101 Park Ave., (3) $90. Noted Oct. 12.

CONTRACTS AWARDED

Coaling Station — Pa., Rikers (Punxsutawney P. O.)—Buffalo, Rochester & Pittsburgh R.R., 20 State St., Rochester, N. Y., 1,200 ton coaling station, here, to Ogle Constr. Co., 28 East Jackson Blvd., Chicago.

Mechanical Equipment—D. C., Wash.—C. Gilbert, archt., 244 Madison Ave., New York City, mechanical equipment for office building, here, to W. C. Cornell Co., 19 Patterson St., N.E., for U. S. Chamber of Commerce c/o L. A. Skinner, secy., Mills Bldg. Archts. est. $200,000. Noted Oct. 19.

Foundations—Grand Tower, Ill.—Middle West Power Co. of Illinois, foundations for electric power house, incl. sinking 48 open concrete caissons, 8-74 ft. diam., near here, to Union Bridge and Constr. Co., 903 Sharp Bldg., Kansas City, Mo., $350,000.

Lighting System—Maywood, Ill. — For underground street lighting system, incl. 1,764 concrete posts, to Kelley Constr. Co., 210 Bridge St., Chippewa Falls, Wis. $418,938.

Pipe—Kansas City, Kan.—For 4 car load class C, 6 in. c.i. pipe, to Natl. C. I. Pipe Co., 903 Commerce Bldg., Kansas City, Mo., $52.20 per ton.

Dykes, etc.—Aberdeen, Wash.—Grays Harbor Co. (Montesano) 4 mi. dykes, 30 mi. ditches, 10 mi. fill for streets and roads, street work includes dyking, draining and crowning ready for gravel, also clearing streets to width of 60 ft., to Parker-Schram Co., Couch Bldg., Portland, Ore., $80,000. Engrs. est. $90,000.

Car Bodies—San Francisco, Calif—Bd. Pub. Wks., furnishing and delivering under Contr. 132, Municipal Ry. System, 20 or more car bodies, f.o.b. place of manufacture, to Bethlehem Shipbuilding Corp., 20th and Illinois Sts., $7,626 each. Noted Aug. 17.

Rock Fill—San Francisco, Calif. — Bd. Pub. Wks., 3,600 ton Class A and 13,600 ton Class B rock fill along Marina Blvd., to Healy-Tibbitts Constr. Co., 9 Main St., $42,960. Noted Oct. 5.

Hydro Hoist and Lee Trailers—San Jose, Calif.—Santa Clara Co., furnishing one or more 1-A Heil hydro hoist 5, with all steel dump body 4 yd. with double acting tailgate, to Artana-Geoffroy Co. Inc., Santa Clara and River Sts., $877 each; one or more 5 ton Lee trailers (only one will be purchased at this time) to Benson & Weaver, 89 South Market St., $2,092. Noted Oct. 19.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: **Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.**

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Nov. 6.

School Building

Maywood, N. J.

Sealed proposals for the complete construction of a new Public School Building will be received by the Board of Education of Maywood in the County of Bergen, at the meeting room of the Board in the Public School Building, Grove Street, Maywood, New Jersey, until 8:30 o'clock p.m., Eastern Standard time, on Monday, the sixth day of November, 1922, at which place and time all bids received will be unsealed and the contents publicly announced. No bids will be received after the time designated.

Bids for the general construction, for the heating and ventilating, for the plumbing, and for the electrical work, will be taken separately.

A certified check for One Thousand ($1,000.00) Dollars, for the general construction, one for Five Hundred ($500.00) Dollars for the heating and ventilating, one for Three Hundred ($300.00) Dollars for the plumbing and one for One Hundred ($100.00) Dollars for the electrical work, made payable to the Board of Education of Maywood, New Jersey, to be treated as liquidated damages in case the bidder receiving the award shall fail to execute a contract and furnish the required bond, within ten days after notification of the acceptance of their bid.

The Board of Education reserves the right to reject any or all bids, or to waive defects or informalities in any bid if it be deemed to the interest of the Borough so to do.

A limited number of copies of the plans and specifications will be loaned to the prospective bidders on deposit of a check drawn to the order of the Board of Education, Maywood, New Jersey, in the sum of $10.00. These plans and specifications may be obtained from the Clerk of the Board, W. J. Cuddy, 105 Pleasant Avenue, Maywood, New Jersey, or from the Architect, Ernest Sibley, George F. Reeke, Associated, Edgewood Lane and Bluff Road, Palisade, New Jersey. Deposits will be forfeited unless plans and specifications are returned to the Architect or Clerk of the Board of Education within ten days after bids are opened.

Signed W. J. CUDDY,
District Clerk.

For the Board of Education, Borough of Maywood, N. J.

Dated Oct. 16, 1922.

Bids: Nov. 29.

Filtration Plant and Reservoir

San Juan, Porto Rico.

Sealed proposals for the furnishing of all labor and material for the construction of a 8,000,000 gals. filtration plant and a 10,500,000 gals. filtered water concrete reservoir for the City of San Juan will be received in the office of the Commissioner of Public Service until November 29, 1922, at 10 A.M.

All plans, specifications, instruction to bidders, blanks, forms for proposals and all other information may be obtained at the office of the City Commissioner of Public Works at San Juan, Porto Rico.

The right is reserved to reject any and all bids.

MARTIN TRAVIESO,
Commissioner of Public Service.

OFFICIAL PROPOSALS

Bids: Oct. 31.

Furnishing, Delivering and Laying Water Pipe

Jersey City, N. J.

Sealed proposals will be received by the Board of Commissioners of Jersey City, Tuesday, October 31st, 1922, at 3 p.m., in the Assembly Chamber, City Hall, Jersey City, N. J., for the Furnishing, Delivering and Laying of about 5,000 Lineal Feet of 36-inch Cast Iron Water Pipe from Summit Avenue, through Jefferson Avenue to Palisade Avenue; Palisade Avenue to Hill Street to its easterly terminus; thence from the easterly terminus of Hill Street to Hoboken Avenue, a 36-inch steel pipe, as per plan; thence through Hoboken Avenue, a cast iron pipe to a point east of Jersey Avenue, to the Hoboken City Line, in accordance with specifications on file in the office of the City Clerk.

Said improvements to be made conformably to the provisions of Chapter 152 of the Laws of 1917.

Blank forms of bid, showing estimate of quantities, and agreements of sureties must be obtained at the office of the Chief Engineer, City Hall, Jersey City, N. J.

Proposals must be enclosed in sealed envelopes endorsed "Proposal for the furnishing, delivering and laying of about 5,000 lineal feet of 36-inch cast iron water pipe from Summit Avenue, through Jefferson Avenue to Palisade Avenue; Palisade Avenue to Hill Street, etc.," directed to this Board and handed to the City Clerk in open meeting when called for in the order of business relating to sealed proposals.

The bonds required to be furnished on proposals (and a possible subsequent contract) are those of some surety company authorized to do business in the State of New Jersey or a certified check will be accepted in lieu of bond. Bonds must also comply with the provisions of Chapter 75, P. L. 1918 of New Jersey.

The Board reserves the right to reject any or all proposals if it is considered for the best interests of the City so to do.

By order of the Board of Commissioners of Jersey City.

Dated, City Clerk's Office,
Jersey City, Oct. 13, 1922.

EDWARD J. HOLLAND,
City Clerk.

Bids: Nov. 7.

Sewage Disposal

Miami, Fla.

Sealed proposals will be received by the Commission of the City of Miami, Florida, at their regular meeting, November the 7th, 1922, until 9 a.m., for furnishing:

1 Motor driven sewage screen, including motors and necessary equiqment; capacity 2100 gallons per minute.

2 Motor driven centrifugal pumps, including motors and necessary equipment; capacity 2100 gallons per minute, against total head of 30 feet.

2400 feet 16 inch Class B Cast Iron Pipe.

Each proposal must be accompanied by a certified check for 2½ per cent of the amount of the bid, or by bidders bond, to insure the execution of the contract as provided by Section 56 of the City Charter.

The Commission of the City of Miami reserves the right to reject any or all bids.

Detailed specifications and bidders blank form can be obtained from Chas. W. Murray, Director of Public Service, upon deposit of $10.00, this deposit to be returned to those submitting a bona fide bid.

F. H. WHARTON,
City Manager.

OFFICIAL PROPOSALS

Bids: Nov. 8.

County Road Work

Atlantic City, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Atlantic, N. J., at 12 o'clock noon on November 8th, 1922, during a regular meeting of the Board at its meeting room in the Guarantee Trust Building, Atlantic City, N. J., for the reconstruetion of Section 6 of Route No. 14 in Hamilton Township, County of Atlantic and State of New Jersey, with a Warrenite-Bitulithic pavement on a six inch (6") 1-3-5 concrete base. The estimated amount of pavement and of base is 8,123.51 square yards, together with excavation, extra embankment, gravel shoulders, drainage provisions and various other details required in the work. The aforesaid bids will be opened and read in public at the time and place stated for receiving them.

Plans, specifications and forms of bid, certificate of surety, contract and bond, as prepared by A. H. Nelson, County Engineer and approved by the State Highway Commission, have been filed at the office of the County Engineer at 636 Guarantee Trust Bldg., Atlantic City, N. J., and at the office of the State Highway Commission in Broad St. Bank Bldg., Trenton, N. J., at which places they may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of said plans and specifications by the County Engineer on consideration of a deposit of $10.00 which deposit will be refunded if the plans and specifications are returned to him in good condition by noon of November 8th, 1922. Each bid must be made on the standard proposal form, in the manner designated therein and required by the specifications, must be enclosed in a sealed envelope bearing on the outside the name and address of the bidder and the name of the road and the envelope must be addressed to the Board of Chosen Freeholders, Atlantic County, N. J. Each bid must be accompanied by a certificate of surety and by a certified check in an amount not less than 10% of the bid and must be delivered at the place and on the hour above stated for receiving bids. A contract will be awarded, if awarded at all, subject to the approval of the State Highway Commission ofr New Jersey and also subject to the sale and delivery of bonds, which will be issued for the purpose of paying for the proposed work. The Board reserves the right to reject any or all bids.

By order of the Board of Chosen Freeholders of the County of Atlantic, N. J.

F. W. WILLETTS,
Clerk.

Bids: Dec. 1.

Cast Iron Pipe and Castings

San Juan, Porto Rico.

Sealed proposals for the furnishing of about 20,020 tons of cast iron pipe and of 250 tons of special castings, or its equivalent in steel pipe and specials, delivered at San Juan, Porto Rico, for the City of San Juan, will be received in the office of tho Commissioner of Public Service until December 1, 1922, at 10 a.m.

All plans, specifications, instruction to bidders, blanks, forms for proposals and all other information may be obtained at the office of the City Commissioner of Public Works at San Juan, Porto Rico.

The right is reserved to reject any and all bids.

MARTIN TRAVIESO,
Commissioner of Public Service.

Bids: Oct 31.

Highway Work

Baltimore, Md.

Sealed proposals for building eight sections of State Highway, as follows:

Garrett County—Cont. G-24—One section of state highway from Luke to Bloomington, a distance of 0.5 miles (Penetration Macadam).

Allegany County—Cont. A-22—One section of state highway along the Williams Road, for a distance of 1.6 miles (Concrete).

Howard County—Cont. HO-26—One section of state highway along the Old Frederick Road from the end of St. Johns Lane to the Woodstock Road, a distance of 2.56 miles (Concrete).

Montgomery County—Cont. M-39—One section of state highway thru Laytonsville, for a distance of 1.0 miles (Concrete).

Montgomery County—Cont. M-38—One section of state highway from Dawsonville toward Beallsville for a distance of 1.0 miles (Concrete).

Montgomery County—Cont. M-37—One section of state highway from Dawsonville towards Seneca, for a distance of 1.0 miles (Concrete).

Montgomery County—Cont. M-40—One section of state highway from Seeks Corner to the Pr. Geo. County Line, for a distance of 0.7 miles (Concrete).

Anne Arundel County—Cont. AA-26—One section of state highway from Tracy's Corner toward Nutwell, a distance of 1.0 miles (Gravel)

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., on the 31st day of October, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 11th day of October, 1922.

JOHN N. MACKALL,
Chairman
L. H. STEUART,
Secretary

Bids: Nov. 10.

Well

Gridley, Ill.

Sealed bids will be received by the Trustees of the Village of Gridley, Illinois, until 2 o'clock p.m., November 10, 1922, and then publicly opened and read, for furnishing all labor and material for the construction of one well, 8 inches in diameter and approximately 290 feet in depth, and equipped with a strainer, all in accordance with the plans and specifications for same on file in the office of the Village Clerk.

Proposals must be made on blanks furnished by the Village and in accordance with the instructions furnished therewith and which may be had on application to the Village Clerk.

Each proposal must be accompanied by cash or by a certified check payable to the order of the Treasurer, Village of Gridley, for an amount not less than 10% of the amount of the proposal.

The person or persons to whom the contract is awarded will be required to file a bond, with good and sufficient sureties, to guarantee the faithful performance of the contract.

Payment for the work will be made in cash.

Plans and specifications may be obtained from the Engineers, Taylor & Woltmann, 428 Unity Bldg., Bloomington, Illinois.

The Trustees reserve the right to reject any or all bids.

A. L. KLOPFENSTEIN,
President.
A. O. RUPP,
Clerk.

Bids: Dec. 11.

Labor-Material Percentage Contract

New Orleans, La.

Sealed proposals will be received at the Sewerage and Water Board, Room 401, No. 526 Carondelet Street, New Orleans, La., up to 12 o'clock noon of Monday, December 11th, 1922, on Labor-Material Percentage Contract for year 1923.

Specifications and blank forms of proposal may be obtained at the office of the Board.

The right is reserved to reject any or all bids.

October 12th, 1922.

A. G. MOFFAT,
Secretary.

GEO. G. EARL,
General Superintendent.

Maximum Competition Is Assured

these advertisers through *Engineering News-Record's* large NATIONAL circulation, reaching almost every worthwhile contractor, dealer, and manufacturer in the country interested in bidding on public work contracts. It is the DOMINANT MEDIUM for advertising contracts for work, material, and supplies for towns, cities, counties, state and government departments, and private organizations.

Bids: Oct. 31.

Road Reconstruction

Avon, N. J.

Notice is hereby given that sealed bids will be received by the Council of the Borough of Avon for the Reconstruction of the Ocean Boulevard, Borough of Avon, N. J., with a Warrenite-Bitulithic Pavement on a concrete base and with a Sheet Asphalt Pavement on a concrete base and opened and read in public at the rooms of said Council, Borough Hall, Avon, N. J., on Oct. 31, 1922, at 2.00 p.m.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., Civil Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and at Borough Hall, Avon, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Council of Borough of Avon and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the Collector of Borough of Avon and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Council of the Borough of Avon reserves the right to reject any or all bids if deemed to the best interests of the Borough so to do.

By order of the Council of Borough of Avon.

JOHN THOMSON,
Mayor.

Attest:
RUTH A. DORN, Clerk,
Avon, N. J., Oct. 17, 1922.

Bids: Nov. 14.

Change of Date for Receiving Sewage Disposal Plant Proposals

Indianapolis, Ind.

Sealed proposals will be received by the Board of Sanitary Commissioners, Sanitary District of Indianapolis, at its office in the City Hall, Indianapolis, Indiana, until 10 a.m. November 14th, 1922, at which time bids will be publicly opened and scheduled and awards made as soon thereafter as practicable, for the construction of Section 3, Division 111, and furnishing and erecting mechanical equipment for the Sewage Disposal Plant of the Sanitary District of Indianapolis, in accordance with plans and specifications on file at the office of the Board. This construction and equipment consists of the following items:

1. Activated Sludge Plant:
   a. Aeration and Settling Tanks including operating Gallery and Connecting Conduits.
   b. Air Mains, Air Distribution System, Sewage, Sludge and Drain Piping.
   c. Sluice Gates and Gate Valves.
   d. Air Control and Drain Valves.
   e. Diffuser Plates.
   f. Air and Sewage Meters and Recorders.
   g. Sludge Removal Equipment erected.
2. Power Plant Auxiliary Equipment:
   a. Boiler Settings and Breeching.
   b. Coal Storage Bunker.
   c. Coal Handling Equipment.
   d. Power Plant Piping.
   e. Boiler Feed Pumps and Regulators.
   f. Feed Water Heaters and Softening System.

Each bidder shall be required to deposit with his bid a certified check in the amount as provided in said specifications and information to bidders, to secure the execution of the contract for which bid is made.

Copies of plans and specifications and general information may be obtained at the office of Charles H. Hurd, Consulting Engineer, 1405 Merchants Bank Building, Indianapolis, Indiana.

The Board reserves the right to reject any and all bids.

Board of Sanitary Commissioners.

JAY A. CRAVEN,
President.
JOHN L. ELLIOTT,
Vice-Pres.
LUCIUS B. SWIFT.

Bid. Nov. 1.

State Road Work

Providence, R. I.

Sealed proposals for the construction of the following sections of State Highway will be received by the State Board of Public Roads at its office State House, Providence, R. I. until 12M on Wednesday, November 1st, 1922, at which time they will be opened and read in public:

Contract No. 2205—Lincoln-Smithfield Avenue, Pawtucket Line to Lonsdale Ave., 1.32 miles—Sheet Asphalt Pavement with Concrete Base.

Contract No. 2206—North Kingston-Ten Rod Road, Wickford Junction easterly to Tower Hill road, 1.8 miles—Bituminous Macadam.

Contract No. 2207—South Kingston-Kingston Road, Usquepaug to West Kingston Station, 2.46 miles—Bituminous Macadam.

Contract No. 2208—Warwick-Apponaug Road, Pawtuxet Bridge to Elmwood Avenue, 2.05 miles—Bituminous Macadam.

Bids must be made upon blank forms to be furnished by the Board. No bids will be accepted unless accompanied by a certified check for the sum of $200.00, payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids, and to give preference to towns or cities, in accordance with Section V of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Friday, October 20, 1922, every week day (except holidays and Saturdays), between the hours of 9 a.m. and 5 p.m.; Saturdays 9 a.m. to 12 m.

State Board of Public Roads.

ABRAM L. ATWOOD,
BENJAMIN F. ROBINSON,
FRANK COLE,
J. H7NRY WOODARD,
ALTON HEAD.

OFFICIAL PROPOSALS

Bids: Nov. 1.

Construction of Power House

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Wednesday, November 1st, 1922, at which place and hour they will be publicly opened and read, for the development of canal water power pursuant to the provisions of Chapter 532 of the Laws of 1922, as follows:

CONTRACT B-3—VISCHER FERRY POWER HOUSE

For constructing a power house and work incidental thereto, at Vischer Ferry dam, County of Saratoga.

Sheets 1-15, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required, and other information for proposers, may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Eastern Division, Wedgeway Building., Schenectady, N. Y.; at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division, at Rochester, N. Y.; at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bond, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposit of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE,
Superintendent of Public Works.
October 7th, 1922.

OFFICIAL PROPOSALS

Bids: Oct. 30.

Street Improvement

Laurel, Miss.

Sealed proposals will be received by the Mayor and Board of Commissioners of the City of Laurel, Mississippi, until two o'clock P.M., October 30th, 1922, at the office of the City Clerk of said city for constructing approximately:

19,865 sq.yds. brick pav't concrete foundation.
16,160 sq.yds. gravel surfacing.
20,243 lin.ft. combined curb and gutter.
3,000 sq.yds. concrete sidewalk.
1,357 lin.ft. 8-in. sanitary sewer with all appurtenances thereto.

Plans and profiles may be seen, specifications and proposal forms may be obtained at the office of the City Clerk of the City of Laurel.

J. H. PACE.
Street Commissioner.

A Bonding Company's Suggestion to Official Proposal Advertisers

"A large part of our contract bond business is submitted to us by wire, and I am a constant reader of the Official Proposals in order to find out the size and nature of the work that is referred to in the bond application. Very frequently I am unable to get any clear idea of what the advertisers are asking bids on, and of course the prospective bidder or contractor is also at a loss to know what kind of a job is being advertised.

"Traveling expenses are heavy at the present time, and contractors pay out considerable sums during the course of a year in investigating prospective contracts. This of course is a large charge that the owners eventually pay, and anything that will reduce the general overhead of contract work will eventually be to the advantage of the owner.

"One way to reduce this overhead is to word the advertisement so that the contractor sitting in his office will know whether or not he should investigate and prepare a bid on the proposed work."

Bids: Nov. 1.

Water Main Extension

Elmsford, N. Y.

Sealed bids for the construction of the extension to the water mains in the Village of Elmsford, N. Y., will be received by the Board of Trustees of said Village at the Corporation Rooms, Lawn Avenue, Elmsford, N. Y., until 8 o'clock p.m., Wednesday, November 1st.

Plans and Specifications may be obtained at the office of the Wulff Engineering Company, National Bank Building, Tarrytown, N. Y.

A certified check in the amount of three thousand ($3,000) dollars must accompany each bid.

The Board of Trustees reserve the right to reject any or all bids and to accept whatever bid they deem for the best interests of the Village.

Dated this 17th day of October, 1922, at the Village of Elmsford, N. Y.

ALBERT T. WILSON,
Village Clerk.

OFFICIAL PROPOSALS

Bids: Oct. 31.

Barge Canal Terminals

Albany, N. Y

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, October 31st, 1922, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and amendatory laws, and Chapter 402 of the Laws of 1920, as follows:

TERMINAL CONTRACT NO. 91.

For paving a portion of the terminal site at Hallets Cove, New York City.

Contract plans, sheets 1 to 3 inclusive.

Plans may be seen and detailed specifications, engineers' estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE,
Superintendent of Public Works.
September 28, 1922.

OFFICIAL PROPOSALS

Bids: Nov. 24.

Superstructures, Chimney, Crane and Filter Plant

Memphis, Tenn.

Sealed proposals, addressed to the Board of Commissioners of the Memphis Artesian Water Department, and endorsed with the bidder's name and designation of the work bid upon will be received at the office of the Memphis Artesian Water Department eat Memphis, Ten., until 12 o'clock noon of the 24th day of November, 1922, and then publicly opened and read, for the construction at Memphis, Tenn., of building superstructures for new water supply and for the furnishing and installing of machinery, the work being divided into contracts as follows:

Contract 7. Superstructures, chimney and filter equipment.

Contract 8. Coal and ash handling system.

Contract 9. Three 9 m.g.d. low-head, centrifugal pumps direct conected to reaction water-turbines.

Contract 10. Two 100 k.w. direct-connected unaflow engine generator sets and switchboard.

Bids may be made upon any or all contracts, but a bid upon any contract must include all work under that contract.

Contract 7 includes the brick walls, stone trim, steel frame and roof of the pumping station, approximately 125 feet by 225 feet in plan and 50 feet high; the walls and stone trim of the iron removal plant approximately 90 feet by 160 feet in plan and 25 feet high; the superstructure of the aerator house; tile and cement floor finish; steel sash doors; roofing; plumbing, heating and lighting; a 15 ton 120 foot span traveling crane; a 9 foot by 225 foot radial brick chimney; sand, gravel, pipe laterals and operating tables for eight filters; two dry feed machines; and various incidental work.

Copies of the bidding blanks, bonds, contracts, specifications and drawings may be obtained from the office of the engineers, Fuller & McClintock, 421 Produce Exchange Bldg., Kansas City, Mo., or may be inspected at any of the following offices:

Memphis Artesian Water Department, Memphis, Tenn.

Fuller & McClintock, 170 Broadway, New York City.

Fuller & McClintock, 319 Summit-Cherry Bldg., Toledo, Ohio.

A charge of $20.00 wil be made for each set of specifications which charge will be refunded provided the specifications are returned within 30 days after bids are received.

The Water Commission reserves the right to reject any or all bids, to waive any informalities in the bids received, and to accept any bid or bids which they deem most favorable to the interests of the City of Memphis.

By order of the Board of Commissioners of the Memphis Artesian Water Department.

Bids: Nov. 4.

Jetties, Sea Walls and Bulkhead

Longport, N. J.

Sealed proposals for the construction or extension of stone or slag jetties or stone sea walls; the placing of stone along the toe of the seawall; the placing and sinking of floats in position; and the construction of a bulkhead, or any or all of them, on the Atlantic Ocean, in the Borough of Longport, County of Atlantic, State of New Jersey, will be received by the Board of Commissioners of the Borough of Longport, at 3.00 o'clock in the afternoon, November 4, 1922, during a regular meeting of said Board of Commissioners, at the Commission Chamber, Borough Hall, Longport, N. J., said bids to be opened and read in public at the aforesaid time and place.

Plans, specifications and form of bid, certificate of surety, contract and bond, covering proposed work, are on file in the office of the Borough Clerk, at Borough Hall, Longport, N. J., where they may be inspected during business hours. Any prospective bidder will be furnished with a complete set of the plans and specifications of the proposed work in consideration of a deposit of $10.00 and such deposit will be refunded if both plans and specifications are returned in good condition on or before November 4, 1922. Each bid must be made on the standard proposal form in the manner required by the specifications, must be enclosed in a sealed envelope marked "Proposals for Construction of Stone Jetties or Stone Seawalls, etc., or any or all of them, at Longport, N. J., to be opened at 3:00 P.M., November 4, 1922, and with the certificate of surety properly filled in, and shall be enclosed in another envelope addressed to William S. Gilmore, Borough Clerk, Borough Hall, Longport, N. J." These envelopes must not be marked in any other manner. Each bid must be accompanied by a certified check payable to the Director of Revenue and Finance, or cash, in the amount of $1,000.00 and no bid will be received after the hour fixed for receipt of bids.

A contract will be awarded, if awarded at all, within one month of the date of receiving bids.

The right is reserved to reject any or all bids.

By order of the Board of Commissioners of the Borough of Longport, N. J.

WILLIAM S. GILMORE,
Borough Clerk.

Contractors Everywhere Read These Advertisements

to see where bids are desired on contracts suited to their available plant and organization. The suggestion is therefore made to advertisers that they word their advertisements so that the contractor will get a good idea of the size and kind of work to be let, and perhaps the plant needed. This should result in an increased number of desirable bidders.

Bids: Nov. 1.

Metal Doors and Partitions

Marcy, N. Y.

Sealed proposals for Construction—Metal Doors and Partitions for Water Closet Compartments (One Building for Acute Patients; Two Buildings for Chronic Patients) at the Utica State Hospital—Marcy Division, Marcy, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 P.M., Wednesday, November 1, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 4010. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Utica State Hospital, Utica, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway; and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.

Dated: October 17, 1922.

TO SUBLET

Hauling of Material on 13 Mile Concrete Base-Contract, in Southern Kentucky—Average Haul 2½ Miles—Industrial Equipment Preferred—

METZEL & O'HEARN
Covington, Ky.

OFFICIAL PROPOSALS

Bids: Nov. 8.

Road Reconstruction

Atlantic City, N. J.

Sealed bids will be received by the Board of Chosen Freeholders of Atlantic County, N. J., at 12 o'clock noon on Nov. 8th, 1922 during a regular meeting of said board at the Freeholders' Meeting Room in the Guarantee Trust Bldg., Atlantic City, N. J. for the reconstruction of Cedar and Landis Avenues from Mays Landing-Downstown Road in Richland to the line between the Counties of Cumberland and Atlantic, with a Warrenite-Bitulithic pavement on a six inch (6") 1-3-5 concrete base; estimated amount of surface pavement and concrete base required is 44,663 sq.yds. together with gravel shoulders, excavation and embankment, drainage provisions, guard rail and other items; said bids to be opened and read in public at the aforesaid time and place.

Drawings, specifications and form of bid, certificate of surety, contract and bond, covering proposed work, are on file in the Office of the County Engineer at 636 Guarantee Trust Bldg., Atlantic City, N. J., where they may be inspected and a prospective bidder may secure a copy of the specifications and blueprints of the plans upon the deposit of $10, which deposit will be refunded provided the plans and specifications are returned to the County Engineer's office in good condition by noon on Nov. 8th, 1922. Each bid must be made on the standard proposal form in the manner required by the specifications and must be accompanied by a certified check, or cash, in the amount of Ten (10%) per cent of the bid except that the amount need not exceed $20,000.

A contract will be awarded, if awarded at all, within one month of the date of receiving bids and such award will be made subject to the sale and delivery of bonds to be issued for the purpose of financing the reconstruction. The right is reserved to reject any or all bids.

By order of the Board of Chosen Freeholders of Atlantic County, N. J.

F. W. WILLETTS
Clerk.

Bids: Nov. 4.

Drainage Work

Bolton, N. C.

Notice is hereby given that sealed proposals for repair and improvement of the main ditch of Columbus County Drainage District No. 2, will be received until twelve o'clock noon, Eastern Standard time, November 4, 1922, at the office of the Board of Drainage Commissioners, Bolton, N. C.

The work to be performed consists of removing earth from the main ditch for a distance of approximately three miles between laterals D and G, by means of a drag line. Earth to be deposited on one side.

The yardage of earth to be removed is approximately 168,000 cubic yards. The date of completion to be five months from date of awarding contract.

A certified check in the amount of $2,000.00 payable to the Board of Drainage Commissioners of Columbus County Drainage District No. 2, must accompany each proposal. Checks of unsuccessful bidders will be returned within ten days of awarding of the contract.

The said board reserves the right to reject any or all bids. Plans and specifications are on file at the office of the Board, Bolton, N. C., or same will be mailed upon application when same is accompanied by a deposit of $10.00, which will be refunded if plans are returned in good condition.

By order of the Board of Drainage Commissioners, Columbus County Drainage District No. 2.

G. T. MEYER, Secretary.

I can't handle all the Contract Bond and Compensation Insurance so I handle only the best of it. That is one reason why the Surety Companies are glad to handle my risks.

SWART
92 William St., New York

OFFICIAL PROPOSALS

Bids: Nov. 16.

Structural Steel Shed

New Orleans, La.

Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans at their office, Suite 200, New Court Building, until 3:00 P.M., November 16, 1922, and then publicly opened for furnishing, erecting and painting of the structural steel required for the Seventh Street Shed.

A deposit of $1,000.00 in cash or certified check is required with each proposal.

A bond to the amount of 50% of the sum bid is required with notarial contract.

Specifications and proposal forms are on file in the office of the Supervisor of Purchases, at No. 1 Canal Street, New Orleans, Louisiana. Complete sets will be furnished to prospective bidders on deposit of $5.00, which will be refunded to depositors who submit proposals, or return sets in good condition.

The right is reserved to reject any or all bids and to waive informalities.

J. H. WALSH,
General Manager.

Req. E. D. 12552.

UNITED STATES SHIPPING BOARD

Invites Tenders

for

Pier Removal and dredging

The United States Shipping Board, through the United States Shipping Board Emergency Fleet Corporation, Washington, D. C., invites bids upon the removal of Pier No. 5 and dredging areas between Piers Nos. 4 and 6, United States Shipping Board Terminal, Hoboken, New Jersey.

Bids should be submitted as follows:

(a) Lump sum for removal of Pier No. 5.

(b) Price per cubic yard for dredging (1) Slip between Piers Nos. 4 and 5, (2) Area covered by Pier No. 5 and (3) Slip between Piers Nos. 5 and 6.

Copies of Proposal for Bids, Specifications, Bid, Contract and Bond will be supplied on application to J. M. Hoffman, Room 1907, U. S. Shipping Board, Washington, D. C., and bidders will also be permitted to visit and inspect property and to make their own soundings if desired. Apply to J. M. Hoffman, or J. W. McGovern, 45 Broadway, New York City for pass to inspect property.

Bids will be received at the office of the United States Shipping Board Emergency Fleet Corporation, Washington, D. C., until 12 noon, November 10, 1922. Envelopes should be addressed to J. M. Hoffman and plainly marked "Pier Removal and Dredging Bids, Hoboken Terminal."

The right is reserved to reject any or all bids or parts of bids.

UNITES STATES SHIPPING BOARD
Washington, D. C.

OFFICIAL PROPOSALS

Bids: Nov. 1.

Metal Doors and Partitions

Central Islip, N. Y.

NOTICE TO CONTRACTORS: Sealed proposals for Construction-Metal Doors and Partitions for Water Closet Compartments (additional quarters for acute patients) at the Central Islip State Hospital, Central Islip, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 p.m., Wednesday, November 1, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 4008. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Central Islip State Hospital, Central Islip, N. Y., at the New York Office of the Department of Architecture, Room 1058, 25 Broadway; and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commisson.
Dated: October 17, 1922.

Engineering News-Record Reaches Your Local Contractors

Its distribution among the contractors of any one state is in proportion to the number of contractors situated in that state. The Official Proposal Colums of *Engineering News-Record* offer precisely the same efficient service to municipalities, counties, and state and government departments in every section of the United States.

Bids: Nov. 14.

Assembly Hall and Industrial Building

Letchworth Village, Thiells, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work—Attendants' Home—Assembly Hall and Industrial Building (Girls' Group) at Letchworth Village, Thiells, N. Y., will be received by Mr. Mortimer B. Patterson, President of the Board of Managers of Letchworth Village, at No. 7 Wall Street, New York City, until 12 o'clock Noon on Tuesday, November 14, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3928, 3929, 3930, 3931, 3932, 3933, 3934 and 3935. The right is reserved to reject any or all bids. Drawings and specifications may be examined at No. 7 Wall St., New York City; at Letchworth Village, Thiells, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: October 19, 1922.

OFFICIAL PROPOSALS

Bids: Nov. 13.

Dredging

Newark, N. J.

Sealed proposals will be received from 10:00 to 10:15 A.M., on Monday, November 13, 1922, at the office of the Director of the Department of Streets and Public Improvements on the second floor of the City Hall and then publicly opened and read for the dredging of a portion of the City of Newark Channel at Port Newark Terminal; approximate yardage to be removed 500,000 cubic yards.

Bids must be made upon blanks to be furnished by the Department.

Plans and specifications and proposal blanks may be obtained at the office of the Bureau of Docks, room 205, City Hall.

Terms of proposal and surety required are fixed by the specifications.

The contract will be awarded to the lowest responsible bidder, the right being reserved to reject any and all bids or waive informalities therein, and to award contracts for the whole or any part thereof.

By direction of the Board of Commissioners of the City of Newark.

THOMAS. L. RAYMOND,
Director, Department of Streets and
Public Improvements.

U. S. GOVERNMENT

SEALED PROPOSALS, indorsed "Proposals for Steel Water Tank, Tupper Lake, N. Y., Specification No. 4724," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., November 15, 1922, and then and there publicly opened, for 200,000 gallon steel tank with tower and appurtenances at the U. S. Veterans' Hospital, Tupper Lake, N. Y. Specification No. 4724 may be obtained on application to the Bureau of Yards and Docks. Deposit of a check or postal money order for $5, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the specification. R. E. BAKENHUS, Acting Chief of Bureau, October 5, 1922.

SEALED PROPOSALS, indorsed "Proposals for Stack, Tupper Lake, N. Y., Specification No. 4722," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C, until 11 o'clock a.m., November 15, 1922, and then and there publicly opened, for a radial brick stack on a concrete foundation, at the U. S. Veterans' Hospital, Tupper Lake, N. Y. Specification No. 4722 may be obtained on application to the Bureau of Yards and Docks. Deposit of a check or postal money order for $10, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the specification. R. E. BAKENHUS, Acting Chief of Bureau, October 5. 1922.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., October 21, 1922. Sealed proposals will be opened in this office at 3 p.m., November 10, 1922, for Exterior and interior painting at the U. S. Post Office, Rhinelander, Wis., in accordance with the specification, copies of which may be had at this office or at the office of the Custodian, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

PROPOSALS FOR CONCRETE CAISSON BREAKWATER. — U. S. Engineer Office, Room 1201, 537 South Dearborn Street, Chicago, Illinois.—Sealed proposals for constructing concrete caisson breakwater at Indiana Harbor, Indiana, will be received here until 10 a.m., November 6, 1922, and then opened. Further information on application.

U. S. ENGINEER OFFICE, PROVIDENCE, R. I. Sealed proposals will be received here until 12 o'clock, noon, Oct. 30, 1922, and then opened for maintenance dredging in Milford Harbor, Conn. Further information on application.

U. S. ENGINEER OFFICE, BUFFALO, N. Y.—Sealed proposals will be received here until 11 a.m., October 30, 1922, and then opened for constructing stone-concrete superstructure on breakwater, Buffalo Harbor, N. Y. Further information on application.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, MILWAUKEE, WIS., Sept. 30, 1922. Sealed proposals will be received here until 2 p.m., Nov. 6, 1922, and then opened, for constructing pile pier, removing old timber-crib pier, and dredging at Racine Harbor, Wis. Further information on application.

SEALED PROPOSALS, indorsed "Proposals for Refrigerating Equipment, Tupper Lake, N. Y. Specification No. 4720," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., November 15, 1922, and then and there publicly opened, for refrigerating and ice-making equipment, using as refrigerant any satisfactory substance, except ammonia, and consisting of two motor-driven compressors, condensers, liquid receiver, two motor-driven brine pumps, a combination freezing and brine cooling tank with expansion coils, a water-precooler tank with coils, two charcoal filters, brine agitator, water agitating system by compressed air, automatic can filler, hand operated can hoist, automatic can dump and ice chute, ice cans, oil and scale traps, piping and other accessories; and for cold storage rooms with insulation for eight compartments including doors, floors and equipment for the storage and handling of goods in the subsistence building at the U. S. Veterans' Hospital, Tupper Lake, N. Y. Drawings and specification No. 4720 may be obtained on application to the Bureau of Yards and Docks. Deposit of a check or postal money order for $10, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the drawings and specification. R. E. BAKENHUS, Acting Chief of Bureau, October 6, 1922.

SEALED PROPOSALS, indorsed "Proposals for Boiler Plant Equipment and Steam Distribution, Tupper Lake, N. Y., Specification No. 4719," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., November 15, 1922, and then and there publicly opened, for Mechanical equipment, piping and an outside steam distributing system consisting of brick settings on concrete foundations for 5 water tube boilers, side-feed mechanical stokers with extension furnaces, smoke flue, feed water heater, storage tank, feed water and vacuum pumps, combined twin pump and receiver, drip traps, an incinerator plant equipped with two incinerators and hot water heating and sterilizing equipment and complete piping systems for all equipment; the installation of 5 marine type water tube boilers furnished by the Government, and an outside steam distribution system including condensate and vacuum return lines; all at the U. S. Veterans' Hospital, Tupper Lake, N. Y. Drawings and Specification No. 4719 may be obtained on application to the Bureau of Yards and Docks. Deposit of a check or postal money order for $20, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the drawings and specification. R. E. BAKENHUS, Acting Chief of Bureau, October 5, 1922.

SEALED PROPOSALS will be received and publicly opened by the Director of the U. S. Veterans Bureau in the office of the Quartermaster General, 2306 Munitions Building, Washington, D. C., at 11:00 A.M., November 14, 1922, for the construction of a 400 bed neuro-psychiatric hospital at Camp Sherman, Chillicothe, Ohio. Work will include construction of twenty-two buildings, built of reinforced concrete and brick, complete with water, lighting, heating and sewer systems, roads and walks Plans and specifications may be obtained after October 14, upon deposit of $100, from the Quartermaster General, 2312 Munitions Building, Washington, D. C., or from the Constructing Quartermaster, Chillicothe, Ohio. One set of plans and specifications will be on exhibition at each of the following stations: Constructing Quartermaster, 39 Whitehall Street, New York City, Constructing Quartermaster, Scott Field, Belleville, Illinois; Quartermaster Supply Officer, Chicago General Intermediate Depot, 1819 West Pershing Road, Chicago, Illinois.

U. S. GOVERNMENT

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., Nov. 23, 1922, for constructing about 380,000 cubic yards of earthwork in the Kings Lake Drainage District, Mo. Further information on application.

U. S. ENGINEER OFFICE, Charleston, S. C.—Sealed proposals will be received here until noon, November 25, 1922, and then opened, for dredging western channel and Sampit River, Winyah Bay, S. C. Further information on application.

Largest Circulation of Any Technical Paper

Engineering News-Record's circulation—over 30,000 weekly—is the largest of any technical paper printed. It includes among its readers practically every worthwhile contractor, dealer, and manufacturer in the country who is interested in bidding on public works contracts—either local or outside of his immediate vicinity.

U. S. ENGINEER OFFICE, PITTSBURGH, PA. Sealed proposals will be received here until 12 noon (Eastern time) November 20, 1922, and then opened, for furnishing and delivering one steel derrick boat hull. Further information on application.

U. S. ENGINEER OFFICE, BUFFALO, N. Y.—Sealed proposals will be received here until 11 a.m., November 6, 1922, and then opened, for construction of three 400-cu.yd. steel dump scows. Further information on application.

U. S. GOVERNMENT

PROPOSAL FOR STEEL BARGE—U. S. Engineer Office, Montgomery, Ala. Sealed proposals will be received here until 11 a.m., Dec. 1st, 1922, and then opened, for one 80 ft. x 26 ft. x 5 ft. steel barge. Further information on application.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., Oct. 23, 1922.—Sealed proposals will be opened in this office at 3 p.m., Nov. 24, 1922, for construction of the United States Post Office at Chandler, Okla. Drawings and specifications may be obtained from the custodian of the site at Chandler, Okla., or at this office in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., October 23, 1922.—Sealed proposals will be opened in this office at 3 p.m., November 20, 1922, for roof over extended mailing platforms, etc., United States Post Office, Toledo, Ohio. Drawings and specification may be obtained from the Custodian at the building, or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., October 16, 1922.—Sealed proposals will be opened in this office at 3 p.m., November 16, 1922, for construction of the United States Post Office at Shawnee, Okla. Drawings and specifications may be obtained from the Custodian of the site at Shawnee, Okla., or at this office in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, HUNTINGTON, W. VA., October 20, 1922. Sealed proposals will be received here until 11 a.m. (Eastern time), November 20, 1922, and then opened, for furnishing and delivering horses and props for Ohio River Dam No. 32. Further information on application.

Wanted—Correspondents
for Engineering News-Record

If you want to earn some extra money and are a resident in one of the cities named below;
If you can spare an hour or two a day *during business hours* for calling upon architects, contractors, engineers and city departments;
Then write me concerning your qualifications and present connection, if you live in

- **ARIZONA**
  - Bisbee
  - Globe
  - Phoenix
  - Tucson
- **CALIFORNIA**
  - Los Angeles
- **INDIANA**
  - Evansville
  - Ft. Wayne
  - South Bend
- **IOWA**
  - Dubuque
- **KANSAS**
  - Hutchinson
  - Leavenworth
- **KENTUCKY**
  - Anywhere
- **MISSISSIPPI**
  - Anywhere
- **MISSOURI**
  - St. Joseph
- **MONTANA**
  - Butte
- **NEVADA**
  - Carson City
- **NEW MEXICO**
  - Santa Fe
- **NEW YORK**
  - Binghamton
  - Schenectady
- **NORTH DAKOTA**
  - Anywhere
- **OKLAHOMA**
  - Anywhere
- **OREGON**
  - Astoria
  - Medford
  - Salem
- **SOUTH CAROLINA**
  - Except Columbia
- **SOUTH DAKOTA**
  - Pierre
  - Sioux Falls
- **TENNESSEE**
  - Chattanooga
- **WASHINGTON**
  - Walla Walla
- **ALBERTA**
  - Calgary
- **MANITOBA**
  - Winnipeg

Alden W. Welch
Engineering News-Record, 10th Ave. at 36th St., New York

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Nov. 6	Elizabeth Park (Trenton P. O.), Mich.	Nov. 2
Nov. 9	Marshall, Ill.	Oct. 26
Nov. 10	Gridley, Ill.	Oct. 26
Nov. 14	Newport, Ky.	Oct. 5
Nov. 15	Ossining, N. Y. Adv. Nov. 2.	Nov. 2
Nov. 15	Dallas, Tex.	Nov. 2
Nov. 20	Springfield, Mass. Adv. Nov. 2.	Nov. 2
Nov. 24	Memphis, Tenn. Adv. Oct. 26 and Nov. 2.	Oct. 26
Nov. 29	San Juan, Porto Rico Adv. Oct. 12 to Nov. 2.	Oct. 19
Nov. 29	Bay St. Louis, Miss.	Nov. 2
Dec. 1	San Juan, Porto Rico Adv. Oct. 19 to Nov. 2.	Oct. 19

SEWERS

Nov. 6	Amboy, Minn.	Oct. 19
Nov. 6	Cleveland Heights (Warrensville P. O.), O.	Nov. 2
Nov. 7	Miami, Fla.	Oct. 19
Nov. 8	Hillside, N. J.	Nov. 2
Nov. 13	Garfield Heights (Cleveland P. O.), O.	Nov. 2
Nov. 13	Wash., D. C. Adv. Nov. 2.	Nov. 2
Nov. 14	Indianapolis, Ind.	Oct. 26
Dec. 11	New Orleans, La. Adv. Oct 12 to Nov. 2.	Oct. 12

WASTE DISPOSAL

Nov. 6	Waco, Tex.	Oct. 26

BRIDGES

Nov. 7	Detroit, Mich.	Nov. 2
Nov. 7	Vaudreuil, Que.	Oct. 19
Nov. 7	Vicksburg, Miss	Oct. 19
Nov. 10	Tennessee	Oct. 26
Nov. 14	Milton, Fla.	Oct. 19
Nov. 15	New Jersey Adv. Nov. 2.	Nov. 2
Nov. 20	Pittsburgh, Pa. Adv. Nov. 2.	Nov. 2
Nov. 29	Phila., Pa. Adv. Nov. 2	Nov. 2
Jan. 23	Spokane, Wash.	Sept. 21
Sept. 1, 1923	Sydney, New South Wales, Australia	Aug. 3

EXCAVATION, DRAINAGE, IRRIGATION

Nov. 10	Maricopa, Ariz.	Nov. 2
Nov. 13	Newark, N. J.	Oct. 26
Nov. 15	Lake Providence, La	Nov. 2

STREETS AND ROADS

Bids Close		See Eng. News-Record
Nov. 6	Ebensburg, Pa.	Oct. 19
Nov. 6	Fresno, Calif.	Oct. 26
Nov. 6	Warsaw, Ind.	Oct. 26
Nov. 6	Utah	Oct. 26
Nov. 6	California	Oct. 26
Nov. 6	Ebensburg, Pa.	Nov. 2
Nov. 7	Marion, Ind.	Oct. 19
Nov. 7	Stockton, Calif.	Oct. 26
Nov. 7	Topeka, Kan.	Oct. 26
Nov. 7	Birmingham, Ala.	Oct. 26
Nov. 7	Topeka, Kan.	Oct. 26
Nov. 7	Louisiana	Oct. 26
Nov. 7	Columbus, O.	Nov. 2
Nov. 7	Ft. Worth, Tex.	Nov. 2
Nov. 8	Bridgeton, N. J.	Oct. 19
Nov. 8	Monticello, Ind.	Oct. 26
Nov. 8	Mays Landing, N. J. Adv. Oct. 26 and Nov. 2.	Oct. 26
Nov. 9	Duluth, Minn.	Oct. 19
Nov. 9	Eldorado, Kan.	Oct. 19
Nov. 9	Duluth, Minn.	Oct. 26
Nov. 9	Michigan	Nov. 2
Nov. 9	Kentucky	Nov. 2
Nov. 9	Ft. Worth, Tex.	Nov. 2
Nov. 9	St. George, S. C.	Nov. 2
Nov. 10	New York, N. Y.	Nov. 2
Nov. 10	Tennessee	Oct. 26
Nov. 10	Canton, O.	Nov. 2
Nov. 10	Colorado	Nov. 2
Nov. 10	Pearsall, Tex.	Nov 2
Nov. 14	Santa Rosa, Calif.	Oct. 26
Nov. 14	Massachusetts	Oct. 26
Nov. 14	Louisiana	Nov. 2
Nov. 14	West Virginia Adv. Nov. 2	Nov. 2
Nov. 14	Sumner, Ia. Adv. Nov. 2.	Nov. 2
Nov. 14	Florida	Nov. 2
Nov. 16	Greenville, N. C.	Nov. 2
Nov. 17	Tampa, Fla. Adv. Oct. 19 and Nov. 2.	Oct. 26
Nov. 17	Bernardsville, N. J. Adv. Nov. 2.	Nov. 2
Nov. 18	Logansport, Ind.	Oct. 26
Nov. 20	Goderich, Ont.	Oct. 19
Nov. 21	Pascagoula, Miss.	Oct. 26
Nov. 21	Newton, N J. Adv. Nov. 2.	Nov. 2
Nov. 23	Wilmington, N. C. Adv. Nov. 2.	Nov. 2
Nov. 27	Washington, N. C. Adv. Nov. 2.	Nov. 2
Dec. 22	Spokane, Wash.	Nov. 2
Dec. 30	Quebec	Nov. 2
Jan. 7	Duluth, Minn.	Sept. 28

INDUSTRIAL WORK

Nov. 4	Johnstown, Pa.	Nov. 2
Nov. 4	Pittsburgh, Pa.	Nov. 2
Nov. 6	Crawfordsville, Ind.	Oct. 26
Nov. 9	Marshall, Ill.	Oct. 19

BUILDINGS

Nov. 6	Detroit, Mich.	Oct. 19
Nov. 6	Cleveland, O.	Oct. 19
Nov. 6	Maywood, N. J.	Oct. 26
Nov. 6	New York, N Y.	Nov. 2
Nov. 7	Rapid City, S. D.	Oct. 19
Nov. 7	Athens, Ga.	Nov. 2
Nov. 8	St. Louis, Mo.	Oct. 19
Nov. 8	Kitchener, Ont.	Oct. 26
Nov. 8	Buffalo, N. Y.	Nov. 2
Nov. 9	Trenton, N. J.	Oct. 26
Nov. 9	Minneapolis, Minn.	Oct. 26
Nov. 9	Pittsburgh, Pa.	Oct. 26
Nov. 9	Phila., Pa.	Nov. 2
Nov. 10	Glastonbury, Conn.	Nov. 2
Jan. 10	Jamestown, N. Y.	Nov. 2
Nov. 10	Atlanta, Ga.	Nov. 2
Nov. 14	Theills, N. Y. Adv. Oct. 26 and Nov. 2.	Oct. 26
Nov. 14	Canandaigua, N. Y. Adv. Nov. 2.	Nov. 2
Nov. 15	Ocean City, N. J.	Oct. 5
Nov. 15	Butler, Pa.	Oct. 26
Nov. 15	Beaumont, Tex.	Oct. 19
Nov. 15	Birmingham, Ala.	Nov. 2
Nov. 15	Atlanta, Ga.	Nov. 2
Nov. 18	Portland, Ore.	Oct. 19
Nov. 20	Birmingham, Ala.	Nov. 2
Nov. 20	Cleveland, O.	Nov. 2
Nov. 21	Owen Sound, Ont.	Nov. 2
Nov. 21	Detroit, Mich.	Nov. 2
Nov. 22	Wash., D. C. Adv. Nov. 2.	Nov. 2
Nov. 22	San Antonio, Tex.	Nov. 2
Nov. 25	Bowling Green, O.	Nov. 2
Dec. 1	Oil City, Pa.	Oct. 26

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Nov. 6	Pier, etc. — Milwaukee, Wis. Adv. Oct. 12 to Nov. 2.	Oct. 12
Nov. 6	Breakwater—Chicago, Ill. Adv. Oct. 12 to Nov. 2.	Oct. 12
Nov. 6	Dump Scows — Buffalo, N. Y. Adv. Oct. 12 to Nov. 2.	Oct. 12
Nov. 6	Extension—Fargo, N. D.	Oct. 19
Nov. 7	Extension, etc.—San Jose, Calif.	Oct. 19
Nov. 8	Gas Tank, etc.—Chollas Heights, Calif.	Oct. 19
Nov. 14	Hospital—Chillicothe, O. Adv. Oct. 19 to Nov. 2.	Oct. 12
Nov. 15	Radial Brick Stack—Tupper Lake, N. Y.	Oct. 19
Nov. 15	Mechanical Equipment, etc. —Tupper Lake, N. Y.	Oct. 19
Nov. 15	Water Tank—Tupper Lake, N. Y.	Oct. 19
Nov. 15	Refrigerating and Ice-Making Equipment, etc.—Tupper Lake, N. Y.	Oct. 19
Nov. 15	Coal and Ash Handling Equipment, etc. — Tupper Lake, N. Y.	Oct. 19
Nov. 15	Post Office—Vernal, Utah	Oct. 26
Nov. 15	Repairs — Moorhead City, N. C.	Oct. 26
Nov. 16	Post Office—Shawnee, Okla. Adv. Oct. 26 and Nov. 2.	Oct. 26
Nov. 17	Re-roofing—Carville, La.	Oct. 26
Nov. 20	Horses and Props—Huntington, W. Va. Adv. Oct. 26 and Nov. 2.	Oct. 26
Nov. 20	Steel Hull—Pittsburgh, Pa. Adv. Oct. 26 and Nov. 2.	Oct. 26
Nov. 20	Roof—Toledo, O.	Oct. 26
Nov. 21	Roadway, Norfolk, Va. Adv. Nov. 2.	Nov. 2
Nov. 22	Covering Railroad Tracks—San Diego, Calif.	Nov. 2
Nov. 23	Earthwork—St. Louis, Mo. Adv. Oct. 26 and Nov 2.	Oct. 26
Nov. 23	Earthwork—St. Louis, Mo. Adv. Nov. 2.	Nov. 2
Nov. 24	Post Office—Chandler, Okla. Adv. Oct. 26 and Nov. 2.	Oct. 26
Nov. 25	Dredging—Charleston, S. C. Adv. Oct. 26 and Nov. 2.	Oct. 26
Nov. 25	Barges—Pittsburgh, Pa. Adv. Nov. 2.	Nov. 2
Nov. 25	Lock and Dam—Jacksonville, Fla.	Nov. 2
Nov. 27	Dredge Hull, etc.—Milwaukee, Wis. Adv. Nov. 2.	Nov. 2
Nov. 27	Dredging — Jacksonville, Fla. Adv. Nov. 2.	Nov. 2
Dec. 1	Barge—Montgomery, Ala. Adv. Oct. 26 and Nov. 2.	Oct. 26
Dec. 1	Dredging—Honolulu, H. T.	Nov. 2
Dec. 2	Boilers—Memphis, Tenn. Adv. Nov. 2.	Nov 2
Dec. 2	Barges—Memphis, Tenn. Adv. Nov. 2.	Nov. 2
Dec. 2	Machinery — Memphis, Tenn. Adv. Nov. 2.	Nov. 2
Dec. 6	Pumping Units — Boise, Idaho	Oct. 19

MISCELLANEOUS

Nov. 6	Heating and Ventilating Systems—Wilmore, Pa.	Nov. 2
Nov. 6	Grade Separation—Milwaukee, Wis.	Nov. 2
Nov. 8	Foundation—Cleveland, O.	Oct. 26
Nov. 9	Structural and Tank Steel—New Orleans, La.	Oct. 19
Nov. 9	Steel—Cleveland, O.	Nov. 2
Nov. 9	Concreting Voids—New York, N. Y.	Nov. 2
Nov. 10	Column Foundations — New York, N. Y.	Nov. 2
Nov. 13	High School Equipment—Wash., D. C.	Oct. 12
Nov. 16	Hoist and Trailers — San Jose, Calif.	Oct. 19
Nov. 16	Steel Shed—New Orleans, La.	Oct. 26
Nov. 21	High School Equipment—Wash., D. C.	Oct. 12
Nov. 21	Lumber—Ocean City, N. Y. Adv. Nov. 2.	Nov. 2
Nov. 24	Shaft—Brooklyn, N. Y. Adv. Nov. 2.	Nov. 2
Nov. 27	Electrical Work, Plumbing, Heating, etc. — Johnstown, Pa.	Nov. 2
Dec. 18	Coal Handling Plant — Melbourne, Victoria, Australia	Sept. 21

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

W. Va., Wheeling — City Council takes bids about Feb. 1, filtration plant, intake pier, reservoirs and pipe lines. $2,000,000. C. H. Dowler, city mgr. J. N. Chester Engineers, Union Bank Bldg., Pittsburgh, Pa., engrs. Noted Oct. 5.

Miss., Corinth—City Council opens bids about Nov. 28 1,000,000 gal. filter plant, 210,000 gal. settling basin, pumping equipment and distribution system, incl., 25,212 ft. 4-6 in. c.i. pipe, 13 standard fire hydrants, one deep well pump, two 250 g.p.m. motor driven pumps, two 400 g.p.m. motor driven centrifugal pumps, one 250 g.p.m. wash pump, two 400 g.p.m. low pressure service pumps, one 600 g.p.m. spray pond equipment. $35,000. A. H Beard, 616 Title Guaranty Bldg., St. Louis, Mo., engr.

La., Gretna—Jefferson Parish plans 4 mi. circulating system, 8 and 12 in. mains, to

Waterworks (Continued)

supply 7th and 8th Wards of Metarie Ridge with water obtainable from New Orleans. $50,000 to $60,000.

O., Akron—S. Porter, clk. Summit Co., preparing plans and takes bids early in 1923, 3 mi. c.i. mains in Co. Sewer Dist. 5. $40,000; 6 mi. c.i. mains in Co. Sewer Dist. 13, $60,000. E. D. Barstow, 226 Ohio Bldg., co. engr.

O., Akron—S. Porter, clk. Summit Co., opens bids about Dec. 1, for 2½ mi. c.i. mains in Tallmadge Dist. 1. $35,000. E. D. Barstow, 226 Ohio Bldg., co. engr.

O., Canton—See "Miscellaneous."

O., Delaware—See "Industrial Works."

Ill., Galesburg — Chicago, Burlington & Quincy R.R., 547 West Jackson Blvd., Chicago, soon receives bids for reservoir and dam, here. $350,000. W. T. Krausch, engr. of buildings.

Ill., Vandalia—Making surveys and will take bids about Dec. 1, 500,000 gal. filter plant, 600 ft. intake, chemical treatment plant, 1 mi. 4 in. c.i. mains, etc. $30,000. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, Mo., engr.

Wis, Milton—Plans waterworks and sewerage system. $25,000. W. E. Rogers, clk. Engineer not selected.

Wis., Waupaca—Plans purchasing emergency pumping unit, incl. centrifugal pump, motor and machinery. F. A. Houseman, City Hall, clk. Engineer not selected.

Kan., Phillipsburg — Had plans prepared and soon takes bids complete waterworks system. Black & Veatch, 701 Mutual Bldg., Kansas City, Mo., engrs.

Mo., St. Charles—Preparing plans new water pumping plant. O. Boekemeier, city clk. A. L. Mullergren, 555 Gates Bldg., Kansas City, consult. engr.

Okla., Canton — Having plans prepared new waterworks system. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Cement—V. V. Long & Co., engrs., 1300 Colcord Bldg., Oklahoma City, submitted reports for water main extensions, electrical distribution system extensions and electrical power plant improvements. $30,000.

Okla., Cushing—City retained W. L. Benham of Benham Eng. Co., 512 Gumbel Bldg., Kansas City, Mo., as engineer for new water supply, waterworks and sewer extensions and sewage disposal plant. O. Block, city engr.

Okla., Guthrie—See "Sewers."

Tex., Austin—Bd. Water Comrs. having preliminary plans and surveys made for complete new waterworks system and possibly water filtration plant. Election later to vote on $500,000 bonds. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs.

Tex., Beaumont—Submitted $350,000 bond issue to Attorney Generals Dept., Austin, for approval, extending and improving waterworks. A. Fulweiler, city engr.

Tex., Celina—See "Industrial Works."

Tex., Celina—Election, Nov. 28 to vote on $50,000 bonds, watermains and additions to plant. Address J. E. Owsley, mayor. Engineer not selected.

Tex., Dallas — Making plans for dam, mains, etc., Denton Creek at Coppell or Grapevine. $2,000,000 or $5,000,000, according to location. G. Fairtrace, city engr. W. J. Powell, engineering supervisor of public utilities.

Tex., Gatesville—Voted $40,000 bond issue for waterworks improvements. Address Mayor.

Tex., Santa Anna — Attorney General's Dept., Austin, approved $25,000 bond issue for main extensions.

Calif., Manteca—Having plans prepared multiple septic tank. $10,000. W. S. Farley, Monadnock Bldg., San Francisco, engr.

Tex., Rotan—Nov. 28, to vote on $50,000 bond issue for waterworks system. Address Mayor.

Tex., Tulia—Voted $45,000 bond issue for extending and improving waterworks. Address Mayor. Noted Sept. 21.

Tex., Wylie—Nov. 9 to vote on $50,000 bond issue for waterworks system. Address G. W. Housewright, mayor.

Ont., Cannington—Having lans prepared waterworks system. $45,000. Prices wanted on all materials. James, Proctor & Redfern, Excelsior Life Bldg., Toronto, engrs.

Ont., Kingston—Having plans prepared filtration plant. $300,000. Prices wanted on all materials. H. Dick, city engr.

BIDS DESIRED

Mass., Springfield—Nov. 20, by Bd. Water Comrs., Municipal Bldg., furnishing c.i. water pipe and special castings. H. M. King, supt.; adv. this issue.

N. Y., Ossining—Nov. 15, by C. F. Rattigan, supt. of Prisons, Albany, installing water pipe in Sing Sing Prison, here; adv. this issue.

Miss., Bay St. Louis—Nov. 29, by Mayor and Bd. Aldermen, two gal. water, motor driven centrifugal fire pumps, 75,000 gal. tank and tower, 125,000 gal. concrete reservoir, 600 ton 4, 6 and 8 in. c.i. pipe. $90,000. Swanson-McGraw, United Fruit Bldg., New Orleans, La., consult. engrs.

O., Garfield Heights (Cleveland P. O.)—See "Sewers."

Mich., Elizabeth Park (Trenton P. O.)—Nov. 6, by Bd. Trustees, Wayne Co., 201 County Bldg., Detroit, trenching, laying and backfilling 4,400 ft. 6 in. and 9,200 ft. 4 in. Class B c.i. pipe. P. W. Keating, 517 Ford Bldg., Detroit, engr.

Tex., Dallas—Nov. 15, by City Com., 1,000,000 gal. concrete and steel standpipe, Sunset Addition-Oak Cliff. $30,000. G. Fairtrace, city engr.

BIDS RECEIVED

O., Kent—Opened bids Oct. 16, 15,160 ft. 6 in. mains (a) bell and spigot pipe (b) Universal pipe, from L. Garrett Constr. Co., Kent, (a) $29,539 (b) $28,430; E. and W. McShaffrey Co., Rhodes Ave., Akron, (a) $30,508, (b) $27,978; D. Lowensohn, 12603 Clifton Blk., Cleveland, (a) $34,761 (b) $34,290. Engrs. est. $26,749.

CONTRACTS AWARDED

N. Y., Canandaigua — Bd. Pub. Wks., City Hall, furnishing 2½ mi. 16 in. c.i. pipe, to U. S. Cast Iron & Fdry. Co., East Burlington St., Burlington, N. J., $48,259. Noted Oct. 12.

N. J., Newark—North Jersey Dist. Water Supply Comn., 20 Clinton St., great notch tunnel and approaches. Contr. 3, to Heyman & Goodman Co., 15 Exchange Pl., Jersey City, $918,297. Noted Oct. 24.

O., Cleveland Heights (Warrensville P. O.)—See "Sewers."

O., Parma Heights (near Cleveland)—For 22,622 ft. 12 in. mains, to D. Pfahl & Co., Guardian Bldg., Cleveland, $109,852. Noted Oct. 12.

Mich., Bay City—Superstructure for filtration plant, to Bay City Stone Co., Bay City. $167,000.

N. D., Hillsboro—Extending waterworks system incl. 1,164 lin.ft. 4 in. and 1,520 lin.ft. 6 in. c.i. pipe, also extending sewers incl. 720 lin.ft. 8 in. and 3,990 lin.ft. 12 in. sewer pipe, to W. Danforth, 810 Guardian Life Bldg., St. Paul, $15,000.

Mo., St. Louis—Bd. Pub. Serv., City Hall, furnishing and delivering 160 ton coated c.i. special castings, Contr. 1465, to Bessemer Fdry. & Material Co., Bessemer, Ala., $13,952; two hundred seventy 4-12 in. stop valves, one 20 in. and one 36 in. tapping valves, Contr. 1466, also 300 fire hydrant tops, St. Louis standard, Contr. 1467, to A. P. Smith Mfg. Co., Norman St., East Orange, N. J., $16,263 and $11,678 respectively. Noted Oct. 12.

Calif., Knights Landing (Grafton P. O.)—Meek Estate, rein.-con. pumping plant, using Byron Jackson pumps and G. E. motors, in Recl. Dist. 730, to L. F. Youdall, Commercial Savings Bank Bldg., Stockton, $22,429.

Sewers

PROPOSED WORK

Conn., Hartford—Plans sewers in private land, Tower Ave., Granby, Westbrook, Durham, Canaan, Manchester, Lyme, Harold, Pomfret, Simpson and Hartland Sts., 1,008 ft. 8 in., 7,549 ft. 10 in., 2,457 ft. 12 in., 215 ft. 15 in., 1,862 ft. 18 in., and 4,302 ft. 24 in. pipe. R. N. Clark, city engr.

N. J., Elizabeth—Making plans sewer under Elizabeth River at 3rd Ave. between Palmer and Garden Sts. $60,000. J. H. Fuertes, 140 Nassau St., New York City, engr.

N. J., Roselle—Making plans 12-24 in. tile and concrete sewers in vicinity of Pine St. and 9th Ave. $40,000. J. L. Bauer, 120 Broad St., Elizabeth, engr.

Miss., Corinth—City Council opens bids about Nov. 28, 5 mi. sanitary sewers in various streets, trenches 4½ ft. deep and 2 ft. wide, 26,400 ft. 8-10 in. vitr. clay pipe, 8,800-9,000 cu.ft. earth trenching, 110 manholes. $35,000. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, Mo., engr.

O., Akron — S. Porter, clk. Summit Co. takes bids about Dec. 1, approximately mi. vitr. clay or segmental block sanitary sewer in Sewer Dist. Tallmadge 1. $30,000. E. D. Barstow, 226 Ohio Bldg., co. engr.

O., Akron—S. Porter, clk. Summit Co. takes bids in about 6 weeks trunk sewer in main county Dist. 4 A, at Stow Corners. $25,000. E. D. Barstow, 226 Ohio Bldg. co. engr.

O., Akron—S. Porter, clk. Summit Co. preparing plans and takes bids early in 1923, 3 mi. vitr. clay or segmental block sewers in Co. Sewer Dist. 5, 3 allotments. $40,000; 6 mi. vitr. clay or segmental block sewers in Co. Sewer Dist. 13, $70,000. E. D. Barstow, 226 Ohio Bldg., co. engr.

O., Canton—See "Miscellaneous."

O., Cleveland—Nov. 7, to vote on $3,000,000 bonds for brick, steel and concrete sewage disposal plant. G. B. Gascoigne, City Hall, engr.

O., West Park—Nov. 7, to vote on $400,000 bonds for sewerage system and sewage disposal plant. J. Reitz, City Hall, engr.

Ill., East St. Louis—Plans 18 mi. sewers in Lansdowne Dist., 1,250 ft. 54 in., 2,250 ft. 42 in., 1,500 ft. 36 in., 650 ft. 33 in., 4,450 ft. 30 in., 1,950 ft. 27 in. and 10,780 ft. 24 in. concrete pipe; 1,000 ft. 20 in., 5,560 ft. 18 in., 6,700 ft. 15 in., 8,880 ft. 12 in. 14,050 ft. 10 in. and 33,700 ft. 8 in. vitr clay pipe. $504,000. May not mature for 2 or 3 years. E. F. Harper, City Hall, engr.

Wis., Marshfield—Having plans prepared sanitary and storm sewers, incl. septic tank. $25,000. G. Leonard, clk. T. Pankow, Washington Bldg., Madison, engr.

Wis., Milton—See "Waterworks."

Minn., Rochester—Plans sewage disposal plant. $125,000. C. H. Armstrong, city engr.

S. D., Leola — Having plans prepared sanitary sewerage system and disposal plant. $25,000. Cory & LeCocq, Aberdeen, engrs.

Wyo., Laramie—Soon receives bids 44,000 ft. 8 to 36 in. trunk sewers $160,000 E. K. Nelson, city engr.

Mo., Paris—Takes bids within 20-30 days addition to sewerage system, vitr. clay. $27,000. R. W. Rollins & Co., 521 Ry. Exch. Bldg., Kansas City, engrs.

Tex., Tulia—Voted $30,000 bond issue for sewerage extensions and improvements. Address Mayor. Noted Sept. 21.

Okla., Cushing—See "Waterworks.

Okla., Guthrie—V. V. Long & Co., engrs., 1300 Colcord Bldg., Oklahoma City, submitted estimates of cost for sewerage system $18,000; waterworks $16,000. G. Anderson, clk.

Okla., Shattuck—Had plans prepared for sewer laterals. $45,000. H. G. Olmsted & Co., 415 Oil Exch. Bldg., Oklahoma City, engrs. Noted May 4.

Colo., Denver—Takes bids after Dec. 15, Eastern Capitol Hill special sanitary sewer, 34,000 ft. 8-12 in. vitr. pipe. $34,300. A. K. Vickery, City Hall, engr.

N. M., Santa Fe—Making plans complete sewage plant. $115,000. H. F. Gray, Santa Fe (street address not available), engr.

Calif., Lodi—Plan election to vote on $100,000 bonds for sewage disposal plant. C. F. Smith, 7 Nottingham St., Berkeley, engr. Noted May 11.

Calif., Paso Robles—City trustees plan sewers in 33 blocks.

Ont., Sandwich—Having plans prepared sewage disposal plant. $150,000. Prices wanted on all materials. McColl & Patterson, Gas Bldg., Windsor, engrs.

BIDS DESIRED

N. J., Hillside — Nov. 8, by Township Clerk 12,000 ft. 12-45 in. tile and concrete sewers, 75 manholes and 65 catch basins. $200,000. W. H. Luster, 286 North Broad St., Elizabeth, engr.

D. C., Wash.—Nov. 13, by Washington Suburban Sanitary Comn., Evans Bldg., New York Ave., for sewer in Mt. Rainier and vicinity, Contr. 33-S. R. B. Morse, Hyattsville, Md., ch. engr. of district; adv. this issue.

O., Cleveland Heights (Warrensville P. O.)—Nov. 6, vitr. storm and sanitary sewer in Ardmore Sewer Dist. To exceed $25,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs

O., Garfield Heights (Cleveland P. O.)—Nov. 13, sewers in 7 streets and c.i. mains in 3 streets. To exceed $25,000. R. F. Munz, Turney Rd., engr.

Sewers (Continued)

BIDS RECEIVED

N. Y., **New York** — H. Bruckner, pres. Bronx Boro, Tremont and 3rd Aves., opened bids Oct. 24, sewers in (1) Waterbury Ave. (2) Odell St. (3) Laconia Ave., from Anita Constr. Co., 2975 Marion Ave., (1) $7,172 (2) $4,633; Knight & Demico, 448 East Tremont Ave., (1) $7,367; B. T. McDonald, (1) $7,449; J. B. Timmoney Co., 320 East 201st St., (2) $4,574; J. L. Sigretto, Woodhaven, (2) $4,700 (3) $155,585; J. B. La Marsh, La Salle and Gelespie Aves., (3) $138,888; Clementi Contg. Co., 1195 Spoffard St., (3) $157,301. Noted Oct. 19.

N. J., **Dover** — Bd. Aldermen and Bd. Sewerage, Municipal Bldg., North Sussex St., opened bids Oct. 23, (a) tile (b) concrete sewers and appurtenances, from C. F. Goeringer Constr, Co., 51 South Washington St., Wilkes-Barre, Pa., (a) $388,164 (b) $379,497; C. Ippolito, 252 Main St., Orange, (a) $421,881 (b) $407,933; Interstate Constr. Co., 52 Van Ripen Ave., Jersey City, (a) $422,262 (b) $410,338. Noted Oct. 5.

Mich., **Detroit**—Brick or monolithic concrete sewers in (1) Southern Ave. Arm of Lonyo Rd. Sewer, (2) Lawton Ave. Arm of Morrell St. Sewer, from W. Blanck Co., 823 Ford Bldg., (1) $36,244; J. Porath, 745 Griswold St., (1) $39,464 (2) $37,606; J. A. Mercier, 216 Hammond Bldg., (1) $33,723 (2) $34,941; R. D. Baker, 1631 Elmhurst Ave., (2) $37,695.

Mich., **Springwells** — Opened bids (1) Sect. 16 Barclay Ave. Trunk Extension, (2) Sect. 17 Maple Rd. Sewer, (3) Sect. 18 Dix Ave. Sewer, (4) Sect. 19, Eagle Rd. and Ford Ave. Sewers, from R. A. Mercier, 5435 Wesson Ave., Detroit, (1) $145,000; J. Porath, 745 Griswold St., Detroit, (1) $148,900; Gass-Thurston Co., 1520 15th St., Detroit, (1) $151,000; Liberty Constr. Co., 1026 Book Bldg., Detroit, (2) $8,359, (3) $19,638, (4) $9,956; A. Rossi, 5585 Pennsylvania Ave., Detroit, (2) $8,570; W. Porath, 35 McGraw Bldg., Detroit, (2) $11,120, (3) $22,734, (4) $12,477; Hammen & Co., 4612 Woodward Ave., Detroit, (3) $23,612, (4) $14,878. Noted Oct. 19.

Neb., **Omaha**—Sewers in Dist. 780, Victor St. between Bancroft, Dorcas, 5th and 6th Sts., 8,830 lin.ft. 8 to 36 in. pipe, from Kruse Constr. Co., Spencer, Ia., $22,066, H. J. Petersen Co., 403 Farnam Bldg., $22,570, Omaha Sewer Constr. Co., 4535 Parker St., $26,855; in Dist. 770, Pacific St. from 52nd to 55th Sts., 335 ft. 8 in. and 335 ft. 15 in. pipe, from J. Jensen, 2625 Wirt St., $828; in Dist. 778, 2nd St. from Hickory to Cedars Sts., 315 ft. of 18 in. pipe, etc., from G. Carlson, 2449 Larimore Ave., $2,603, H. J. Petersen, 403 Farnham Bldg., $2,699, E. P. Donahue, 306 Lincoln Blvd., $2,763.

Mo., **Maplewood**—For 29,018 ft. 8-36 in. vitr. clay and 1,100 ft. segmental block sewers, draining 135 acres land in southwest Maplewood, 31,400 cu.yd. earth trenching, 1,189 cu.yd. macadam, 98,681 lb. c.i. manhole frames and covers, etc., from A. Lewald, 5909 Ethel Ave., St. Louis, $169,689; E. A. Yahr, Antigo, Wis., $169,919; J. Walker Contg. Co., Cleveland, O. (street address not available), $192,000. Engrs. est. $172,000.

CONTRACTS AWARDED

N. Y., **Buffalo**—For 27 in. tile sewer in Hewitt Ave., to Dark & Co., 654 Main St., $8,783; 10-15 in. tile sewer in East Hertel Ave. and 10-24 in. tile sewer in Lenox Ave., to J. M. Fahning, 460 Leroy Ave., $4,283 and $2,418 respectively; 10-20 in. tile sewer in Parkridge Ave. and 10-15 in. tile sewer in Cornwall Ave., to L. Di Pasquale, Buffalo (street address not available), $5,315 and $5,803 respectively.

N. Y., **Rochester**—For 1,910 ft. 15-24 in. vitr. tile and 1,477 ft. 34-60 in. segmental block sewer in Mt. Read Blvd., Otis St. and Lyell Ave., to Rochester Foundation Co., 205 E and B Bldg., $66,339, engrs. est. $88,552; 1,642 ft. 12 in. sewer in Acorn St., to W. E. Kinney Co., 62 State St., $14,424; 400 ft. 12 in. sewer in Ravenwood Ave., to J. Petrossi & Co., 401 Elwood Bldg., $3,372; 1,135 ft. 12 in. sewer in Woodbine Ave., to J. Passero, $6,099.

N. Y., **Rochester** — See "Streets and Roads."

O., **Cleveland**—For 740 ft. of 5 ft. and 700 ft. 4 ft. circular brick and 380 ft. 12-24 in. vitr. tile sewer in Bessemer Ave., to P. W. Graham, 1274 West 108th St., $46,679; 275 ft. 24 in. vitr. tile sewer in Lake Shore Blvd., to Kassouff & Co., 3182 West 25th St., $4,168. Noted Oct. 26.

O., **Cleveland Heights** (Warrensville P. O.)—Sewers in South Compton and Ridgefield Rds., to B. H. Whittaker, 335 The Arcade, Cleveland, $8,110, Hyde Park and Blanch Rds., to Patermo & Consolo, 14110 Benwood Ave., Cleveland, $35,821; water mains in Blanch, South Compton and Hyde Parks Rds., to B. H. Whittaker, 335 The Arcade, Cleveland, $17,262. Noted Oct. 12.

O., **Maple Heights** (Worthington P. O.)—Sewers in Bway., to Hadded-Mall Co., Schofield Bldg., Cleveland, $166,954. Noted Oct. 26.

Ind., **Hammond**—Constructing north side system, 24 to 84 in. sewers, to United Constr. Co., Hammond, $846,596; south side system, 54 to 108 in. sewers, to Proudfoot Constr. Co., 127 North Dearborn St., Chicago, $423,784; 24 to 30 in. sewers in South Hohman St., to Public Constr. Co., Hammond, $42,258; system of 8 to 27 in. sewers, to J. J. Nejdl, Whiting, $37,762.

Ill., **Galva**—Constructing sewerage system and remodeling disposal plant, to Natl. Constr. Co., 309 Putnam Bldg., Davenport, Ia., $25,000.

Wis., **Ellsworth**—Sanitary sewers in various streets, incl. 25,900 lin.ft. 8-12 in. pipe, to Camden Constr. Co., c/o J. B. Camden, Benson, Minn., $30,732; 3 Imhoff tanks, etc., to W. L. Oltman and F. H. Johnson, Ellsworth, $16,942. Noted Oct. 5.

Wis., **Milwaukee**—Intercepting sewer in 1st Ave., 3,450 lin.ft. 60 in. plain concrete sewer in tunnel, 1,030 lin.ft. 60 in. concrete sewer in open cut, 970 lin.ft. 60 in. rein.-con. sewer in open cut, also siphon incl. 1,415 ft. 12-30 in. c.i. pipe, etc., to H. Hohensee, Ludington Ave., Wauwatosa, $149,586 and $14,800 respectively.

Neb., **Silver Creek** — Sewerage system incl. 13 x 10 pump house, 2 centrifugal pumps with 5 hp. motors or 1 duplex automatic electric sewage ejector, to H. J. Peterson Co., 403 Federal Reserve Bldg., Omaha. Engrs. est. $28,000. Noted Sept. 14.

N. D., **Hillsboro**—See "Waterworks."

Tex., **Laredo**—For 15,666 ft. 12-24 in. standard vitr. pipe sewers and 33 manholes in 7th Ave. to Janes Constr. Co., San Antonio, (street address not available), $638,430. Noted Oct. 5.

Utah, **Salt Lake City**—City Comrs., 29,000 ft. of 8-18 in. vitr. sewers, Northwest

WATERWORKS—MEMPHIS, TENN.

Following are lowest three bids opened Oct. 6, by Bd. Comrs. Memphis Artesian Water Dept., for rein.-con. reservoir, substructures of pumping station, iron removal plant, etc., Contr. No. 6, (A) D. D. Thomas & Sons, 463 North Dunlap St., (awarded contract); (B) Gauger-Korsmo Constr. Co., St. Paul, Minn.; (C) A. Bentley & Sons Co., Toledo, O. The unit bids were as follows:

	A	B	C
85,000 cu.yd. earth excavation and backfill for structures and general grading	$0.462	$0.58	$0.51
3,500 cu.yd. earth excavation and grading for railroad siding	.462	.45	.38
5,000 cu.yd. earth excavation and backfill for trenches, etc. on site	1.10	2.75	.83
3,000 cu.yd. earth excavation and backfill for trenches, etc.—outside	1.50	2.90	.93
500 cu.yd. earth excavation for foundations below depths shown	3.00	1.25	1.50
55,000 cu.yd. disposal of surplus material from site	.37	.35	.36
6,600 cu.yd. class "A" concrete for reservoir and equalizing basin	13.73	15.49	18.50
5,100 cu.yd. class "A" concrete for substructure of pumping station	14.02	16.49	16.80
310 cu.yd. class "B" concrete for chimney foundations	10.37	14.48	11.00
1,650 cu.yd. class "B" concrete for machinery foundations	10.37	14.48	11.60
100 cu.yd. additional class "B" concrete for foundations	12.72	15.00	10.30
1,200 cu.yd. class "A" concrete for sub. of iron removal plant below elevation 143.0	15.26	16.49	18.30
450 cu.yd. class "A" concrete for super. of iron removal plant above elevation 143.0	22.33	16.49	29.10
1,300 cu.yd. class "A" concrete for conduits, filter tanks and wash water tank	19.59	17.32	21.00
31 cu.yd. class "D" concrete for wash water gutters of iron removal plant	20.00	19.50	71.00
530 cu.yd. class "A" concrete for substructure of aerator below elevation 143.0	15.56	16.49	21.50
100 cu.yd. class "C" concrete for superstructure of aerator above elevation 143.0	23.00	17.32	37.00
25,000 sq.ft. machine surfacing of concrete	.045	.06	.10
1,200,000 lb. steel reinforcement	.036	.0375	.0435
210 tons c.i. pipe B & S	73.23	97.35	70.00
50 tons c. i. pipe, flanged	157.50	132.00	133.40
40 tons c. i. specials B & S	177.75	175.00	221.00
50 tons c. i. specials, flanged	178.50	231.00	252.00
1,000 lin.ft. 42 in. concrete drain	13.05	7.46	6.85
480 lin.ft. 30 in. concrete drain	20.21	4.94	4.30
250 lin.ft. 24 in. vitrified pipe	1.96	5.30	3.30
250 lin.ft. 18 in. vitrified pipe	1.22	3.26	2.15
1,130 lin.ft. 12 in. vitrified pipe	.69	1.81	1.35
640 lin.ft. 8 in. vitrified pipe	.40	1.10	.90
350 lin.ft. 6 in. vitrified pipe	.27	.485	.40
1,020 lin.ft. 4 in. vitrified pipe	.21	.35	.30
Vitrified specials (per cent discount)	List	50%	20%
200 cu.yd. brick masonry	18.00	16.75	23.40
70,000 lb. miscellaneous cast iron	.09	.085	.08
4,000 lb. miscellaneous steel	.05	.094	.14
50M ft. b.m. sheeting and timbering left in place	20.00	20.00	20.00
20,000 lb. steel sheeting left in place	.02	.02	.02
50M ft. b.m. timber for foundations	60.00	65.00	53.00
100 lin.ft. piles	5.00	2.00	2.50
350 cu.yd. broken stone or gravel	3.50	3.90	4.40
Valves (lump sum)	29,109.00 K	22,791.00 CL	23,645.00 K
Valves, alternate (lump sum)	29,319.00 E	31,166.00 R	24,200.00 E
Valves, alternate (lump sum)	29,374.00 CL	27,686.00 Ch	24,200.00 CL
Valves, alternate (lump sum)	36,691.00 Ch	....	29,231.00 M
Valves, alternate (lump sum)	38,549.00 R	....	30,114.00 Ch
Sluice gates (lump sum)	5,648.00 CL	4,380.00 CL	4,014.00 Cf
Sluice gates, alternate (lump sum)	4,915.00 Ch	4,191.00 Ch	4,046.00 C & W
Sluice gates, alternate (lump sum)	....	....	4,485.00 CL
Sluice gates, alternate (lump sum)	....	....	4,590.00 M
3,000 ft. b.m. stop planks	165.00	65.00	122.00
Venturi meters (lump sum)	14,490.00 S	11,555.00 B	12,370.00 S
Venturi meters, alternate (lump sum)	14,496.00 B	11,600.00 S	14,337.00 B
Venturi meters, alternate (lump sum)	....	....	12,584.00 S
Filter rate controllers (lump sum)	12,810.00 S	10,900.00 B	13,460.00 B
Filter rate controllers, alternate (lump sum)	15,737.00 B	....	....
Filter rate controllers, alternate (lump sum)	....	....	....
Engineers office (lump sum)	300.00	350.00	$350.00
160 lin.ft. electric conduit	1.60	.80	1.00
160 lin.ft. steam line	2.00	5.00	3.60
Extended totals Combination 3– Eddy valves, Simplex meters and controllers	$516.718	$544,401	$564,815

Key:—K, Kennedy; E, Eddy; CL, Clow; Ch. Chapman; R. Rensselaer· M, Michigan; C & W, Caldwell & Wilcox; Cf., Coffin; S, Simplex; B, Builders.

Sewers (Continued)

Dist., to J. O'Conner, Utah Savings Bldg., $84,340. Engrs. est. $94,000. Noted Sept. 28.

Ont., Hamilton—G. Coppley, mayor and chn. Bd. Control, storm sewer, up to 36 in., in Kenilworth Ave., to Central Foundation Co., 14 Wellington St., Toronto, $84,994. Noted Oct. 12.

Waste Disposal

PROPOSED WORK

O., Cleveland—City plans 3 story garbage reduction plant, brick, steel and concrete, Canal Rd. $1,000,000. F. E. Osborn, 700 Rose Bldg., engr. Noted Feb. 9.

Bridges

PROPOSED WORK

North Carolina—State Hy. Comn., Raleigh, plans reconstructing bridges over Neuse and Trent Rivers, Craven Co. $25,000. C. M. Upham, Raleigh, state highway engr.

La., Jennings—State Hy. Dept., Redmond Bldg., Baton Rouge, having plans prepared bridge over Mermentau River, here. $225,000. Waddell & Son, 800 Graphic Art Bldg., Kansas City, Mo., consult. engrs.

Kan., Columbus—Comrs. Cherokee Co. soon take bids Marsh arch bridge over Brush Creek, on Spring Valley Rd., one 130 ft. span. $30,000. L. Noftzeger, co. engr.

Kan., Hutchinson — Reno Co. making plans deck girder bridge over Arkansas River, to have twelve 40 ft. spans. $40,000. W. A. Stacey, co. engr.

Kan., Kansas City—Had plans prepared and takes bids about Nov. 16. ¾ mi. rein.-con. viaduct, 30 ft. roadway, two 6 ft. sidewalks, across Rock Island tracks. $750,000. R. L. McAlpine, City Hall Bldg., engr.

S. D., Woonsocket—Sanborn Co. rejected bids opened Sept. 16, bridge on Federal Aid Project 50, Sect. C, over James River, 340 ft. long with center steel truss of 100 ft. Noted Sept. 21.

N. D., Pembina—Pembina Co. plans 500 ft. steel bridge, concrete piers and abutments, over Red River. $26,000. W. W. Felson, co. aud. Engineer not announced.

Mo., St. Louis—Bd. Pub. Serv., 228 City Hall, plans 1,100 ft. concrete bridge, 80 ft., with 550 ft. southern and 200 ft. northern approach to replace old 14th St. viaduct spanning Terminal and Missouri Pacific R.R. tracks, from Chouteau Ave. to Spruce St., etc., 13,200 cu.yd. earth excav., 40,000 lin.ft. concrete piling, 16,400 cu.yd. rein.-con., 1,000 ton reinforcing, 5,400 lin.ft. granite curb, 11,300 sq.yd. granite block paving and 7,000 sq.yd. concrete sidewalks. $595,000. L. R. Bowen, Div. Bridges & Buildings, 301 City Hall, ch. engr.

Ark., De Valls Bluff—State having plans prepared 600 ft. bridge over White River, near here, three 200 ft. spans, 20 ft. roadway, steel, rein.-con. and timber. $150,000. Harrington, Howard & Ash, Orear Leslie Bldg., Kansas City, Mo., engrs.

Idaho, Emmett—Comrs. Gem Co. take bids after Nov. 6, one 75 ft. pony truss and three 20 ft. steel spans, concrete abutments. $25,000.

BIDS DESIRED

New Jersey—Nov. 15, by State Hy. Dept., Trenton, concrete and steel bridge over north branch of Raritan River in municipalities of Bridgewater and Bedminster, Somerset Co. J. L. Vogel, 772 Broad St., Newark, bridge engr.; adv. this issue.

Pa., Phila.—Nov. 29, by Delaware River Bridge Joint Comn. at Room 806, Widener Bldg., 2 main towers of bridge over Delaware River between here and Camden, N. J.; adv. this issue.

Pa., Pittsburgh—Nov. 20, at office J. P. Moore, controller Allegheny Co., Court House, 5th Ave. and Grant St., Bridge 7 over Allegheny River; adv. this issue.

Mich., Detroit—Nov. 7, by Michigan Central R.R. Co., Michigan Central Terminal, fabrication and delivery of steel for Bridge 50.54, air line division.

Colorado—See "Streets and Roads."

BIDS RECEIVED

N. J., Dover—State Hy. Dept., Trenton, opened bids Oct. 24, repairing 1¼ mi. bridge over Barnegat Bay from Seaside Heights to Island Heights, here, from L. J. Seiling, Red Bank, $83,718; R. J. Mansfield, 53 Park Pl., New York City, $85,927; General Contg. & Eng. Co., 40 Rector St., New York City, $88,815. Noted Oct. 12.

North Carolina—State Hy. Dept., Raleigh, rein.-con. bridges and culverts on (1) State Project 152, Hyde Co., (2) State Project 133, Gates and Pasquotank Counties, (3) State Project 254, Lenoir and Pitt Counties, from O. A. Mann & Co., La Grange, Ga., (1) $29,928; C. W. Lacy, Wilmington, (1) $32,512; (2) $36,716; Pittsburgh-Des Moines Steel Co., Curry Bldg., Pittsburgh, Pa., (2) $34,463; Roanoke Iron & Bridge Co., Roanoke, Va., (3) $64,942; Atlantic Bridge Co., Roanoke, Va., (3) $72,900. Noted Oct. 12.

Colo., Pagosa Springs—State Hy. Dept., Denver, opened bids, 125 ft. span through truss steel bridge, graveled approaches, here, from Plains Constr. Co., 424 E & C Bldg., Denver, $30,261; Monarch Eng. Co., Box 1196, Denver, $32,865; Levy Constr. Co., 620 Symes Bldg., Denver, $34,493. Engrs. est. $30,738.

CONTRACTS AWARDED

Miss., Yazoo City—See "Streets and Roads."

Tennessee — State Hy. Dept., Nashville, bridges over 20 ft. span on road from Carthage to Smith Co. line, Project 68, Smith Co., to Phillips, Simpson & McGugin, Stahlman Bldg., Nashville, $61,929.

Mich., Crystal Falls—State Hy. Dept., Lansing, building Bridge 360,205, two span concrete arch, 240 ft. long, 24 ft. roadway, to Smith & Holmes, Crystal Falls, $58,902. Noted Oct. 5.

Ia., Maquoketa—Jackson Co., 36 concrete box culverts and extensions, 3 pony truss spans, rein.-con. abutments, to J. Anderson & Son, Maquoketa, $59,748.

Idaho, Wallace—W. I. Bassett, dist. engr. Bureau Highways, Coeur d'Alene, four 90 ft. steel bridges, concrete substructures, between here and Kellogg, to W. A. Byers, 1204 Mansfield St., Spokane, Wash., $45,032. Noted Oct. 26.

Dams

PROPOSED WORK

Pa., Sharpsville—Sharpsville Improvement Assn., plans large concrete dam at foot of Shenango St., incl. concrete wall and series of flood gates, to exceed $50,000. W. Mertz, pres. Engineer not announced.

Mich., Centerville—O. G. Roehling, 940 Edgecomb Pl., Chicago, Ill., had plans prepared 500 ft. concrete, tile and stone dam across river, 11.6 ft. above river bed, without lock, apron or chute, but to have fish ladder and constructed to accordance with statutes of Michigan.

Ill., Galesburg—See "Waterworks."'

N. D., Mandan—Morton Co. plans 700 ft. concrete and rock dam, 70 ft. high, in Heart River south of Glen Ullin, to irrigate 15,000 acres. $50,000. Engineer not announced.

Tex., Breckenridge — Chamber of Commerce plans to form Improvement District and make surveys for dam site on Clear Fork Brazos River, to irrigate 40,000 acres. J. A. Norris, Austin, State Bd. Water Engr.

CONTRACTS AWARDED

Wis., Laona—Connor Lumber Co., will build steel and rein.-con. dam, by day labor. L. A. DeGuere, Wisconsin Rapids, engr. Noted Oct. 12.

Railways

PROPOSED WORK

Ontario—Niagara, St. Catherine & Toronto Ry., Stamford, plans to completely rebuild local lines, and lines between Port Dalhousie and Stamford, incl. pavement between tracks. $2,000,000. E. J. Oliver, genl. mgr.

BIDS RECEIVED

New York—Transit Comn., 49 Lafayette St., New York City, opened bids Oct. 26, constructing Sect. 3 of Route 52, part of Rapid Transit R.R., Flushing Route, from Oakdale Contg. Co., Harris & East Aves., Long Island City, $1,635,990; F. L. Cranford, 149 Remsen St., Brooklyn, $1,753,000; J. Schlesinger, Inc., 259 West 30th St., New York City, $1,795,375. Noted Oct. 19.

Excavation, Drainage, Irrigation

PROPOSED WORK

Wis., Kenosha—Kenosha Co. Drainage Bd. excavating and laying 9,200 lin.ft. 8-24 in. tile and drain pipe. $20,000-$25,000. W. E. O'Brien, Courthouse Annex, engr.

Wis., Woodworth — Kenosha Co. Farm Drainage Bd. making plans excavating and laying 9,200 ft. 8-24 in. tile drain. $25,000. J. Edwards, Woodworth, Secy. W. E. O'Brein, Courthouse Annex, Kenosha, engr.

Mo., Alexandria—Des Moines & Mississippi Levee Dist. 1, Clark Co. [illegible] having surveys made enlarging and extending present ditch system and constructing pumping plant to protect 12,000 acres land from Mississippi and Fox River overflow. $250,000. Morgan Eng. Co., Goodwyn Institute, Memphis, Tenn., engrs.

Tex., Breckenridge—See "Dams."

Wash., Dayton—Cities of Dayton and Pomeroy plan irrigating 25,000 acres land at cost of $75 to $80 per acre. 16 mi. concrete and steel flume, 2,400 ft. and 700 ft. tunnels, 2 large syphons, water to be diverted from Tucannon River. $2,000,000. J. Strack, Ziegler Bldg., Spokane, engr.

Wash., Wenatchee—Greater Wenatchee Irrigation Co. plans irrigating 26,000 acres land, water to be carried up Columbia River as far at Brays and up Moses Coulee. $1,300,000. Engineer not selected.

Calif., Banning — San Gorgonia Power Co. had plans prepared 8,410 lin.ft. canal, 3 ft. wide, 2 ft. deep, concrete lined, forebay for power houses, storing 121,000 a.c. ft., 2 power plants as follows: No. 1, fall of 1,774 ft., 16 sec.ft., through penstocks. No. 2, fall of 898 ft., 4,857 hp. to be developed. W. L. Huber, 1st Natl. Bank Bldg., San Francisco, engr.

Ont., Loiselleville—Council of Sandwich South Twp. plans to raise $75,000 for drainage work. J. McAuliffe, Oldcastle, twp. clk.

BIDS DESIRED

Ala., Mobile—City Comrs. receiving bids main canal, 6 ft. deep, 30 ft. wide, running from tide water of Dog River to near the government street road, near Sage Ave., draining 6,000 acres, also 3 small canals from north, west and southwest into Dog River. $70,000. S. M. Adams, Mobile, engr.

La., Lake Providence—Nov. 15, by Bd. Comrs. Tensas Bayou D.D., excavating Tensas Bayou Canal as outlet canal for Tensas Bayou D.D., 3rd D.D. and 1st and 2nd Wards D.D., also 3 laterals canals in Tensas Bayou D.D., incl. 1,600,000 cu.yd. excav. J. R. Adams, Lake Providence, engr.

Ariz., Maricopa—Nov. 10 by Dirs. Maricopa Irrigation Dist., furnishing labor, material and construction of necessary machinery and equipment and installation of general irrigation system, incl. drilling approximately 17 single wells and 36 batteries of 3 wells each, construction and concrete lining necessary shafts, pumping chambers and connecting tunnels, construction of derricks, towers, housing, furnishing and installing pumps and motors, will all wiring, switching and appurtenances for 23 single wells and 37 batteries of 3 wells each, construction 51 mi. 11,000 volt transmission line, installation 60 pole type transformer stations, complete with transformers, lightning arresters, switches, etc. and excavation of approximately 74 mi. distributing ditches. D. H. Smith, secy. H. S. Reed and S. K. Baker, 419 Fleming Bldg., Phoenix, engrs.

BIDS RECEIVED

Minn., Minneapolis—Bd. Park Comrs., City Hall, dredging Lake Calhoun and filling lowland and neighboring boulevards, 85,500 cu.yd. sand shore dykes, 264,400 cu.yd. sand fill, 312,200 cu.yd. mud fill, from A. R. Thayer, 1003 St. Clair St., St. Paul, $136,639; Minneapolis Dredging Co., Metropolitan Life Bldg., $148,539; La Crosse Dredging Co., 405 Plymouth Bldg., $153,191. Noted Sept. 21.

CONTRACTS AWARDED

S. C., Kingstree—Comrs. Williamsburg, Florence and Clarendon Counties, 1,250,000 cu.yd. earth excav., to E. J. Doane & Sons, Mason, Mich., $150,000. Noted Sept. 21.

Ind., Hammond—Constructing new pumping station for new north and south side system, to Ahlborn & Bates, Hammond. $227,324.

Ind., Terre Haute—Constructing Gundy Run Drainage System, to J. P. Babcock, Paris, Ill., $0.143 per cu.yd.

S. D., Yankton—Yankton Co., Missouri River Drain Dist. 1, incl. 12 current retards, 600 lin.ft., to Woods Bros. Constr. Co., Lincoln, (street address not available), $30,000.

Mont., Columbus—Stillwater Co. rebuilding 55 mi. Cove Ditch, to J. Gibson, Fromberg, $55,000.

Streets and Roads

PROPOSED WORK

Pa., Oil City—Plans paving Central Ave. and Butler Alley. $25,000. W. Weber, city engr.

Md., Baltimore—Plans grading and paving Ethland Ave., Southern Ave. from Eloise to Edna Aves., Halcyon Park Rd. from Eloise Ave. to alley east of Edna Ave., Clarendon Ave. from Kathland Rd. to point 185 ft. north, Meriwent Ave. from Clarendon Ave. to Hillsdale Rd., Blythewood Rd. from Charles St. to Wyndhurst Ave. H. G. Perring, city engr. R. K. Compton, 214 East Lexington St., chn. paving com.

North Carolina—State Hy. Dept., Raleigh, plans grading and surfacing 6 mi. road from Lilling to Mamers, Project 440, Harnett Co., $35,000, 19 mi. road from Oxford to Durham Co. line, Project 432, Granville Co., $100,000, 5 mi. road from Franklinton to Vance Co. line, Project 422, Franklin Co., $30,000, 9.8 mi. road from Braggtown to Granville Co. line, Project 413, Durham Co., $50,000, 12 mi. road from Henderson to Franklin Co. line, Project 474, Vance Co., $60,000, 8.5 mi. Macon-Littleton Rd., Project 496, Warren Co., $43,000, 8.58 mi. road from Muddy Creek to Danbury, Project 750 B, Stokes Co., 11 mi. Waynesville-Canton Rd., Project 944, Haywood Co., $60,000; grading and concrete or asphaltic paving 2 mi. road from Roxboro north toward Virginia State Line, Project 465, Person Co., $60,000, 10 mi. road from Neuse River to Franklin Co. line, Project 488, Wake Co., $300,000, 5.5 mi. road from Raleigh east to Neuse River, Project 487, Wake Co., $154,000; clearing, grading and topsoiling 13.5 mi. road from Wake Co. line to Wilson Co. line, Project 164, Nash and Johnson Counties, $67,500; 9 ft. concrete or asphaltic paving 13.5 mi. Winton-Gatesville Rd., Project 131 B, Gates and Hertford Counties, $189,000, 10.9 mi. Gatesville-Sunbury Rd., Project 132 B, Gates Co., $154,000; 16 ft. concrete or asphaltic paving 15 mi. Greenville-Beaufort Rd., Project 185 B, Pitt Co., $433,500; re-surfacing with asphalt 20 mi. Mamers-Sanford Rd., Project 444, Lee and Harnett Counties, $25,000; reconstructing 7.5 mi. brick road between New Bern, Pollocksville and Bridgeton Rd., Craven Co., $35,000; grading and surfacing 10 mi. Pittsboro-Lee Co. line Rd., also bridge over Deep River, Project 404, Chatham Co., $70,000, 19.5 mi. Silver City-Lee Co. line Rd., and bridge over Deep River, Project 405, Chatham Co., $120,000. C. M. Upham, state highway engr.

North Carolina—State Hy. Dept., Raleigh, received no bids Oct. 25, grading and concrete or asphaltic paving 9.89 mi. road, Project 113 B, Chowan Co., $114,580. Will readvertise. C. M. Upham, state highway engr. Noted Oct. 12.

Fla., Stark—Bradford Co. having plans prepared 12 mi. Sanderson Rd. from Stark to Redding Bridge, $48,000; 7 mi. Lawtry-Raiford Rd., $28,000; 7 mi. road from Brooker to Wynn farm via Graham, $28,000. E. R. Neff, Stark, engr.

Tenn., Shelbyville—H. B. Cowan, mayor, rejected bids improving various streets. Noted Oct. 19.

O., Canton—See "Miscellaneous."

Michigan—State Hy. Dept., Lansing, soon takes bids grading and gravel surfacing 4 mi. Assessment Dist. Rd. 283, Branch and Hillsdale Counties, and 4 mi. Assessment Dist. Rd. 326, Branch Co. F. F. Rogers, state highway comr.

Mich., Detroit—Plans grading and paving with 3½ in. sheet asphalt on 8 in. concrete 2,450 sq.yd. Reeder Ave. from Junction to Cavalry Aves., 26 ft., $17,470; with one course concrete on 6 in. concrete, 6,000 sq.yd. alley between Garland, St. Clair, Mack and Canfield Aves., 18 ft., $15,660, 3,000 sq.yd. alley between Maxwell, Seminole, Warren and Moffat Aves., 20 ft., $5,100, 700 sq.yd. alley between Mitchell, McDougall, Willis and Canfield Aves., 18 ft., $1,890. J. W. Reid, city engr.

Ill., East St. Louis—Making plans asphalt paving 2,000 ft. St. Clair Ave. from 1st to Collinsville Ave., 50-60 ft., 8,940 sq.yd. asphalt on present brick. $35,730. E. F. Harper, City Hall, engr.

Ill., Sparta—Making plans paving, $500,000. Bruce & Grupe, 408 Finance Bldg., Omaha, Neb., engrs.

Ill., Vandalia—Making survey grading, paving and curbing 3,500 ft. Main St., 30 ft., 7,000 lin.ft. curbing. Will start work in spring. $40,000. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, Mo., engr

Wis., Mayville—Having plans prepared improving Horicon, School, Williams and Allen Sts., 25,000 sq.yd. concrete, concrete curb and gutter. $30,000. J. Donohue Co., 608 North 8th St., Sheboygan, engrs.

Ia., Anita—Takes bids about Jan. 1, 40,000 sq.yd. paving, vitr. brick, asphalt, asphaltic concrete, artificial stone or macadam. Bruce & Grupe, 408 Finance Bldg., Omaha, Neb., engrs.

Ia., Chariton—Making plans paving 15 blocks. $50,000. Price & McCormick, 215 Securities Bldg., Des Moines, engrs.

Minn., St. Paul—Plans paving Berkeley, Stanford, Jefferson and Wellesley Sts. from Frederick to Fairview Aves. $36,496. O. Claussen, city engr.

Kan., Columbus—Comrs. Cherokee Co. soon take bids concrete paving 4.6 mi. Spring Valley Rd., Federal Aid Project 142, 18 ft. $200,000. L. Noftzeger, co. engr.

Kan., Girard—Comrs. Crawford Co. soon take bids paving 0.942 mi. Arcadia Branch of Commercial Highway, 18 ft., Concrete or brick. $35,000. C. M. Cooper, co. engr.

Kan., Independence—Comrs. Montgomery Co. soon take bids bituminous macadam paving 9.3 mi. Independence-Caney Rd., Project 121, Sects. A and D, 18 ft. $300,000. H. K. Hibbard, co. engr.

Neb., Omaha—City takes bids between Dec. 1 and Jan. 1, constructing 18th and 19th Sts. from M to I Sts.; 20th St. from Missouri Ave. to G St.; 21st St. from G to J Sts., 22nd St. from J to N Sts.; 23rd St. from J to A Sts.; 26th and 27th Sts. from N to L Sts.; 33rd and 34th Sts. from Martha to Center Sts.; Castelar St. from 13th to 15th Sts.; F St. from 21st to 27th Sts.; Francis St. from 32nd Ave. to 34th St.; G St. from 19th to 25th Sts.; H St. from 21st to 24th Sts.; I St. from 18th to 25th Sts.; J St. from 18th to 22nd Sts.; M St. from 27th St. to Union Pacific right of way; Park Ave. from Farnam St. to Dewey Ave.; Poppleton Ave. from 28th St. to 29th Ave.; Railroad Ave. north to south line of Blk. 8 south side; Spencer St. from 16th to 24th Sts. $250,000. H. Beal, city engr.

Missouri—State Hy. Dept., Jefferson City, plans 3.953 mi. road from Pleasant Hill to Strasburg, 24 ft., State Aid Project 20.174, Cass Co., 18,968 cu.yd. earth excav., 1,587 cu.yd. borrow, 255.8 cu.yd. concrete masonry, etc.; 3.532 mi. road north, south, east and west of Nodaway, 24 ft., State Aid Project 20.209, Nodaway Co., 17,462 cu.yd. earth excav., 1,657 cu.yd. borrow, 133.4 cu.yd. concrete masonry, etc.; 3.087 mi. road north and south from Neosho, 24 ft., State Aid Project 20.192, Newton Co., 9,985 cu.yd. earth excav., 4,900 cu.yd. borrow, 117.1 cu.yd. concrete masonry etc.; 7.119 mi. road north, south, east and west, 24 ft., State Aid Project 20,127, Boone Co., 38,786 cu.yd. earth and 583 cu.yd. rock excav., 4,972 cu.yd. borrow, 190 cu.yd. concrete masonry, etc.; 4.127 mi. road from Lowery to Osceola, 24 ft., State Aid Project 20.176, St. Clair Co., 11,075 cu.yd. earth and 1,370 cu.yd. rock excav., 989 cu.yd. borrow, 32.3 cu.yd. concrete masonry, etc.; 4.452 mi. road east, west, north and south, 24 ft., State Aid Project 20.186, Andrew Co., 32,241 cu.yd. earth excav., 2,864 cu.yd. borrow, 60.5 cu.yd. concrete masonry, etc.; 3.178 mi. road from St. Charles to West Alton, State Aid Project 20.220, St. Charles Co., 16,784 lin. ft. grading, 22,513 sq. yd. specification C gravel pavement, 12 ft.; 6.046 mi. road north and south of Stoddard, Federal Aid Project 197 A, Stoddard Co., 29,776 cu.yd. earth excav., 16,200 cu.yd. borrow, 203.7 cu.yd. concrete masonry, 43,197 sq. yd. specification C gravel pavement, 12 ft., etc.; 3,386 mi. road from Potosi to Steelville, 24 ft., Federal Aid Project 160 A, Washington Co., 26,578 cu.yd. earth and 2,282 cu.yd. rock excav., 1,972 cu.yd. borrow, 257.5 cu.yd. concrete masonry, etc. B. H. Piepmeier, state highway engr.

Mo., Maplewood — Plans constructing 3,100 ft. Greenwood Blvd. from Big Bend Id. to Canterbury, 30 ft., 6,192 lin.ft. integral concrete curb, 5,000 cu.yd. earth excav., 11,000 sq.yd. 8 in. rein.-con. $40,000. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, engr.

Mo., St. Louis—Plans resurfacing 5,202 ft. Clayton St. from Vandeventer St. to Kingshighway, 36 ft., 22,560 sq.yd. asphalt or bitulithic, etc. $57,200. W. W. Horner, 300 City Hall, engr.

Tex., Bay City—Nov. 25, to vote on $2,000,000 bond issue for highway improvements and road construction in Matagorda Co., which if voted, will take up all district bond issues that may have been voted. J. C. Carrington, co. engr.

Tex., Beaumont — Submitted $350,000 bond issue to Attorney Generals Dept., Austin, for approval, extensive street improvements. A. Fulweiler, city engr.

Tex., Dallas — Making plans widening, paving and extending St. Paul St. from Commerce to Marilla Sts., 50 ft. $308,000. G. Fairtrace, city engr. E. A. Wood, city plan engr.

Tex., Dallas—Dallas Co. having plans prepared and takes bids about December improving 12.6 mi. Richardson Rd., State Highway 6, 18-20 ft., $500,000; takes bids about January grading and bituminous surfacing 5 mi. Bonnie View Rd., 18 ft., $75,000, 13 mi. Beckley Rd., 18 ft., $150,000; 4 mi. West Dallas-West Moreland Rd., 18 ft., $60,000. Nagle-Witt-Rollins, Courthouse, engrs.

Tex., Houston—Harris Co. plans to vote on $890,000 bond issue for grading and concrete surfacing 17.8 mi. La Porte Rd. from Galveston Pike to La Porte, 18 ft., incl. bridges over Simms and Vina Bayou; $540,000 bond issue for 12 mi. road between Ureka and Cypress, 18 ft. Howe & Wise, 211 First Natl. Bank Bldg., engrs.

Tex., Palestine—Nov. 21, to vote on $1,500,000 bond isue for 2 main trunk highways, north, south, east and west through Anderson Co. C. R. Stewart, co. judge.

Tex., Paris—Lamar Co. making plans gravel surfacing 9.9 mi. State Highway 19 north of here, 12 ft. $63,500. A. J. Goode, co. engr.

Tex., Terrell—Nov. 14, to vote on $35,000 bond issue for highway improvements in Terrell Rd. Dist., in Kaufman Co., incl. State Highway 15. L. M. Ferlet, Terrell, engr.

Calif., Fresno—Supervs. Fresno Co. rejected bids improving 2.14 mi. Mountain Rd., 3 mi. northeast of Auberry. Noted Oct. 26.

Calif., Oakland—Had plans prepared grading and paving 13th St. between East 16th and 38th Sts., 172,013 sq. ft. grading, 163,055 sq. ft. asphaltic concrete pavement, 1,082 lin. ft. concrete curb, steel guard and 6,214 lin. ft. without guard, etc. W. W. Harmon, city engr.

Ontario—See "Railways."

Ont., Ancaster—Plans concrete pavement on Bway. $35,000. J. Moffatt, chn. com.

Ont., Hamilton—Having plans prepared asphalt pavement on Park Row from Main St. to pipe line. $42,000. E. R. Gray, city engr.

Ont., Port Dover—Having plans prepared concrete pavements on Main St. $50,000. Prices wanted on all materials. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

BIDS DESIRED

N. Y., New York—Nov. 10, by J. Miller, pres. Manhattan Boro, Municipal Bldg., repaving 27th St. from 1st to 3rd Aves., 30th St. from 2nd to 4th Aves., both sheet asphalt on concrete, Mulberry St. at intersection with Prince St. and Mott St. at intersections with Grand, Broome, Spring and Prince Sts., both granite block on concrete; grading Chittenden Ave. from Northern Ave. to point about 190 ft. westerly therefrom and the easterly 20 ft. from this point to point 87 ft. south of West 187th St., etc.; grading, curbing and flagging Pinehurst Ave. from West 183rd to West 181st St. also sewer in Pinehurst Ave. between West 181st to West 183rd Sts.

N. J., Bernardsville—Nov. 17, by Bernard Twp. Com. at office of F. P. Bowman, clk., constructing Sect. 1 Claremont-Post-Kunhardt (Mine Mt.) Rd. F. S. Tainter, twp. engr.; adv. this issue.

N. J., Newton—Nov. 21, by Sussex Co. grading Fredon Stillwater Rd. in Fredon Twp. H. Snook, co. engr.; adv. this issue.

Pa., Ebensburg — Nov. 6, by Supervs. Jackson Twp., c/o H. T. Jones, controller Cambria Co., paving 5,800 ft. Route 52, Jackson Twp. Highway, vitr. brick blocks on combination concrete base and curb, or 2 course rein.-con. $40,000. A. B. Curry, Trust Bldg., Johnstown, engr.

West Virginia — Nov. 14, by State Rd. Comn., Charleston, constructing Projects 3151 and 3152, Boone Co.; Projects 123 and 3133, Raleigh Co.; Project 3051, Pocahontas Co.; Project 3047, Nicholas Co.; Project 3054, Summers Co.; Project 3170, Clay Co.; Projects 3057 and 3138, Mason Co.; Project 3060 A, Mercer Co.; Project 3061, Wayne Co.; Project 3062, Wyoming Co.; Project 3076 B, Calhoun Co.; Project 3067, Wirt Co.; Project 3021 B, Webster Co.; Project 3111, Gilmer Co.; Project 3154, Upshur Co.; Project 3149, Grant Co.; Project 3012, Hampshire Co.; Project 3107, Mineral Co.; Project 3028, Berkeley Co. E. B. Carskadon, secy.; adv. this issue.

N. C., Washington—Nov. 27, by Beaufort Co. Rd. Comn., paving 6.8 mi. Chocowinity-Aurora Rd., asphalt or concrete. F. C. Kugler, chn.; adv. this issue.

Streets and Roads (Continued)

N. C., Wilmington — Nov. 23, by R. C. Cantwell, Comrs. Pub. Wks., 75,000 sq.yd. hard surfacing. Carolina Eng. Co., 412 Southern Bldg., engrs.; adv. this issue.

S. C., Greenville—Nov. 16, by Greenville Co. Hy. Comn., topsoiling 15 mi. Jones Gap Rd. between Cleveland and North Carolina line. $155,000.

S. C., St. George—Nov. 9, by Dorchester Co. Hy. Comn., constructing 4 mi. State Route 27, between Dorange and Reevesville, 39,000 cu.yd excav., 9,800 cu.yd. sand clay surfacing, also bridge work consisting of five 22 ft. bents, 150 cu.yd. concrete and 29,000 lb. reinforcing.

Florida—Nov. 14, by State Hy. Dept., Tallahassee, constructing 11.6 mi. Rd. 1 between Lake City and Wellborn, Columbia and Suwannee Counties, alternate bids on 2½ in. penetration macadam on 6 in. rock base, 6-8-6 in. plain concrete, 2 in. bituminous concrete (topeka type), with no binder course on 6 in. rock, 1½ in. sheet asphalt with 1 in. binder course on 6 in. rock. Former bids rejected. W. F. Cocke, state highway engr. Noted Oct. 26.

Louisiana—Nov. 14, by State Hy. Comn., Redmond Bldg., Baton Rouge, surfacing 4.03 mi. Project 372, Crowley-Kaplan Highway, Arcadia Parish, incl. concrete culverts and timber bridges, grading and gravel surfacing 16.1 mi. Project 371, Winnsboro-Vidalia Highway, Franklin Parish. J. M. Fourmy, state engr.

Kentucky—Nov. 9, by State Hy. Comn., Frankfort, shaping and surfacing to width of 16 ft., 0.415 mi. Pineville-Middlesboro Rd. from south corporate limits of Pineville, Sta. 21 plus 87 to Wasiota Bridge, Sta. 43 plus 80, State Project 5, Sect. C, Bell Co., with rock asphalt, waterbound macadam or waterbound macadam, surface treated, 960 cu.yd. unclassified, 466 cu.yd. borrow and 156 cu.yd. solid rock excav., 20 cu.yd. Class B concrete. 1,780 sta.yd. overhaul, 131 cu. yd. cement rubble masonry, 312 ton rock asphalt, 3,899 sq.yd. modified Telford base, 390 ton stone, 548 ton crushed limestone for rock asphalt, 1,218 ton for waterbound macadam, 780 gal. bituminous prime coat, 1,300 gal. cold oil or medium tar special, 49 ton stone chips, etc.; shaping to width of 24 ft. on fills and 28 ft. on cuts, 6.363 mi. Virginia State Line-Lynch Rd., from Virginia State line Sta. 0 plus 00 to end of concrete street in Lynch, Sta. 336 plus 47, State Project 56, Sect. A, Harlan Co., 39 acres clearing, 46,830 cu.yd. earth, 46,835 cu.yd. loose rock, 181,771 cu.yd. solid rock and 4,760 cu.yd. borrow excav., 80,538 sta. yd. overhaul, 1,072 cu.yd. cement rubble masonry, 256 cu.yd. concrete, 42,890 lb. reinforcement, alternate bids on 1,062 lin.ft. 18 in. and 272 lin.ft. 24 in. standard vitr. pipe, 1,018 lin.ft. 18 in. and 448 lin.ft. 24 in. D. S. vitr. pipe, 123 cu.yd. 1:3:6 encasing concrete, or 2,080 lin.ft. 18 in. and 720 lin.ft. 24 in. rein.-con. pipe, or 2,080 lin.ft. 18 in. and 720 lin.ft. 24 in. standard c.i. culvert pipe. J. S. Boggs, state highway engr.

O., Canton—Nov. 10, by G. L. Sickafoose, engr. Stark Co., Court House, paving 1½ mi. Uniontown-Hartville Rd. west of Hartville, 18 ft., brick on concrete; ½ mi. road east of Waynesburg to county line, 18 ft., brick.

O., Columbus—Nov. 7, grading, curbing and paving 1,174 ft. roadway of Chestnut St. from High to 4th Sts., asphalt-granite circles, $26,090, steel circles, $25,990; stone-granite circles, $33,438, steel circles, $33,335. R. H. Simpson, 262 South High St., engr. Noted Sept. 21.

Michigan—Nov. 9, by State Hy. Dept., Lansing, grading and surfacing 4.724 mi. State Trunk Line Rd. 15-12, Sect. A, Menominee Co., 36,418 cu.yd. excav., 44,192 sq.yd. gravel or stone gravel, 16 ft. F. F. Rogers, state highway comr.

Ia., Sumner—Nov. 14, for 58,000 sq. yd. pavement, various types, and 34,000 ft. curb and gutter. Currie Eng. Co., Webster City, engrs.; adv. this issue.

Tex., Ft. Worth—Nov. 7, by City Com., paving West 21st St. from Clinton to Pearl Sts., West 6th St. from Burnett to Throckmorton Sts., 30 ft., 12,100 sq.yd. Unvalde rock asphalt, 3 in. vertical fiber brick or bitulithic, 6,600 ft. curb and gutter. $45,000. D. L. Lewis, city engr.

Tex., Ft. Worth—Nov. 9, by Comrs. Court Tarrant Co., grading and gravel surfacing 5.75 mi. Randol Mill Rd. Project 21, 18 ft. $41,670. R. V. Glenn, Ft. Worth, co. engr.

Tex., Pearsall—Nov. 10, by J. C. Pranglin, judge Frio Co., grading, gravel surfacing and bituminous topping 17.2 mi. Meridian Highway from here to Meridian Co. line, 1,480 cu.yd. concrete, 102,736 cu.yd. earth and 37,000 cu.yd. rock excav., 180,558 sq.yd. 1½ in. bituminous macadam, $283,279; 17.81 mi. Meridian Highway between here and La Salle Co. line, 1,188 cu.yd. concrete, 96,060 cu.yd. roadway, 183,494 sq.yd. 1½ in. bituminous macadam, 5,000 sq.yd. concrete pavement, 74,192 lb. reinforcing, $316,415. J. D. Metcalfe, co. engr. Noted Oct. 5.

Colorado—Nov. 10, by State H. Dept., Denver, concrete paving 4,185 mi. Colorado Springs-Denver Rd. beginning 700 ft. north of Colorado Springs and extending north toward Breed, 18 ft., Federal Aid Project 116-A, El Paso Co., 1 acre clearing, 12,300 cu.yd. borrow fill, 98,000 cu.yd. earth and 16,400 cu.yd. rock excav., 42,000 sq.yd. overhaul, 3,100 cu.yd. gravel shoulders, 837 cu.yd. Class A concrete, 43,776 sq.yd. one course plain cement concrete pavement, 91,710 lb. reinforcing, etc., also bridge over Cottonwood Creek, Sta. 214 plus 60 to 216 plus 72,916 cu.yd. Class A concrete 3,500 lb. structural and 119,400 lb. reinforcing steel, etc. $231,394. L. D. Blauvelt, Denver, state highway engr.

Wash., Spokane—Dec. 22, grading and curbing Gordon Ave. from C to F Sts., $1,800, Belt St. from Montgomery to Dundee Ave., Dundee Ave. from Belt to Hemloch Sts., $1,004; grading Olympic Ave. from Magnolia to Nevada Sts., $2,328; paving Maple St. from 10th to 14th Sts., $8,919; curbing Cleveland Ave. from Washington to Post Sts., $1,887, Mallon Ave. from Cochrane to A Sts., $2,158; curbing and laying sidewalks on Dakota St. from Mission to De Smet Aves., $4,951; grading, curbing and laying sidewalks on Carlisle Ave. from Morton to Hamilton Sts., $3,660; sidewalks on Illinois Ave. from North Center to Morton Sts., $969. A. Butler, City Hall, engr.

Quebec—Dec. 30, by J. L. Boulanger, deputy minister of highways, Quebec, graveling 10½ mi. Beauce Junction-Sherbrooke Highway, in Westbury Twp., Ascot Corner, and Ascot Twp. M. Nectkar, ch. engr.

BIDS RECEIVED

New York—H. S. Sisson, comr. State Hy. Dept., Albany, opened bids Oct. 24, improving (1) 3.57 mi. Highway 8133 Morehouseville-Piseco, Part 3, Hamilton Co., engrs. est. $134,118 (2) 3.71 mi. Highway 8138 Cronomer Valley-Plattekill, Orange Co., engrs. est. $152,864 (3) 2.67 mi. Highway 8137 Lape Corners-Clifton Park, Saratoga Co., engrs. est. $91,930 (4) 2.41 mi. Highway 1632 Cold Spring-Huntington-Ft. Salonga, Part 2, Suffolk Co., engrs. est. $96,816 (5) 0.09 mi. Highway 8066-A, Port Jefferson-Riverhead, Part 3, Suffolk Co., engrs. est. $11,449, reconstructing (6) 2.27 mi. Repair Contr. 3033 Highway 275, Broome Co., engrs. est. $67,433 (7) 3 mi. Repair Contr. 3029 Highway 5207, Chemung Co., engrs. est. $112,101 (8) 3.19 mi. Repair Contr. 3031 Highway 258, Clinton Co., engrs. est. $56,596 (9) 2 mi. Repair Contr. 3032 Highways 315 and 678, Otsego Co., engrs. est. $74,419 (10) 2.5 mi. Repair Contr. 3021 Highway 742, Steuben Co., engrs. est. $80,942 (11) 2.36 mi. Repair Contr. 3035 Highway 5008, Suffolk Co., engrs. est. $76,704 (12) 2.67 mi. Repair Contr. 3034 Highway 5231, Westchester Co., engrs. est. $124,701, from C. J. Burgess Co., Marcy, (1) $130,488. Bricon Constr. Co., Inc., Buffalo (street address not available), (1) $130,518 (8) $50,327. C. D. Murray, 701 Westcott St., Syracuse, (1) $130,868. H. Hull, Highland Mills, (2) $138,792. S. B. Wagenen, Inc., Rondout, (2) $144,583. J. L. Hayes Constr. Co., Inc., 53 South Bway., Yonkers, (2) $148,238. Malloy Constr. Co., 434 State St., Schenectady, (3) $82,945. A. D. Pike Co., North Adams, Mass., (3) $84,629. Collins Bros., Mechanicsville, (3) $87,242. R. W. S. Corp., 30 Church St., New York City, (4) $85,668 (11) $71,457. E. Gould, Brooklyn (street address not available), (4) $90,222 (11) $68,761. Fleming & Sheppard Co., Inc., New York City (street address not available), (4) $94,910. M. J. Rush, New York City (street address not available), (5) $10,302. Awixa Corp., Islip, (5) $11,449. A. Yesu & Son, 27 Carroll St., Binghamton, (6) $65,648. M. H. Ripton, Rochester (street address not available), (6) $66,897, (7) $109,900, (10) $80,047. Dale Eng. Co., Mann Bldg., Utica, (6) $66,933. Wieberg Bros., Buffalo (street address not available), (7) $98,738, (10) $72,192. Horn & Devling, Main St., Galeton, Pa., (7) $107,875, (10) $79,383. Hogeboom & Campfield, Inc., Kingston, (8) $49,204. United Building & Constr. Co., Lodi, N. J., (8) $53,859. Morrell Vrooman, Inc., Gloversville, (9) $73,294. C. Heling Lindenhurst, (11) $72,323. Frederick Roeber Co., Inc., 507 5th Ave., New York City, (12) $118,296. J. J. Bellote & Sons, Troy (street address not available), (12) $118,561. Spadaro Constr. Co., Inc., 827 East 217th St., New York City, (12) $119,7[illegible]. Noted Oct. 5.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids Oct. 25, repaving with asphalt (1) Court St. (2) Franklin Ave., (3) Rockaway Ave. from Brooklyn Alcatraz Co., 407 Hamilton Ave., (1) $10,531, (2) $6,020; Boro Asphalt Co., 1301 Metropolitan Ave., (1) $11,508 (2) $6,682 (3) $20,689; Cranford Co., 52 9th St., (1) $11,350 (2) $6,852 (3) $20,450. Sicilian Asphalt Paving Co., 41 Park Row, New York, (3) $19,182. Noted Oct. 19.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., opened bids Oct. 27, grading and laying sidewalks in (1) Fresh Pond Rd. (2) Woodside Ave., from E. Block, Woodhaven, (1) $12,440 (2) $7,620; Galecor Contg. Co., (1) $15,015; Peace Bros., Inc., 57 North Lawrence St., Flushing, (2) $9,650. Noted Oct. 19.

N. Y., New York — H. Bruckner, pres. Bronx Boro, Tremont and 3rd Aves., opened bids Oct. 24, paving (1) Park Ave., sheet asphalt, grading, setting curb and laying sidewalks, etc., on (2) Norman Ave. (3) Duryea Ave. (4) Pelham Parkway, from C. D. Beckwith, 2875 Bway., (1) $13,096; Interboro Constr. Co., 233 Bway., (1) $13,679; Asphalt Constr. Co., 208 Bway., (1) $13,872; M. DelBalso, 660 East 221st St., (2) $8,283; Burnside Contg. Co., 270 Burnside Ave., (2) $9,774; N. Masceli, (2) $9,987; C. DeBlasio, 339 7th Ave., Mt. Vernon, (3) $3,298; Spadaro & Turriamo, 3185 East Tremont Ave., (3) $3,300 (4) $33,937; J. V. Trousi, (3) $3,380; Ames Building Material Co., 3437 Kingsbridge Rd., (4) $37,745; Kearns Contg. Co., 2306 Creston Ave., (4) $44,078. Noted Oct. 19.

Md., Baltimore — Grading, curbing and surfacing with cement concrete 6 in. thick, 1-2-4 mix, Weaver, Arabia, Batavia, Cottage Aves., Lanvale, Glyndon and Weber Sts., Oksley, Tyndale, Harcourt and Canterbury Rds., from Leonard & Apicella, 224 Albermarle St., $34,521, Arundel Constr. Co., Knickerbocker Bldg., $36,352, G. Long Constr. Co., 13th St. and 1st Ave., $37,690; Kenoak Ave. and Hilltop Rd., from Amer. Paving & Contg. Co., Jenkins Lane, $43,650, Baltimore Asphalt Block & Tile Co., Monroe and Lorman Sts., $44,187, P. Flanigan & Sons, Harford Rd. and 25th St., $44,378.

Fla., Homestead — Improving various streets, (a) 44,500 sq.yd. one course broken stone (b) 17,600 sq.yd. two course broken stone (c) 20,000 sq.yd. first course for penetration (d) 1,500 cu.yd. grading (e) 20,000 sq.yd. one course for penetration, from T. B. McGahey, Miami, (a) $0.43 (b) $0.83 (c) $0.48 (d) $1.15, total $45,068; J. B. Nash, Homestead, (a) $0.51 (b) $0.88, total $47,583; H. L. Clark & Sons, Lemon City, (a) $0.50 (b) $0.88 (d) $1.25 (e) $0.50, total $49,613.

Louisiana—State Hy. Dept., Redmond Bldg., Baton Rouge, opened bids Oct. 17, surfacing 16.07 mi. Federal Aid Project 144, Monroe-Ruston Highway, Sect. B, from Meyer-Greenwall Constr. Co., Meridian, Miss., $122,007, W. H. Harris, Monroe, $128,700.

North Carolina—State Hy. Dept., Raleigh, grading and concrete paving (1) 4.23 mi. Project 101, 16 ft., Beaufort Co., (2) 7.52 mi. Project 901, 18 ft., Buncombe Co., clearing and grading (3) 14.07 mi. Project 133, 30 ft., Gates and Pasquotank Counties, clearing, grading and topsoiling, (4) 10.89 mi. Project 152, 18 ft., Hyde Co., grading, concrete or asphaltic paving and rein.-con. bridges and culverts on (5) 2 mi. Project 105 A, 16 ft., Beaufort Co., grading, concrete paving and rein.-con. bridges and culverts on (6) 5.04 mi. Project 105 B, 16 ft., Beaufort Co., grading and 2 in. asphaltic paving on 5 in. concrete (7) 14.53 mi. Project 220, Duplin Co., (8) 14.22 mi. Project 282, Wayne Co., from Public Service Production Co., Terminal Bldg., Newark, N. J., (1) $129,906 (5) $74,888 (6) $149,365 (7) $359,000 (8) $357,017; Groves Co. & Shepard, Inc., Greenville, (1) $131,965 (5) $78,614 (6) $153,394; Hadlow & McDonald, Jacksonville, Fla., (street address not available) (1) $159,245 (6) $187,142; A. J. Wardrep, Holston Bank Bldg., Knoxville, Tenn., (2) $292,527; J. A. Kreis, Holston Bank Bldg., Knoxville, Tenn., (2) $293,235; Allport Constr. Co., Asheville, (2) $295,609; C. W. Lacy, Wilmington, (3) $91,013 (4) $92,042; O. A. Mann & Co., La Grange, Ga., (4) $68,774; J. L. McGehee Contg. Co., Tarboro, (5) $71,672; Union Paving Co., 30th and Locust Sts., Phila., Pa., (7) $354,612 (8) 354,300; West Constr. Co., Kinston, (7) $369,400 (8) $367,966.

Streets and Roads (Continued)

O., Cleveland—Cuyahoga Co. opened bids Oct. 21, paving Brainard Rd., 22,400 lin.ft. 4 in. vitr. tile pipe gutter, 10,400 cu.yd. earth excav., 21,390 sq.yd. waterbound macadam, engrs. est. $77,513, from Lane & Freeman, Newman-Stern Bldg., $67,244, Scott Bros., Ada, $70,195; River Constr. Co., Schofield Bldg., $70,359; Clague Rd., 13,400 lin.ft. 4 in. vitr. tile pipe gutter, 5,100 cu.yd. earth excav., 12,800 sq.yd. waterbound macadam, engrs. est. $45,065, from Ohio Contg. Co., Elyria, $39,277, Lake Erie Paving Co., Marshall Bldg., $40,226; Bunts Rd., 8,100 lin.ft. 4 in. vitr. tile pipe gutter, 6,500 cu. yd. earth excav., 12,600 sq.yd. asphalt, engrs. est. $72,627, from Cleveland Trinidad Paving Co., The Arcade, $64,295, Highway Constr. Co., Elyria, $64,375.

O., Cleveland — Cuyahoga Co. paving Stearns Rd. 1, 26,465 lin.ft. 4 in. vitr. tile gutter, 10,700 cu.yd. earth excav., 26,405 sq.yd. waterbound macadam penetration, from Ohio Contg. Co., Elyria, $80,425; Lane & Freeman, Newman-Stern Bldg., $85,540. Engrs. est. $94,058.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, opened bids Oct. 24, improving 5,400 ft. Watson Rd. from Southwest to Pernod Aves., from Webb Kunze Constr. Co., 5927 Fyler Ave., $137,745, Fruin Colnon Constr. Co., Merchants Laclede Bldg., $180,342, engrs. est. $121,800; reconstructing Easton Ave. from Marcus Ave. to Kingshighway, (1) removing 9,265 sq.yd. granite block and bed course, (2) recutting 4,630 sq.yd. granite block bedding grout, (3) recutting 4,630 sq.yd. granite block bedding course asphalt filler, (4) 1,125 cu.yd. concrete, etc., from F. A. Stiers Constr. Co., 4500 Enright Ave., (1) $0.50 per sq.yd., (2) $3.20, (3) $3.45, (4) $8.50, total $38,991, S. Krainka Constr. Co., Security Bldg., (1) $0.40, (2) $3.25, (3) $3.40, (4) $9, $39,946, J. E. Perkinson, 237 Carter Ave., (1) $0.50, (2) $3.10, (3) $3.42, (4) $9, $40,228, engrs. est. $33,000. Refund on granite blocks. Noted Oct. 5 and Sept. 28.

South Dakota—State Hy. Comn., Pierre, opened bids grading 4.64 mi. Federal Aid Project 123, Belle Fourche, Butte Co., from E. Parrish, Rapid City, $40,083, C. Cole, Spearfish, $40,802, H. Pickus Constr. Co., 2316 3rd St., Sioux City, Ia., $43,524; bridges on same from E. Wilson, Belle Fourche, $10,750.

Colorado—State Hy. Dept., Denver, concrete paving (a) Topeka pavement, (b) National pavement, (c) cement concrete, 1.003 mi. road extending eastward on Union Pacific Highway from Aurora City limits, Federal Aid Project 225, Adams and Arapahoe Counties, from Miller Douglas & Haines, 100 South York St., Denver, (a) $35,791, (b) $34,790; Colorado Bridge & Constr. Co., Gas & Electric Bldg., Denver, (a) $37,850, (b) $38,350, (c) $30,849; W. F. Pigg & Son, Engineers Bldg., Denver, (c) $30,648, engrs. est. $36,000; gravel surfacing 5.302 mi. road between Grand Valley and De Beque, Federal Aid Project 210 A, Garfield Co., 18 ft., from F. L. Hoffman, 527 Mining Exch. Bldg., Denver, $32,209; Hinman Bros., Kremmling, $34,536; H. Shore, Steamboat Springs, $57,126, engrs. est. $67,921.

Calif., Fresno—Grading and paving Ferger Ave. between Olive and Beltmont Aves., (1) 100,775 sq. ft. grading (2) 83,670 sq. ft. asphalt pavement (3) 9,194 sq. ft. concrete gutter (4) 3,785 sq. ft. concrete curb (5) 17,923 ft. cement walks, from Thompson Bros., Divisadero and G Sts., (1) $0.053 (2) $0.219 (3) $0.33 (4) $0.65 (5) $0.225; California Road and Street Impvt. Co., Bank of Italy Bldg., (1) $0.059 (2) $0.219 (3) $0.35 (4) $0.62 (5) $0.23; Federal Constr. Co., Call Bldg., San Francisco (1) $0.068 (2) $0.229 (3) $0.30 (4) $0.59 (5) $0.23. Noted Sept. 28.

Calif., San Diego—City Council opened bids Oct. 23, improving Fort Stockton Dr., Montecito, Palmetto and Plumosa Ways., Stephens, Randolph and Jackdaw Sts., (a) 79,523 sq.ft. 1½ in. asphaltic concrete on 4 in. cement concrete, (b) 121,558 sq.ft. 1½ in. asphaltic concrete on 2½ in. asphaltic concrete, (c) 6,636 sq.ft. cement concrete sidewalk, (d) 1,327 lin.ft. 8 in. cement concrete curb, (e) 929 lin.ft. 6 in. cement concrete curb, etc., from Fairchild-Gilmore-Wilton Co., 25 14th St., (a) $0.20 (b) $0.16 (c) $0.22 (d) $0.63 (e) $0.62, etc.; G. R. Daley, 4440 Boundary St., (a) $0.209 (b) $0.16 (c) $0.22 (d) $0.65 (e) $0.60, etc.; California Constr. Co., Granger Bldg., (a) $0.22 (b) $0.158 (c) $0.22 (d) $0.70 (e) $0.60, etc. Noted Aug. 10.

CONTRACTS AWARDED

N. Y., New York—Dept. Parks, Municipal Bldg., furnishing and setting curbstones and paving with sheet asphalt roadway of Morningside Dr., to C. D. Beckwith, 2875 Bway., $62,150. Engrs. est. $62,200. Noted Oct. 26.

ROAD WORK—VERMONT

Bids were opened by State Highway Comn., Montpelier, Sept. 22, for constructing 3.24 mi. road in Barton Twp., Federal Aid Project No. 33, (A) D. W. Overocker, Brattleboro (awarded contract); (B) P. C. Ricci, Rutland; (C) Streeter & Sons Co., 1 Glenwood St., Worcester, Mass. The unit bids were as follows:

	A	B	C
19,376 cu.yd. earth excavation including borrow	$0.95	$1.25	$1.40
200 cu.yd. rock excavation	2.00	3.00	5.00
4,897 cu.yd. sub-base of field or quarry stone	2.15	2.50	3.50
200 cu.yd. telford base course	3.50	3.00	3.50
7,040 cu.yd. gravel surface course	2.20	3.25	3.00
7,040 cu.yd. gravel surface course (if crushed)	3.60	4.00	3.60
217 cu.yd. concrete class A (1-2-4)	20.00	20.00	27.50
333 cu.yd. concrete class B (1-2½-5)	16.00	15.00	25.00
6,871 lb. reinforcing steel	.05	.07	.10
5,408 lin.ft. wooden guard rail	.45	.40	.70
276 lin.ft. 12-in. corrugated pipe culvert grade "A"	1.40	1.20	1.75
148 lin.ft. 14-in. corrugated pipe culvert grade "A"	1.60	1.40	2.25
142 lin.ft. 16-in. corrugated pipe culvert grade "A"	1.75	2.00	2.50
142 lin.ft. 12-in. corrugated pipe culvert grade "B"	1.40	1.10	1.75
142 lin.ft. 14-in. corrugated pipe culvert grade "B"	1.60	1.30	2.25
142 lin.ft. 16-in. corrugated pipe culvert grade "B"	1.75	1.75	2.50
142 lin.ft. relaying pipe culvert	1.00	.40	1.00
1,105 lin.ft. standard underdrain	.50	.75	.50
Drop inlets grates	10.00	75.00	25.00
Extended totals	$59,403	$74,248	$87,600

ROAD WORK—WASHINGTON

Following are lowest three bids opened Oct. 3, by State Highway Comn., Olympia, for constructing 20.51 mi. Inland Empire Highway, Kittitas and Yakima Counties, (A) Grant-Smith Co., Henry Bldg., Seattle, (awarded contract); Rajotte-Winters, Inc., Spokane; Pacific Coast Paving Co., Tacoma; 12.21 mi. North Bank Highway, Klickitat Co., (A) K. L. Coulter & Co., Ilwaco, (awarded contract); (B) Grant-Smith Co.; (C) G. H. Atkinson, Portland. The unit bids were as follows:

	A	B	C
20.05 acres clearing	$150.00	$100.00	$125.00
6.40 acres grubbing	200.00	100.00	125.00
23,330 cu.yd. excavation, including haul of 400 ft.	1.20	1.15	1.20
89,770 cu.yd. common excavation, including haul of 400 ft.	.60	.45	.20
135,880 cu.yd. solid rock excavation, including haul of 400 ft.	1.10	1.20	1.40
1,060 cu.yd. structure excavation, including haul of 400 ft.	2.00	1.50	2.60
210 cu.yd. ditch excavation, including haul of 400 ft.	1.00	1.00	2.00
191,380 cu.yd. overhaul on above materials	.05	.04	.03
19,480 cu.yd. gravel surfacing	2.00	1.90	1.50
19,480 cu.yd. crushed rock surfacing (alternate)	2.00	2.10	3.00
851.5 cu.yd. concrete class "B"	25.00	30.00	28.90
52.92 cu.yd. concrete class "C"	24.00	28.00	28.90
55,510 lb. steel reinforcing bars	.08	.06½	.07
Plain concrete pipe, 12 in.	1.50	1.75	3.00
1,332 lin.ft. reinforced-concrete pipe, 18 in.	3.50	3.25	4.00
582 lin.ft. reinforced-concrete pipe, 24 in.	4.00	4.25	6.00
120 lin.ft. reinforced-concrete pipe, 30 in.	5.00	5.25	8.00
715 cu.yd. cement rubble masonry	8.00	10.00	12.00
Hand placed riprap	6.00	3.00	6.00
2,755 lin.ft. guard rail No. 4	1.00	1.00	1.50
115 lin.ft. tunnel, 24x20 in.	40.00	100.00	80.00
Extended totals gravel surfacing	$334,136	$338,867	$339,342
Extended totals crushed rock surfacing	$334,136	$342,763	$368,562

	A	B	C
303,090 cu.yd. common excavation	$0.43	$0.47	$0.45
332,610 cu.yd. solid rock excavation, including haul of 400 ft.	.93	.85	1.12
1,650 cu.yd. structure excavation, including haul of 400 ft.	1.50	2.00	2.00
1,600 cu.yd. ditch excavation, including haul of 400 ft.	.75	1.50	2.00
1,041,850 cu.yd. overhaul on above materials	.02	.05	.02
647.37 cu.yd. concrete class "B"	30.00	33.00	27.00
25.22 cu.yd. concrete class "C"	28.00	33.00	27.00
66,380 lb. steel reinforcing bars	06½	.07	.06
286 lin.ft. plain concrete pipe, 12 in.	1.75	3.50	2.00
1,126 lin.ft. reinforced-concrete pipe, 18 in.	3.00	4.00	3.00
1,378 lin.ft. reinforced-concrete pipe, 24 in.	4.25	5.00	4.00
116 lin.ft. reinforced-concrete pipe, 30 in.	5.50	8.00	6.00
236 lin.ft. reinforced-concrete pipe, 36 in.	7.50	10.00	8.00
100 lin.ft. vitrified clay pipe, 8 in.	75	2.00	1.50
36 lin.ft. vitrified clay pipe, 12 in.	1.50	3.00	2.00
835 cu.yd. cement rubble masonry	10.00	12.00	10.00
36 cu.yd. hand placed riprap	3.00	8.00	5.00
1,000 cu.yd. loose riprap	1.50	2.50	2.00
825 lin.ft. guard rail No. 4	1.00	1.50	1.00
*1,170 cu.yd. structure excavation	1.50	2.50	2.00
*546 cu.yd. concrete class "A"	32.00	33.00	30.00
*595 cu.yd. concrete class "B"	30.00	33.00	28.00
*123,500 lb. steel reinforcing bars	06½	.07	.06
Extended totals	$556,739	$589,032	$624,779

*Concrete bridges.

N. Y., Rochester—Paving 420 ft. Herbert St., asphalt, to J. Frederick & Co., 220 Exch. Pl. Bldg., $6,605; 1,800 ft. Bronson Ave., asphalt, and resurfacing Churchlea Pl., to T. Holohan, 164 Lewis St., $15,405 and $5,034 respectively; 1,375 ft. of asphalt paving, also 500 ft. Violetta St., asphalt, to J. Petrossi & Co., 401 Elwood Bldg., $23,877 and $6,418 respectively; 992 ft. Sylvester St., warrenite bitulithic, to Oliver Costich Co., 321 Exch. Pl., $16,289. Noted June 29.

N. Y., Rochester—Paving Alcazar St. and Versailles Rd., bitulithic, to Oliver Costich Co., Rochester (street address not available) $8,936 and $41,865 respectively; grading, laying sidewalks and sewers in Maxwell St., to W. Bailey Co., Rochester (street address not available), $8,209; sanitary sewer in Lake Ave., to L. R. Brotsch, Rochester (street address not available), $4,645. Noted Aug. 31.

N. J., Perth Amboy—Bd. Aldermen, extension to Route 4, Sect. 19, Amboy Ave., to Graham & McKeon, 319 Oak St., $158,217. Noted Oct. 5.

Pennsylvania—State Hy. Dept., Harrisburg, 4,108 ft. Application 1981, Venango Co., to F. S. Wilson, Kittanning, $44,435; 4,786 ft. Route 165, Northampton Co., to Neumeyer Bros., 1416 East 4th St., Bethlehem, $62,315, 2,029 ft. Application 2107, Mercer Co., to Jamieson & Narlee, Fredonia, $18,098; 11,237 ft. Application 1664, Berks Co., to Juniata Co., 410 Empire Bldg., Phila., $75,995.

Pa., Pittsburgh — Grading, paving and curbing Edgewater Ave., Bryant, South Murtland and Blessing Sts., also Webster Ave., to Booth & Flinn, Ltd., Forbes St., $34,298 and $33,968 respectively; Ira Way, Kamin and Kincaid Sts., to T. A. Cronin Co., Carson St., $21,002.

Virginia—State Hy. Dept., Richmond, constructing 5½ mi. Project 168, Route 6,

Streets and Roads (Continued)

16 ft., bituminous macadam, to Pardoe & Gillespie Co., Fairfax, $134,877.

West Virginia—State Rd. Com., Charleston, gravel surfacing 1.9 mi. Grape Island-Raven Rock Rd., Project 58, Pleasants Co., 16 ft., 4,000 cu.yd. excav., 3,000-7,000 cu.yd. bank run gravel on river bank, 3,000-7,000 cu.yd. bank run gravel surfacing, 4,000-7,000 cu.yd. bank run gravel in bins, 4,000-7,000 cu.yd. bank run gravel surfacing, to Smith & Quynn, Parkersburg, $21,900; grading and paving with rock asphalt 2.7 mi. Welch-Coalwood Rd., Project 3153, McDowell Co., 16 ft., 14,000 lin.ft. clearing right of way, 54,000 cu.yd. excav., 8,000 lb. steel, 1,300 cu.yd. cement rubble masonry, 420 cu.yd. concrete, 27,700 sq.yd. rock asphalt surface, 5,720 cu.yd. broken stone base course, 600 cu.yd. stone subbase course, 2,000 sq.yd. cement concrete gutter, 1,520 lin.ft. 18 in. vitr. clay pipe, etc., to Rogers & Shumway, Worthington, $134,965. Noted Oct. 12.

Louisiana—State Hy. Dept., Redmond Bldg., Baton Rouge, gravel surfacing, Federal Aid Project 125, to Hogsett & Co., Church Point, 7.1 mi. Sect. A, $39,067, 11.35 mi. Sect. B, $51,267.

Tennessee—State Hy. Dept., Nashville, surfacing 10.7 mi. road from Carthage to Smith Co. line, Project 68, Smith Co., 16 ft., 8 in. limestone, hand placed base course, to Phillips, Simpson & McGugin, Stahlman Bldg., Nashville, $161,841; grading and surfacing with 7 in. gravel, Federal Aid Project 71, Lake and Obion Counties, 16 ft., to J. C. Gray & Co., Martin, $80,791. Noted Oct. 12.

Miss., Yazoo City—Paving 3.92 mi. road, 1:2:3 mix concrete, 16 ft., incl., 172 ft. and two 99 ft. rein.-con. bridges, to Lebby & Williams Eng. Service, Inc., Yazoo City, $140,742.

Kentucky—State Hy. Dept., Frankfort, paving 12.775 mi. Barbourville-Pineville Rd., 14 ft., Federal Aid Project 39, Sect. A, rock asphalt on concrete, Knox and Kell Counties, to Metzel-O'Hearn & Lewen, Covington, $338,398; 5.075 mi. Dixie Highway, 18 ft., Federal Aid Project 82, State Project 5, Sect. A, rein.-con., using vitr. pipe, Boone Co., to Billiter & Oliver Bros., Covington, $158,462; 13.92 mi. Camp Knox-Elizabethtown Rd., 16 ft., Federal Aid Project 79, State Project 11, Sect. A, bituminous macadam penetration, using concrete pipe, Hardin Co., to R. B. Tyler, 114 South 4th St., Louisville, $295,929; grading 9.717 mi. road from Morehead to Grayson, 24 to 28 ft., Federal Aid Project 68, State Project 47, Sect. D, using cement rubble masonry, Carter Co., to Hatfield Constr. Co., Huntington, W. Va., $111,526; 8.103 mi. Stanton-Campton Rd., 24 to 28 ft., Federal Aid Project 71, State Project 4, Sect. A, using concrete pipe, Powell Co., to Codell-Byars, Winchester, $153,787; 10.207 mi. Stanton-Campton Rd., 24 to 28 ft., Federal Aid Project 72, State Project 4, Sect. A, using cement rubble headwalls and concrete pipe, Wolfe Co., to Vermillion Contg. Co., Barboursville, $81,686; 2.087 mi. Hazard-Whitesburg Rd., 24 ton 28 ft., Federal Aid Project 81, State Project 4, Sect. A, using concrete pipe, to Perry Co., to Codell-Byars, Winchester, $87,061; 5.422 mi. Greensburg-Hodgenville Rd., 24 to 28 ft., State Project 41, Sect. A, using rein.-con. pipe, Green Co., to Ping Bros., Somerset, $49,683; gravel surfacing 2.891 mi. Cadiz-Hopkinsville Rd., 18 ft., Federal Aid Project 73, State Project 1, Sect. B, using bank gravel, Trigg Co., to Alexander Bros., Cadiz, $36,063.

Michigan—State Hy. Dept., Lansing, grading and surfacing 1.064 mi. State Trunk Line Rd. 22-9, Grand Traverse Co., 4,097 cu.yd. excav., 12,489 sq.yd. concrete, to H. A. Hoxie, Grand Rapids, $16,121, plus state cement, $9,000.

Michigan — State Hy. Dept., Lansing, grading and surfacing 1.386 mi. State Trunk Line Rd. 35-9, Gladstone Co., to Nebel Bros., Gladstone, $21,894, plus state cement, $10,400.

Michigan — State Hy. Dept., Lansing, grading 8.612 mi. Federal Aid Project 87, Wayne Co., 69,177 cu.yd. excav., to Fonty & Wolcott, Delta, O., $42,684. Noted Oct. 12.

Ia., Elkader—Clayton Co. gravel surfacing 31.86 mi. Elkader-McGregor Rd., 33,465 cu.yd. gravel, 2,390 cu.yd. excav. and 2,318 cu.yd rock ballast, to McKusick Constr. Co., Minneapolis, Minn. (street address not available), $90,098.

Ia., Holstein—Paving and curbing various streets, 106,400 sq.yd. concrete, 48,296 ft. combined curb and gutter, 7,082 ft. 7 in. curb, to Western Asphalt Paving Co., Sioux City, $299,335. Engrs. est. $300,000.

Ia., Maquoketa—Jackson Co., grading 12.3 mi. road from Bellevue southwest, 239,985 cu.yd. clay and loam, 2,700 cu.yd. loose and 24,049 cu.yd. solid rock excav., to E. Sash, 1025 North 17th St., Cedar Rapids, $93,649.

Kan., Mound City—Linn Co. grading 5.735 mi. Jefferson Highway, 29½ ft., to R. S. Morrow, 5006 Burt St., Omaha, Neb., 20,871 cu.yd. earth excav. $0.28, 182,423 cu.yd borrow $0.22, (both include grubbing), 268.1 cu.yd. concrete $19.75 per cu.yd., 17,910 lb. reinforcing $0.06, etc., total $68,130, 3.056 mi. Jefferson Highway, Federal Aid Project 132, 29½ ft., to L. O. Hales, 1230 College St., Topeka, 25,559 cu.yd. excav. earth $0.33, 3,212 cu.yd. rock excav. $1.90, to Campbell Bros., Salina, 224.6 cu.yd. Class A concrete $19.60, 117.7 cu.yd. Class C concrete $15.20, etc., total $27,365.

Kan., Wellington—Sumner Co. grading 8.426 mi. Meridian Highway 35, Sects. D and E, 28 ft., to L. O. Hales, 1230 College St., Topeka, $39,616. Noted Sept. 14.

Tex., Ballinger — Paving 13 blocks in business section, 33,282 sq.yd. 3 in. vitr. brick on 5 in. concrete, 6,152 lin.ft. concrete curbs and gutters, to J. B. Toomey, Ft. Worth, $110,017.

Tex., Bonham — Fannin Co., grading, gravel surfacing, bituminous topping, etc., certain roads in Dist. 4, to F. P. McElwrath, Corsicana, $114,537. Noted Sept. 28.

Tex., Bryan—Brazos Co. paving, curbing, etc., 2.75 mi. various streets, 24-48 ft., 42,000 sq.yd. 6 in. concrete, 23,000 lin.ft. concrete curb, 11,000 lin.ft. concrete gutter, 12,000 cu.yd. earth excav., to Smith Bros., 308 Sumpter Bldg., Dallas, $129,080.

Tex., Dallas — Paving Montclair, Kings Highway and 12th Sts., 30 ft., to Uvalde Paving Co., Insurance Bldg., 16,038.1 sq. yd. Uvalde asphalt on concrete $3.25, 7,748 lin.ft. curb and gutter $1.15, 5,118 cu.yd. earth excav. $0.90, etc., total $72,099.

Tex., Huntsville—Paving Main St. from Sam Houston Normal to Public Sq., 9,500 sq.yd. rein.-con. pavement, 4,000 lin.ft. concrete curbing and 2,500 cu.yd. excav., to W. A. McClendon, 4620 Walker Ave., Houston, $28,000.

Tex., Johnson City—Blanco Co. grading, gravel and adobe surfacing 5.99 mi. Austin-Fredericksburg Highway, 18 ft., 32,847 cu. yd. roadway, 24,450 cu.yd. borrow, 993 cu. yd. loose and 6,826 cu.yd. solid rock excav., 3,557 cu.yd. adobe and 6,758 cu.yd. gravel, to H. J. Evans, 602 West 6th St., Austin, $46,691. Engrs. est. $52,000. Noted Oct. 26.

Tex., Palo Pinto—Palo Pinto Co. grading and surfacing 3.99 mi. State Highway 1, to T. J. Green, Mineral Wells, $72,474. Noted Oct. 26.

Tex., Vernon — For 5.69 mi. surfacing, .69 mi. graveling, 5 mi. concrete paving, to J. P. Foty, Vernon, $2.51 per sq.yd. for pavement, etc., total $136,222; bridges to A. E. Firmin, Colgate, Okla., $9,134. Bids on earthwork rejected. Noted Oct. 5.

Colo., Denver—Concrete paving 12 blocks Alley Paving Dist. 86, 16 ft., to J. F. Roberts Constr. Co., Tramway Bldg., $22,074. Noted Oct. 19.

Idaho, Lewiston—W. Osborn, dist. engr. State Hy. Dept., 202 Pioneer Bldg., grading 2.5 mi. Federal Aid Project 63, North and South Highway, 8,475 cu.yd. earth and 35,300 cu.yd. rock excav., 8,940 lb. rein.-steel, 122 cu.yd. concrete, etc., to D. E. Murphy, Boise, $36,398. Noted Oct. 19.

Utah—State Rd. Comn., Salt Lake City, grading and paving with 7½ in. concrete, 4.5 mi. road from Brigham to Corinne, Federal Aid Project 38 A, 18 ft., Boxelder Co., to Gibbons & Reed, Kearns Bldg, Salt Lake City, $63,759. Noted Oct. 12.

Calif., Oakland—Grading and paving 14th St. between Poplar and Peralta Sts., to Bates & Borland, Oakland Bank of Savings Bldg., 61,924 sq. ft. grading at $0.06, 229 ft. concrete curb with steel guard $1.35, 2,217 ft. concrete curb without steel guard $1.30, 2,632 ft. concrete gutter $0.30, 59,292 ft. asphaltic concrete paving $0.30, etc. Noted Oct. 26.

Calif., San Jose—Improving portion of 9th St., to Raisch Impvt. Co., 46 Kearny St., San Francisco, 134,870 sq.ft. 1½ in. asphaltic concrete on 3 in. asphaltic concrete at $0.24 per sq.ft., 135 sq.ft. concrete gutter, $0.24, etc.

B. C., New Westminster—Grading and ditching 3 mi. Nicomen Flats Sect. of Pacific Highway, 18 ft. wide, to A. B. Palmer Co. Ltd., 736 Granville St., Vancouver, $60,000.

Industrial Works

PROPOSED WORK

Conn., Hartford — Hartford Despatch & Trucking Co., 105 Albany Ave., plans 3 story warehouse, rein.-con. and brick $125,000. Moores & Dunford, 342 Madison Ave., New York City, archts. and engrs.

N. Y., Alfred—Reynold Bros. plan rebuilding 4 story cheese factory brick destroyed by fire. $50,000-$60,000. Architect not announced.

N. Y., East Aurora—Zapfs Lumber Mill plans rebuilding portion of lumber mill destroyed by fire. $45,000. Architect not announced.

N. Y., Fairport—Amer. Can. Co. plans 4 story, 80 x 176 ft. brick warehouse, Parce Ave. To exceed $40,000. Architect not announced.

N. Y., Willow Point—Binghamton Light, Heat & Power Co., 172 Washington St., Binghamton, plans 2 story addition to power house, here. $65,000-$75,000.

N. J., Trenton—Eberhard Watch Corp., Commonwealth Bldg., plans factory. G. F. Eberhard, Commonwealth, pres.

Pa., Altoona—See "Buildings."

Pa., Erie—Union Storage Co., 9th St., Cleveland, O., plans brick warehouse here. $100,000 or more.

Pa., Harrisburg—See "Buildings."

Pa., Pittsburgh—Guibert Steel Co., Diamond Bank Bldg., having plans prepared 1 story, 55 x 200 ft. plant, West Park. $100,000. Private plans.

Pa., Pittsburgh — Ward Baking Co., Southern Blvd. and St. Marys St., New York City, plans bakery, Ridge Ave., here. $1,500,000. Private plans.

Pa., Saxton — Penn Central Power & Light Co., 1809 Union Ave., Altoona, plans $80,000 bond issue for new light and power plant here.

Pa., Tamaqua—Lehigh Coal & Navigation Co., Lansford, plans to rebuild coal washing plant recently destroyed by fire. Cost between $45,000 and $50,000.

W. Va., Coalwood—Consolidated Coal Co., Watson Bldg., Fairmount, plans 1 story power house. $85,000.

Ga., Athens—Natl. Roofing Co., Fillmore St., Tonawanda, N. Y., plans factory, here. $600,000. Architect not announced.

La., Lafayette—Lafayette Sugar Refining Co. plans to rebuild refinery here, recently destroyed by fire. $300,000. Architect not announced.

Tenn., Knoxville—Cherokee Motor Co., 314 State St., plans 3 story, 100 x 150 ft., brick addition to garage and repair shop. $75,000. C. Reed, pres.

Tenn., Nashville—Tennessee Central R.R., 319 7th Ave., plans to rebuild railroad shops, engine and mechanical repair shops, Hermitage Ave. and Fairfax St., recently destroyed by fire. $100,000. H. R. Manby, ch. engr.

O., Cleveland—Brough Co., 3822 St. Clair Ave., having plans prepared by J. Brugnone, archt., 3505 Woodland Ave., 1 story, 30 x 80 ft. and 50 x 80 ft., brick and steel garage and bottling plant, East 72nd St. and St. Clair Ave. $40,000.

O., Cleveland—City plans new light plant and extensions, brick, steel and concrete, incl. erecting poles, lines, feeders and other plant equipment, to supply 15,000 more consumers. $10,400,000. A. B. Roberts, City Hall, dir. Pub. Utilities. G. Beckwith, City Hall, engr.

O., Cleveland—Glauber Brass Mfg. Co., 7706 Platt Ave., plans altering and building 1 and 2 story, brick and concrete factory addition. $50,000. M. Glauber, pres. Private plans.

O., Cleveland—Natl. Screw & Tack Co., c/o F. G. Walker, archt., 2440 East 75th St., plans 5 story and basement, rein.-con. and brick factory, Platte Ave. near East 76th St. $400,000.

O., Cleveland—Natl. Provision Co., West 65th St., having preliminary plans prepared by Anders & Reimers, archts., 314 Erie Bldg., 3 story, packing house, brick, steel and concrete, West 65th St. $300,000. W. G. Fletcher, pres.

O., Cleveland—J. Sands, East 55th St. and Sweeney Ave., had plans prepared 1 story, 60 x 100 ft., brick and steel machine shop, 10205 Harvard Ave. $40,000. Private plans.

O., Kent—Lamson & Sessions Co., 2188 Scranton Rd., Cleveland, had plans prepared by G. S. Rider & Co., archts. and engrs., Century Bldg., Cleveland, 1 story, 168 x 200 ft., brick and steel factory, here. $125,000.

Industrial Works (Continued)

O., Delaware—Dept. Pub. Welfare, Oak and 9th Sts., Columbus, plans 60 x 80 ft. power house, 25 ft. high, 1 story and basement, laundry with two 30 x 90 ft. wings, brick and concrete, 15,000 gal. coagulating and 26,000 gal. reserve reservoirs, concrete, small pumping station, sulpher well and foot bridge leading to same, at Girls Industrial Home, here. $125,000.

O., Lancaster—Fairfield Eng. Co. having plans prepared 1 story, factory, sawtooth construction. $125,000. Private plans. Noted Oct. 19.

O., Warren—Wadsworth Feed Co. plans to rebuild 5 story flour mill and warehouse, brick, destroyed by fire. $100,000. J. X. Wadsworth, pres.

Ind., Lafayette—Natl. Refining Co., Belt Ry. and Kossuth St., plans to rebuild portion of oil refinery recently destroyed by fire. $100,000.

Ind., Terre Haute—Wabash Valley Electric Co., plans hydro electric power house on Wabash River, Sugar Creek Twp., incl. transmission line. $3,000,000.

Mich., Detroit—Pennsylvania R.R., 1368 Penobscot Bldg., having plans prepared by B. V. Sommerville, engr., 1368 Penobscot Bldg., 1 story, rein.-con., brick and steel, engine and round house, incl. turntable, water tower, coaling station, etc., 19th St.

Mich., Kalamazoo—Kazoo Blow Pipe Co., 408 Church St., having plans prepared by E. Batterson, archt., Kalamazoo, 1 story, 35 x 155 ft. brick and steel factory, North Church St. $60,000.

Wis., Jonesville—Parker Pen Co., Court and Davison Sts., plans 2 story, 60 x 150 ft. factory, rein.-con., brick and steel, plain foundation, South Bluff St. $50,000. Architect not selected.

Wis., Kenosha—C. A. Augustine, archt., 1063 Howland Ave., preparing plans 1 story, 82 x 125 ft., garage and repair shop, brick, rein.-con. and steel. $40,000. Owner's name withheld.

Wis., Milwaukee—A. C. Beck Co., 1 East St., having plans prepared by H. G. Lotter, archt., 427 Milwaukee St., 2 story, 96 x 185 ft., brick and timber factory, plain foundation.

Wis., Racine — Davies Shoe Mfg. Co., Northwestern and Carlisle Sts., plans 2 story, 75 x 150 ft. brick, rein.-con. and steel factory, plain foundation. $100,000. C. Davies, pres. Architect not selected.

Ia., Dubuque—Bosky's Motor Co., 6th and Iowa Sts., having plans prepared 3 story and basement, 100 x 110 ft., brick and concrete garage, 8th and Iowa Sts. $60,000. Private plans.

Ia., Muscatine—Making plans municipal electric light plant and distribution system, also electrification of water pumping plant. $350,000 bonds voted. A. L. Mullergren, 555 Gates Bldg., Kansas City, Mo., engrs. Noted Feb. 23.

Minn., St. Paul — Amer. Radiator Co., 1807 Elmwood Ave., Buffalo, N. Y., having plans prepared by J. F. Groebe, engr. c/o owner, radiator plant, incl. foundry, machine shop, warehouses, etc., rein.-con., steel and brick, Prior Ave., here. $1,500,000.

Kan., Pittsburg—Kansas City Southern R.R., 11th and Wyandotte Sts., Kansas City, Mo., having preliminary plans prepared for new locomotive and car shops, here, incl. steel car shop, engine shop, power house, etc. Cost incl. machinery, over $1,000,000. W. G. Morgan, div. engr.

Ark., Thornton—Stout Lumber Co. plans to rebuild plant recently destroyed by fire. $200,000.

Tex., Celina—Nov. 28, to vote on $50,000 bond issue for electric light plant and waterworks system. Address J. E. Ousley, mayor.

Tex., Dallas — Dallas Power & Light Co., Interurban Bldg., having plans prepared by J. Oram, chief engr., c/o Owner, power plant, 15,000 kw., [illegible]lynn St. $2,800,000 total incl. other improvements $3,000,000.

Tex., Dallas—Trinity Paper Mills, Dallas Co. State Bank Bldg., plans paper mill, 30 ton daily capacity. $500,000. P. H. Diggle, secy.

Tex., Ranger—Oil Belt Power Co., Eastland, having plans prepared by J. E. Lewis, engr., Eastland, power plant, Leon Lake, here. $1,000,000.

Tex., Texas City—U. S. Gasoline Corp. having plans prepared 4 unit Knox process cracking plant, 100,000 gal. per day capacity. $250,000. Private plans.

Okla., Cement—See "Waterworks."

Calif., Fresno — United Engine & Machine Co., recently organized, plans machine shop, foundry, molding, pattern and forge shops. D. Suplrizie, 507 Bway., and G. J. Dolan, Jr., 2137 Cherry St., incorporators.

Ont., Guelph — B. Tolton & Son, 173 Woolwich St., plans to rebuild garage and repair shop recently destroyed by fire. $45,000.

Ont., Tillsonburg—Wilkie Products Co., 312 Pitt St. W., Windsor, plans to vote on $100,000 bonds Nov. 14, for 60 x 200 ft. brick and cement factory.

Ont. Toronto—Ford Motor Co. of Canada, 672 Dupont St., plans 1 story, 350 x 650 ft. brick and steel factory, Danforth Ave. $500,000. Private plans.

B. C., Nordin—J. Buckley Estate plans to rebuild mill recently destroyed by fire. $100,000.

BIDS DESIRED

Pa., Ambridge — Natl. Metal Moulding Co., will build 1 story, 98 x 100 ft. brick and steel shop and cafeteria. Work will be done by separate contracts. Private plans.

Pa., Johnstown—Nov. 4, by W. Steele & Sons Co., archts., 1600 Arch St., Phila., 5 story and basement, 133 x 24 2ft. rein.-con. and brick warehouse, Maple Ave., for Johnstown Terminal Warehouse Co. $600,000.

Pa., Pittsburgh—Nov. 4. by F. J. Kress Box Co., 3030 Liberty Ave., 3 story, 70 x 155 ft. brick addition to factory, Liberty Ave. and 29th St. $40,000. T. Pringle, 504 Pittsburgh Life Bldg., archt.

Mich., Flat Rock—Ford Motor Co., Highland Park (Detroit P. O.) receiving bids and opens same about Nov. 4, for 2 story, 59 x 148 ft. gas producer plant incl. coal hopper, concrete, brick and steel, plain foundation. A. Kahn, 1000 Marquette Bldg., Detroit, archt.

Ill., Chicago—F. D. Chase, Inc., archts., 645 North Michigan Ave., receiving bids 1 story, 124 x 173 ft. factory, rein.-con., brick and steel, 5800-14 Throop St., for Goldsmith Bros., 29 East Madison St. $55,000.

Ill., Chicago—J. H. Klafter, archt., 127 North Dearborn St., receiving bids 1 story, 36 x 150 ft., rein.-con. and brick garage, Ogden St. near California Ave. $40,000. Owner's name withheld.

Wis., Ft. Atkinson—Better Sox Knitting Co., 211 South Water St., taking bids 2 story, 50 x 66 ft. factory, rein.-con. and brick, plain foundation, Water St. $40,000. Private plans.

Wis., Milwaukee—R. E. Oberst, archt., 307 Grand Ave., taking bids 1 story and basement, 60 x 110 ft., brick and concrete garage, plain foundation, 16th and Fond du Lac Sts. $40,000. Owner's name withheld.

Wis., Milwaukee—J. Wilging & Co., 1612 Teutonia Ave., taking bids 2 story, 80 x 120 ft., brick and timber factory, plain foundation, Burleigh St. $45,000. Private plans.

CONTRACTS AWARDED

Mass., Brighton (Boston P. O.)—Boston Spun Silk Co., Western Ave., 2 story weave shed, rein.-con. and brick, plain foundation, to C. A. Dodge Co., Erie and Albany Sts., Cambridge. Archts. est. $40,000.

Mass., Hyde Park (Boston P. O.) — Tileston & Hollingsworth Co., 49 Federal St., Boston, 1 story machine shop addition, brick, concrete and steel, plain foundation, here, to Aberthaw Constr. Co., West End Trust Bldg., Boston. Archts. est. $40,000.

Mass., Somerville (Boston P. O.)—C. R. Bowlby, 16 Thorndike St., West Somerville, will build 4 story, 60 x 75 ft. garage, brick and steel, plain foundation, Buena Vista Rd., by day labor. $40,000. Private plans.

Mass., Somerville—A. W. Hastings, 134 Friend St., Boston, 2 story, 69 x 138 x 264 ft. warehouse, brick and steel, plain foundation, Highland Ave. and West St., here, to Wilson & Tomlinson, 79 Milk St., Boston. Archts. est. $100,000.

R. I., Woonsocket—Macrodi Fibre Co., Carnation St., 1 story, 60 x 150 ft. factory, brick and timber, Carnation St., to F. Pelletier, c/o owner. Archts. est. $40,000.

N. Y., Jamestown—Empire Case Goods Co., 142 Foote Ave., 2 story, brick, factory addition, 7,000 sq.ft. floor space, to D. Elander, 456 Buffalo St. Noted July 20.

Pa., Coraopolis—Standard Steel Spring Co., Coraopolis, 1 story, 64 x 141 ft., corrugated iron and steel factory, to Pittsburgh Bridge & Iron Wks., Bessemer Bldg., Pittsburgh. Noted June 22.

Pa., Glassmere — Allegheny Plate Glass Co., 1 story, 50 x 600 ft., brick and steel factory, to S. Mawhinney Constr. Co., 603 McCause Blk., Pittsburgh. Engrs. est. $100,000.

Pa., New Castle—New Castle News, 2 story, 30 x 160 ft. rein.-con., brick, steel and limestone plant, to Chambers Constr. Co., New Castle. Archts. est. $75,000.

Pa., New Castle—Grasselli Powder Co., Guardian Bldg., Cleveland, O., will build six 1 story buildings, wood frame concrete foundation, by day labor. A. Jackson, 1219 Guardian Bldg., Cleveland, O., engr.

Pa., Phila.—Globe Ticket Co., 110 North 12th St., 9 story and basement, 58 x 183 ft. and 34 x 47 ft. plant, 112-122 North 12th St., to G. F. Payne Co., 401 South Juniper St.

Pa., Pittsburgh — Fleishman Yeast Co., 801 Washington St., New York City, 2 story, 75 x 192 ft. concrete and brick garage, Allegheny and Western Aves., here, to B. A. Groah Constr. Co., 847 West North Ave. Archts. est. $50,000. Noted June 1.

Pa., Pittsburgh — Webster Ave. Garage Co., 1010 Webster Ave., 2 story, 40 x 110 ft. steel, brick and tile garage, 1010-12 Webster Ave., to Inland Constr. Co., 5613 Penn Ave. Archts. est. $40,000.

D. C., Wash.—Corby Baking Co., Georgia Ave. and Trumbull St., addition to bakery, to A. L. Smith Co., Woodward Bldg. Noted Oct. 26.

O., Cleveland—Bd. Educ., East 6th St. and Rockwell Ave., 4 story, 104 x 144 ft., brick and rein.-con. warehouse, 3034 East 63rd St., to J. F. Hohlock, Davis and Farley Bldg. Archts. est. $250,000. Noted Oct. 26.

O., Cleveland — Mall Motor Co., 4900 Euclid Ave., 1 story, 50 x 150 ft., brick, steel and concrete garage, to S. W. Emerson Co., 1900 Euclid Ave. Archts. est. $40,000.

O., Cleveland—Surety Investment Co., 1 story, 100 x 140 ft., brick, steel and concrete factory, East 49th St., to Austin Co., 16112 Euclid Ave. Archts. est. $50,000.

O., Cleveland—Hydraulic Press Steel Co., Hydraulic Ave., 1 story, 30 x 30 ft. and 33 x 40 ft. factories and 20 x 50 ft. crane runway, brick and steel, to E. R. Russell, 1419 St. Clair Ave. Archts. est. $50,000.

O., Cleveland—Vance Motor Co., Central Ave. near East 9th St., 2 story, 63 x 132 ft., brick, steel and concrete garage, East 9th St. and Central Ave., to Hunting Constr. Co., Discount Bldg. Archts. est. $100,000.

O., East Cleveland (Cleveland, P. O.)—Pollock-Davis Co., 11628 Euclid Ave., 2 story, 72 x 74 ft., brick, steel and concrete garage, to Boldt Constr. Co., 5902 Euclid Ave., Cleveland. Archts. est. $40,000.

O., Kent—Falls Rivet Co., 1 story, 168 x 210 ft., brick and steel factory addition, to Hunkin-Conkey Constr. Co., Century Bldg., Cleveland. Archts. est. $50,000.

Mich., Kalamazoo — Bryant Paper Co., Alcott St., 60 x 100 ft. rein.-con. and brick power plant, 85 ft. high, with 150 ft. rein.-con. stack, to H. L. Vanderhorst, Kalamazoo, cost plus basis. Engrs. est. $100,000.

Ill., Elgin—Elgin Stove & Oven Co., 14 Chicago St., 3 story, factory, rein.-con., brick and steel, State and Schiller Sts., to L. Balkin, 538 South Clark St., Chicago. Archts. est. $100,000. Noted Oct. 5.

Wis., Antigo—Pacific Ice Cream Co., 2 story, 50 x 64 ft., brick, rein.-con. and steel factory, plain foundation, to E. Schoeppe, Antigo. Archts. est. $50,000.

Wis., Kaukauna — Ground Wood Pulp Supply Co. will build 2 story, 60 x 80 ft., brick, rein.-con. and steel pulp mill, by day labor. Private plans.

Wis., Loretta (Draper P. O.) — Hines Lumber Co., Park Falls, will build 1 story, 75 x 100 ft. saw mill, brick and rein.-con., plain foundation, by day labor, here. $75,000. Private plans.

Wis., Milwaukee—A. C. Beck Co., 1 East St., 2 story, 60 x 135 ft. factory, brick and timber, East St., to H. Schmitt & Son, 430 Farwell Ave. Noted Oct. 26.

Wis., Milwaukee—O. Jaeger Baking Co., 914 Central Ave., 1 story, 50 x 150 ft., brick and concrete garage, plain foundation, 9th St., to E. Steigerwald & Sons, 2303 Galena St. Archts. est. $40,000.

Wis., Milwaukee—Republic Building Co., c/o M. Tullgren & Sons Co., archts., 425 East Water St., 1 story and basement, 75 x 150 ft., film storage building, brick and concrete, plain foundation, Wells St., to S. M. Siesel, 160 Ogden Ave. Archts. est. $60,000.

Wis., Oshkosh—R. A. Lutz, 1270 Knapp St., 1 story, 75 x 150 ft., brick and steel plant, to Fluor Bros. Constr. Co., 52 State St., $75,000.

Wis., Shawano — Shawano Co. Bd., 1 story, 60 x 90 ft., central heating plant, brick, rein.-con. and steel, to B. B. Shine, 224 East Walnut St., Green Bay. Archts. est. $40,000. Noted Aug. 31.

Wis., Slinger—L. A. Burg will build 1 story, 60 x 90 ft., brick and rein.-con. garage, plain foundation, by day labor. $40,000. Private plans. Noted Oct. 5.

Wis., Wausau—Wausau Wrecking Co., 4 story, 60 x 120 ft., garage, steel, rein.-con. and brick, plain foundation, to F. Seefeldt, 612 Fulton St. Archts. est. $40,000.

Industrial Works (Continued)

Wis., West Bend—Amer. Service & Storage Garage, c/o M. A. Johannes, Ashford, (R. D. Campbellsport,) 1 story, 60 x 80 ft., brick and concrete garage, plain foundation, to A. Baesemann, West Bend. Archts. est. $40,000. Noted Oct. 19.

Minn., Minneapolis — Lavoris Chemical Co., 52 Western Ave., 3 story and basement, 45 x 110 x 143 ft. factory and office, rein.-con., brick and tile, 3rd St. and 10th Ave. N., general contract to C. F. Haglin & Sons Co., 226 Lumber Excn. Bldg. Total $125,000. Noted Oct. 12.

Mo., Kansas City—Electric Storage Battery Co., 19th and Allegheny Sts., Phila., 1 story and basement, 160 x 220 ft., steel, concrete and brick factory, Belmont and Anderson Sts., here, to Fogel Constr. Co., 619 Reliance Bldg. Engrs. est. $150,000.

Tex., Dallas—Dallas Terminal Warehouse Co., 2 story and basement, (ultimately 10 story), 175 x 200 ft., warehouse, factory and sales display building, 2600 Elm St., to Lange & Trumpf, Dallas, (street address not available). $121,000.

Buildings

PROPOSED WORK

Mass., Cambridge—School—School Bd. had plans prepared by E. B. McGirr, archt., 6 Beacon St., Boston, and soon takes bids 3 story and basement, 80 x 100 ft., brick and stone, wood pile foundation, Putnam Ave. $150,000.

Mass., East Boston (Boston P. O.) — School—Schoolhouse Dept., 1009 City Hall, Boston, having plans prepared by J. J. Driscoll, archt., 6 Beacon St., Boston, 3 story, 20 room, brick, concrete and steel, Emerson Dist. $400,000. Noted July 6.

Mass., Gardner—Hotel—Gardner Hotel Co., c/o H. L. Stevens & Co., archts. and engrs., 522 5th Ave., New York City, having plans prepared 5 story, 85 x 100 ft., brick, steel and stone, Pleasant St., here. $250,000.

Mass., Ware—Church—J. T. Sheehan, pastor of Our Lady of Mt. Carmel Church, having plans prepared by J. Jackson, archt., 185 Church St., New Haven, Conn., brick. $150,000. Noted Sept. 14.

Conn., Hartford — Bank and Office — Phoenix Natl. Bank, Main St. and City Hall Sq., plans brick and stone, City Hall Sq. $500,000. Architect not announced.

N. Y., Alden—Home—Erie Co., City Hall, Buffalo, having preliminary sketches made by Kidd & Kidd, archts., 234 Delaware Ave., Buffalo, group of buildings, rein.-con., brick and steel, here. $1,500,000.

N. Y., Alfred—University—Alfred University plans several buildings incl. gymnasium. Plans also include athletic field, $100,000. Total cost $1,000,000. Architect not announced.

N. Y., Brooklyn—Apartment—A. Levy, c/o Shampan & Shampan, archts. and engrs., 50 Court St., having plans prepared 6 story, 130 x 160 ft., brick, steel and stone, plain foundation, St. Johns Pl. and Underhill Ave. $600,000.

N. Y., Ithaca—Bank and Office—Ithaca Savings Bank, having plans prepared by Gibb & Waltz, archts., 110 North Tioga St. and takes bids in January for 5 story and mezzanine, 80 x 106 ft., steel, stone and brick, North Tioga and East Seneca Sts. $350,000.

N. Y., Merrick—School—Bd. Educ. having preliminary plans prepared by A. T. Sutcliffe, archt., 111 East 40th St., New York, brick, steel and stone, plain foundation. $175,000. Noted Oct. 12.

N. Y., Mineola—Hospital—Nassau Hospital soon takes bids 5 story, brick, steel and stone addition, plain foundation. $350,000. Lord & Hewlett, 2 West 45th St., New York, archts. and engrs.

N. Y., New York—Clubhouse—New Amsterdam Council, Knights of Columbus, c/o V. C. Farrar, archt. and engr., 4 East 39th St., having plans prepared 4 story, 40 x 100 ft., brick and limestone, plain foundation, 107-109 West 70th St. $150,000.

N. Y., New York—Institution—New York Institute for Blind, 412 9th Ave., having plans prepared by McKim, Mead & White, archts., 101 Park Ave., several 3 and 4 story, brick, steel and stone buildings, plain foundations, Bronx and Pelham Parkway. H. J. Balcom, 10 East 47th St., engr.

N. Y., New York—Office—Klar Bros., c/o Gronenberg & Leuchtag, archts. and engrs., 303 5th Ave., having plans prepared 9 story, 65 x 100 ft., brick, steel and stone, plain foundation, 156 West 34th St.

N. Y., New York—School—Childrens Society, 355 East 137th St., having plans prepared 3 story, brick, steel and stone, plain foundation, 167th St. and Grand Concourse. $450,000. Private plans.

N. Y., Niagara Falls—City Hall—City having plans prepared by Kirkpatrick & Cannon, archts., Wood-Harmon Bldg., 3 story and basement, brick, steel, stone, etc., Main St. $368,362. Noted May 4.

N. Y., Patchogue—Theatre—M. Glynne, Astoria Theatre, Steinway and Grand Aves., Astoria, having plans prepared by Reilly & Hall, archts. and engrs., 405 Lexington Ave., New York City, brick, steel and stone, plain foundation, here. $200,000. Noted Oct. 12.

N. Y., Phelps—School—Bd. Educ. having plans prepared by Foote & Carpenter, archts., 302 Carter Bldg., Rochester, new school in Dist. 8, $175,000. Noted Sept. 28.

N. Y., Westbury—School—Bd. Educ. having preliminary plans prepared by Peabody, Wilson & Brown, archts. and engrs., 140 East 39th St., New York, 2 story, brick, steel and stone, plain foundation. $200,000.

N. Y., White Plains — Hospital — New York Orthopaedic Hospital, 3rd Ave. and 23rd St., plans brick, steel and stone, plain foundation, Mamaroneck Ave., here. $500,000. Architect not selected.

N. J., Avon-By the Sea—Apartment Hotel —W. H. Post, c/o F. Grad, archt. and engr., 245 Springfield Ave., Newark, having plans prepared 4 story, brick, steel and stone, plain foundation, here. $300,000.

N. J., Elizabeth—Temple—Masonic Temple Assn., 504 North Broad St., plans temple. $400,000. Architect not selected.

N. J., Jersey City—School—Bd. Educ. having revised plans prepared by J. T. Rowland, Jr., archt., 100 Sip Ave., 3 story addition to P. S. 11, brick, steel and stone, plain foundation, Bergen St. $750,000. Noted Feb. 16.

N. J., Newark—Hospital—City having plans prepared by J. S. Piggot, archt., 665 Broad St., 3 story, brick, steel and stone addition, plain foundation, Fairmont Ave. $300,000. C. P. Gillen, dir. D. Sprague, 167 West 13th St., New York City, engr.

Pa., Altoona—Administration and Office—Bell Telephone Co., Phila., (street address not available), plans 6 story and basement, 110 x 172 ft. concrete, brick, steel and stone administration building, office and warehouse, 12th Ave., here. $1,000,000. L. H. Kennard, pres.

Pa., Breckenridge—High School—School Dists. of Boro. and Harrison Twp., c/o T. M. Hathaway, 54 Garfield St., Natrona, take bids about Jan. 1, 2 story and basement, 178 x 179 ft. $245,000. J. H. Phillips, P. O. 977, Pittsburgh, archt.

Pa., Clearfield—Post Office and Lodge—Loyal Order of Moose, East Market St., plans 3 story and basement, 70 x 100 ft. concrete and brick, East Market St. $150,000.

Pa., Duquesne—School—Bd. Educ., plans 2 story and basement, 24-32 rooms, 6th St. $300,000. Architect not selected.

Pa., Erie—Schools—Bd. Educ. having plans prepared by A. Meyers, school archt., c/o Bd. Educ., two grade schools one in Ferncliff Sect. and one at 28th and Reed Sts. $250,000.

Pa., Freeport—High School—Bd. Educ. plans new high school. $200,000.

Pa., Harrisburg—Administration, Office, etc.—Bell Telephone Co., Phila., (street address not available), plans 105 x 210 ft. administration, office and warehouse, concrete, brick, steel and stone, Court and Pine Sts., here. $1,000,000. L. H. Kennard, pres.

Pa., Jersey Shore — Hospital — Jersey Shore Hospital, Inc., 107 Main St., plans 3 story and basement, 100 x 110 ft. concrete, brick and steel, Howard St. $150,000. W. L. Wilson, pres.

Pa., Monongahela — High School — Bd. Educ. plans new brick high school. $200,000.

Pa., Phila. — Church — Woodland Ave. Methodist Church, c/o R. C. Carter, 1413 South 5th St., soon takes bids 1 story and basement, rein.-con., brick, steel and stone, plain foundation, 55th and Springfield Aves. $200,000. G. E. Savage, Witherspoon Bldg., archt.

Pa., Phila.—Hospital—Samaritan Hospital plans 6 story and basement, rein.-con., brick, steel and stone, plain foundation, Broad and Ontario Sts. $750,000. A. W. Barnes, 22 South 17th St., archt.

Pa., Pittsburgh — Clubhouse — Americus Republic Club, 211 Smithfield St., having plans prepared by Kaufman Realty Co., archts., 413 4th Ave., 6 story and basement, 40 x 70 ft. brick, steel and tile, 343-347 2nd Ave. $150,000.

Pa., Pittsburgh—Hotel and Welfare House —Salvation Army, 324 Diamond St., having plans prepared by T. Pringle, archt., Renshaw Bldg., 8 story and basement, 80 x 120 ft. brick, steel and tile, 2nd Ave. $500,000.

Pa., Pittston — Theatre — Comerford Amusement Co., 303 Lackwanna Ave, Scranton, plans brick, steel and terra cotta (2,500 seating capacity), to exceed $150,000.

Pa., Warren—High School—Bd. Educ purchased 300 x 500 ft. site and plans to build school, 20 class rooms, auditorium, two gymnasiums, laboratory and lecture rooms. $400,000.

Pa., Warren—High School—Bd. Educ plans new junior high school. $4[illegible]000. J. G. Smith, member building com. Architect not selected.

D. C., Wash. — Church, Convent and School—Milburn-Heister, archts., 710 14th St., N. W., preparing plans church, convent and Sunday school buildings. $350,000. Owner's name withheld. ,

D. C., Wash.—Store—Lansburgh Bros., Inc., 420 7th St., N. W., having plans prepared by Milburn-Heister Co., archts., 710 14th St., N. W., department store addition. $200,000.

Va., Alexandria — Memorial Temple — George Washington Natl. Masonic Memorial Assn., Scranton, Pa., having plans prepared by Helmle & Corbett, engrs. and archts., 132 West 42nd St., New York City, brick, steel and stone, plain foundation.

Va., Richmond — Club — Westmoreland Club, 601 East Grace St., having preliminary plans prepared by A. C. Blossom, archt., 680 5th Ave., New York City, enlarging and remodeling club building. $240,000. E. Nolting, chn. com.

W. Va., Berkeley Springs—Hotel—Pendleton Arms Hotel Co., 67 Wall St., New York City, having plans prepared by Hewitt & Ash, archts., 1827 Arch St., Phila., Pa., 4 and 5 story and basement, 42 x 117 ft., 41 x 75 ft. and 27 x 46 ft., also includes casino, 4 cottages and 18 hole golf course. $2,000,000.

W. Va., Harrisonville—Court House—Comrs. Ritchie Co. having plans prepared by Holmboe & Pogue, archts., Empire Bank Bldg., Clarksburg, 3 story and basement, rein.-con., brick and stone. $150,000.

W. Va., Logan—Store and Apartment—White & Browning, Box 758, having plans prepared by Meanor & Handloser, archts., Robson-Pritchard Bldg., Huntington, 5 story and basement, 45 x 125 ft., fireproof. $150,000.

W. Va., Morgantown—Theatre and Store Communtzis Bros., having revised plans prepared by C. Reger, archt., Traction Bldg., Morgantown, Pa., 4 story and basement, 95 x 143 ft., rein.-con. and brick. $150,000. Noted Feb. 23.

Ga., Atlanta—Store and Office—Massell Realty Co., Peachtree St., plans 3 story and basement, 100 x 100 ft., brick, Whitehall and Trinity Sts. $150,000. Architect not selected.

Ala., Tuscaloosa—Bank and Office—First Natl. Bank of Tuscaloosa having plans prepared by D. O. Whilden, archt., Title Bldg., Birmingham, 10 story, 51 x 190 ft. $280,000.

La., Shreveport—Office—J. R. Slattery Co., Shreveport, plans 16 story, brick and steel. $1,500,000.

Tenn., Memphis — Cathedral — Episcopal Church plans stone memorial cathedral, Poplar Ave. $200,000. Hanker & Cairns, Madison Ave. Bldg., archts.

O., Cleveland — Apartments — Moreland Development Co., c/o J. Kirby, Discount Bldg., having plans prepared by A. W. Harris, archt., Discount Bldg., 4 and 6 story and basement, 108 suites, brick, steel and concrete, North Moreland Blvd. and Kemper Rd. $1,000,000.

O., Cleveland—Dormitory— Y. M. C. A., c/o R. E. Lewis, secy., East 22nd St. and Prospect Ave., plans brick, steel and concrete addition. $500,000. Architect not selected.

O., Cleveland—High School—Bd. Educ., East 6th St. and Rockwell Ave., having plans prepared by W. R. McCornack, archt., East 6th St. and Rockwell Ave., 2 story and basement, brick, steel and concrete addition, East 79th St. and Hough Ave. $300,000.

O., Cleveland—Hospital and Administration—City having plans prepared by A. C. Wolf, archt., 610 Swetland Bldg., 2 story, brick, steel and concrete, Warrensville Farm. $200,000. R. Perkins, City Hall, dir. Pub. Welfare.

O., Cleveland—School—Bd. Educ., East 6th St. and Rockwell Ave., having plans prepared by W. R. McCornack, archt., East 6th St. and Rockwell Ave., 2 story, brick, steel and concrete annex, Grand Ave. and Kinsman Rd. $200,000.

O., Cleveland—Schools—Bd. Educ., East 6th St. and Rockwell Ave., plans 2 story and basement, 22 room, elementary school, Cranwood site, $600,000, 2 story and basement, 22 room elementary school, East 144th St. and Castalia Ave., $600,000, 2 story Willson High School annex, East 55th St. near Superior Ave., $350,000, 3 story and basement, 70 room, Senior High School an-

Buildings (Continued)

nex. Randall Rd. and Bridge Ave., $2,000,000, all brick, steel and concrete. W. R. McCornack, East 6th St. and Rockwell Ave., archt.

O., Cleveland—Schools—Bd. Educ., East 6th St. and Rockwell Ave., having plans prepared by W. R. McCarnack, archt., East 6th St. and Rockwell Ave., 2 story and basement, 12 room, addition to Hicks School, $200,000; 2 story and basement, 22 room, Parkhurst Florian site, $500,000; 3 story and basement, 25 room high school, Oak Park and Henninger Aves., $750,000, all brick, steel and concrete.

O., Cleveland—Store and Apartment—M. Marmorstein, 607 Ulmer Bldg., having preliminary plans prepared by S. H. White, archt., 1032 Schofield Bldg., 12 story and basement, 150 x 172 ft., brick, steel and concrete, Euclid Ave. and Ford Dr. $2,000,000. W. S. Ferguson Co., 1900 Euclid Ave., engrs.

O., Cleveland—Store and Apartment—Stratford Court Development Co., c/o J. Kirby, Discount Bldg., having plans prepared by A. W. Harris, archt., Discount Bldg., 3 story and basement, 150 x 600 ft., brick, steel and concrete, Shaker Blvd. $1,000,000.

O., Cleveland Heights (Warrensville P. O.) — Church - Fairmount Presbyterian Church, c/o E. Erickson, pastor, 2108 Stillman Rd., having plans prepared by Tuttle & MacDowell, archts., Bulkley Bldg., Cleveland, 1 story and basement, brick, concrete and terra cotta, Fairmount Blvd. $150,000.

O., East Cleveland (Cleveland P. O.)—Commercial and Apartment—Euclid-Taylor Realty Co., c/o R. Ewing, Williamson Bldg., Cleveland, had plans prepared by W. S. Ferguson Co., archts., 1900 Euclid Ave., Cleveland, 3 story and basement, 50 x 120 ft., brick and steel, Euclid Ave. and Taylor Rd., here. $150,000.

O., Logan—Court House—Hocking Co. having sketches made by several architects, brick, steel and stone. $400,000. Noted Aug. 24.

O., Mt. Vernon—Memorial—H. C. Devin, chn. Memorial Comn. of Knox Co., having plans prepared by Richards, McCarty & Bulford, archts., 584 East Broad St., Columbus, 3 story and basement, 95 x 130 ft., brick, stone and concrete. $200,000.

O., Tiffin—High School—Bd. Educ. having plans prepared by Langdon, Hogly & Gram, archts., 1742 Nicholson Bldg., Toledo, 3 story and basement, brick and steel. $190,000. F. Mann, clk.

Ind., Indianapolis—Lodge—Elks Realty Co., 13 East Vermont St., having revised plans prepared by A. Scheirer, archt., Indiana Trust Bldg., 8 story and basement, brick and steel, North Meridian St. $750,000.

Ind., Indianapolis—Temple—A. Biccard, secy., Indiana Pythian Bldg., plans 3 story and basement, brick and stone. $350,000. Architect not selected.

Ind., South Bend — High School — St. Joseph Catholic Church plans 2 story and basement, brick. $500,000. Architect not selected.

Mich., Benton Harbor—Clubhouse, etc.—Michicago Club, c/o R. Dunn, pres., Otis Bldg., Chicago, plans 3 story, brick and steel clubhouse, here, and two 18 hole golf courses, Forest Park. $250,000. Architect not selected.

Mich., Benton Harbor—Hotel—W. Bastar, 719 Lake Blvd., St. Joseph, having preliminary sketches prepared by Nichol, Scholar & Hoffman, archts., Lafayette, Ind., 7 story and basement, 100 x 100 ft. rein.-con. and brick, Main St., here. $300,000.

Mich., Detroit—Church—Jefferson Ave. Presbyterian Church, Rivard and Larned Sts., having plans prepared by Smith, Hinchman & Grylls, archts., 800 Marquette Bldg., 2 story, 60 x 120 ft. brick and steel, plain foundation, Jefferson and Burns Aves. $350,000.

Mich., Owosso—School—Bd. Educ. having plans prepared by Lane, Davenport & Peterson, archts., 2320 Dime Bank Bldg., Detroit, 2 story and basement, rein.-con., brick and steel, plain foundation. $200,000.

Mich., Trenton—High School—Bd. Educ. Dist. 1, plans 3 story, concrete, brick and steel, plain foundation, $165,000 bonds voted. Architect not selected.

Ill., Chicago—Apartment and Store—B. I. Morris, c/o A. L. Himelblau, archt., 179 West Washington St., plans 3 story, 100 x 266 ft., rein.-con., brick and steel, Buckingham Pl. near Aldine St. $400,000.

Ill., Chicago—High School—St. Joseph's Convent, 575 Layton Blvd., Milwaukee, Wis., having plans prepared by Brust & Philipp, archts., 405 Bway., Milwaukee, Wis., 4 story and basement, 220 x 236 ft., rein.-con., and brick, plain foundation, Lawndale Ave. and Byron St., here. $600,000.

Ill., Chicago—Hotel—W. W. Ahlschlager, archt., 65 East Huron St., preparing plans Graemere Hotel, 8 story, 200 x 216 ft., rein.-con., brick and steel, Washington Blvd. and Homan Ave. $2,000,000. Owner's name withheld.

Ill., Chicago — Hotel — Woltersdorph & Bernhardt, archts., 138 North La Salle St., preparing plans 12 story, 118 x 125 ft., rein.-con., brick and steel, Madison and Hamlin Sts. $1,000,000. Owner's name withheld.

Ill., Chicago—Office—Library Bureau, Tower Bldg., plans 7 story, 50 x 150 ft., rein.-con., brick and steel, 214-16 West Monroe St. $250,000. Mundie & Jensen, 39 South La Salle St., archts.

Ill., Lake Forest—Hotel—M. H. Patterson, Deer Path Inn, having plans prepared by Ayers, Beck & Co., archts., 118 North La Salle St., Chicago, 4 story, 172 x 233 ft., rein.-con., brick and steel, here. $500,000.

Ill., Niles (Chicago P. O.)—Dormitory—St. Hedwig Industrial School having preliminary plans prepared by E. Brielmaier & Sons Co., 432 Bway., Milwaukee, Wis., 3 story and basement, brick and concrete, here. $200,000.

Wis., Appleton—School—Bd. of Educ. having plans prepared 3 story and basement, rein.-con., brick and tile. $400,000. G. L. Lockhart, 1353 University Ave., St. Paul, archt.

Wis., Kenosha—Temple—Masonic Temple Building Assn., c/o R. Y. Cooper, chn. building com., 548 Exch. St., having plans prepared by R. G. Schmid & Co., archts., 154 West Randolph St., Chicago, 3 story and basement, 100 x 154 ft., brick, concrete and stone, plain foundation, Deming St. $175,000.

Wis., Milwaukee — Apartment-Hotel — G. Reid, (promoter), 428 Grand Ave., having preliminary plans prepared by R. Messmer & Bros., archts., 221 Grand Ave., 5 or 6 story, rein.-con. and brick, plain foundation, Prospect Ave. $700,000.

Wis., Milwaukee—Apartment—Wisconsin Bond & Mortgage Co., 440 Bway., had plans prepared by Voelz & Siebert, archts., 373 Bway., 3 story and basement, 78 x 100 ft., brick and concrete, plain foundation, Juneau and Marshall Sts. $150,000. Noted Oct. 5.

Wis., Milwaukee—Auditorium—Auditorium Bd., 5th and Cedar Sts., plans to remodel auditorium, incl. new roof, storage rooms, exits, etc. $220,000. C. E. Malig, City Hall, archt.

Wis., Sheboygan—Store—H. C. Prange & Co., 731 North 8th St., having plans prepared by W. C. Weeks, archt., 720 Ontario Ave., 2 story and basement, 110 x 120 ft., brick, rein.-con. and steel, plain foundation. $160,000.

Wis., Wauwatosa—Home—Kinderfreund Society, West Milwaukee Ave., rejected bids 3 story, brick and concrete, plain foundation, West Main St. $150,000. Will readvertise. R. Messmer & Bros., 221 Grand Ave., Milwaukee, archts.

Wis., Wauwatosa—School—Bd. Trustees of Milwaukee Co. plans 2 story, brick and concrete, plain foundation, at Home for Dependent Children. $150,000. W. L. Coffey, mgr. of county institutions. Architect not selected.

Ia., Burlington—Municipal—City plans 3 story and basement, brick, concrete and stone. $150,000. J. H. Johnson, clk. Architect not announced.

Ia., Cedar Rapids—Court House and Jail—Linn Co. election Nov. 7 to vote on $750,000 bonds for court house and jail, 2nd Ave. and Court St. H. R. Churchill, aud. Noted Jan. 13, 1921.

Ia., Monticello—School—L. E. Hoag, secy. School Bd., having plans prepared by Keffer & Jones, archts., 204 Masonic Temple Bldg., Des Moines, 3 story and basement, 102 x 215 ft., rein.-con., brick and stone. $170,000. Noted March 16.

Ia., Mt. Ayr—Court House—Ringgold Co. election Nov. 7 to vote on $175,000 bonds for court house. E. E. Cornwall, aud. Keffer & Jones, 204 Masonic Temple Bldg., Des Moines, archts.

Minn., Minneapolis — Apartment — J. Gruesner, 727 Andrus Bldg., having plans prepared by P. E. Crosier, archt., 916 New York Life Bldg., 3 story and basement, 120 x 125 ft., brick, rein.-con. and stone, Lyndale Ave. and 33rd Sts., S. $150,000.

Minn., Minneapolis—Office—Thorpe Bros., 206 Andrus Bldg., having plans prepared by Magney & Tusler, archts., 126 South 9th St., 8 story and basement, 48 x 110 x 120 ft., rein.-con., brick and tile, Marquette Ave. between 5th and 6th Sts. $200,000.

Minn., Rochester—Court House—Olmsted Co. plans 3 or 4 story and basement, rein.-con., brick, tile and stone. $500,000. A. L. Glabe, aud. Architect not selected.

Minn., St. Paul—Schools—Nov. 7, to vote on $5,000,000 bond issue for schools. F. X. Tewes, City Hall, archt.

Kan., Atchison—Gymnasium—St. Benedict's College having preliminary plans prepared by E. Brielmaier & Sons Co., archts., 432 Bway., Milwaukee, Wis., 54 ft. high, 100 x 190 ft., brick and concrete, plain foundation. $150,000.

Kan., Hutchinson—Hotel—Walcott Hotel Co. having plans prepared by McKecknie & Trask, archts., 719 Gloyd Bldg., Kansas City, Mo., 8 story and basement, 75 x 150 ft., rein.-con., brick and terra cotta, Sherman and Main Sts. $400,000.

Kan., Kansas City—Bd. Educ. having plans prepared by Rose & Peterson, archts., 434 Brotherhood Bldg., 4 story and basement, 90 x 119 ft., rein.-con., brick and stone, 18th and Haskell Sts. $250,000.

Kan., Leavenworth—High Schools—Bd. Educ. had plans prepared and soon takes bids High School, 1 story and basement, 118 x 160 ft. rein.-con., brick and stone, 3rd Ave. $150,000; Morris High School, 1 story and basement, 118 x 160 ft., rein.-con., brick and stone, $150,000. C. A. Smith, Finance Bldg., Kansas City, Mo., archt.

N. D., Jamestown—High School—Bd. Educ. soon takes bids superstructure for 3 story and basement, 125 x 195 ft. rein.-con., brick, stone and tile. $250,000. Shannon, Boyd & Boyd, Jamestown, archts. C. F. Tweed, 531 Metropolitan Bank Bldg., Minneapolis, Minn., engr. Contract awarded for foundation, to E. A. Moline, Bottineau, $8,450.

Mo., Columbia — Dormitories, etc. — Stephens College purchased site adjoining college and plans 4 dormitories, $150,000 each, library $250,000. Architect not selected.

Mo., Kansas City—Home—International Home for Girls, 63rd St. and Swope Parkway, having sketches made by C. A. Smith, archt., Finance Bldg., rein.-con., brick and stone. $150,000.

Mo., Kansas City—Office—Peoples Building Co., 433 Lathrop Bldg., having plans prepared by S. E. Chamberlain, archt., 216 Ridge Bldg., 12 story and basement, 132 x 143 ft., rein.-con. and brick, 10th and Oak Sts. $2,500,000.

Mo., Kansas City—Schools—Bd. Educ. having preliminary plans prepared by C. A. Smith, archt., Finance Bldg., 1 story and basement, 180 x 250 ft. high school, 74th St. and Penn Ave., $250,000, New Central High School, $500,000, High School on 63rd St., $1,500,000, High School on 48th St., $1,400,000, 1 story and basement Willard High School, $250,000, 1 story and basement Shiloh Pub. School, $250,000, all rein.-con., brick and cut stone.

Mo., Kansas City—School—Bd. Educ. takes bids in 2 or 3 weeks, 115 x 115 ft., brick and cut stone. $150,000. C. A. Smith, Finance Bldg., archt.

Mo., St. Louis—Apartment—May Building & Investment Co., c/o H. A. Barnett, 808 Chestnut St., purchased site and plans eighteen 2 story and basement, rein.-con. and brick, plain foundations, Taylor, Forest Park and Duncan Aves. $300,000-$365,000. Architect and engineer not selected.

Tex., San Antonio—Church and Rectory—St. Mary Catholic Church having plans prepared by F. B. Gaenslin, archt. and engr., Bedell Bldg., 1 story and basement, 95 x 193 ft., rein.-con., brick and stone, plain foundation. $300,000.

Tex., San Antonio—Y. M. C. A. conducting campaign to raise $400,000 for building. Address E. L. Mogge, c/o St. Anthony Hotel, regional representative.

Wash., Seattle—Apartment—W. E. Humphrey, Colman Bldg., having plans prepared by E. Guenther, archt., Ry. Exch. Bldg., 5 story and basement, 78 x 108 ft., 2nd and Blanchard Sts. $165,000.

Wash., Seattle — Hotel — United Hotels Co., 25 West 45th St., New York City, having sketches made by G. B. Post & Son, archt. and engr., 101 Park Ave., New York City, brick, steel and stone, plain foundation, here. $3,000,000.

Wash., Seattle—Office and Store—Arcade Building & Realty Co., Arcade Bldg., having plans prepared by H. Thomas, archt., Arcade Bldg., 7 story, 108 x 120 ft., steel, concrete and terra cotta, 2nd and Union Sts. $500,000.

Wash., Tacoma—Church—First Presbyterian Church, 10th and G Sts., having plans prepared by Cram & Ferguson, archts., 248 Boylston St., Boston, Mass., 100 x 295 ft., concrete, brick and steel, Tacoma and Division Aves. $250,000.

Calif., Dinuba—Hotel and Store—C. Wilson, c/o Dinuba Improvement & Investment Co., had plans prepared by E. J. Kump, archt., Rowell Bldg., Fresno, 4 story, 100 x 100 ft., brick, Tulare and J Sts. $150,000.

Calif., Fresno—Store, etc.—Black's Package Co., 1025 Van Ness Ave., having plans prepared by R. F. Felchlin Co., archts., Bank of Italy Bldg., 2 story and basement, store building and refrigerating plant 200 ft. frontage, Van Ness Ave. $150,000.

Calif., Mt. View — School—Mt. View School Dist., having plans prepared by W H. Weeks, archt., 369 Pine St. San Francisco, group of buildings, rein.-con. $197,000.

Buildings (Continued)

Calif., Porterville—Bank—Home Bank of Porterville having plans prepared by A. Johnson, archt., Kingsburg Bank Bldg., Kingsburg, 2 story, 60 x 120 ft.

Calif., San Francisco—Apartment—Crosswings Community Apartments, E. K. Little, pres., c/o H. H. Gutterson, archt., 278 Post St., having plans prepared 9 story, basement and sub-basement, rein.-con. and steel, Sacramento and Mason Sts. $150,000.

Calif., San Francisco—Loft—Cebrian Co., c/o G. A. Applegarth, archt., Claus Spreckles Bldg., had plans prepared 4 story, rein.-con., Fremont and Mission Sts. $200,000.

Calif., San Francisco—Store and Apartment—W. H. Woodfield, Jr., 453 28th Ave., had plans prepared by W. F. Gunnison, archt., 1666 Golden Gate Ave., 5 story and basement, 57 x 87 ft., concrete, Sutter and Larkin Sts. $200,000.

Calif., Stockton—Church—First Church of Christ Scientist, c/o G. Allen, archt., 37 South Aurora St., having plans prepared church, probably concrete. $150,000.

Calif., Yuba City—High School—Yuba City Union High School Dist., to vote on $250,000 bonds Nov. 6, to purchase site and construct new high school buildings. C. K. Schnabel, trustee.

Ont., Woodstock — Hospital — Hospital Trust plans wing. $200,000. Address H. Little, chn.

Ont., Windsor—School—Bd. Educ. having plans prepared by A. H. McPhail, archt., McGregor Bldg., 3 story and basement, 20 rooms, concrete, brick, steel and stone addition. $300,000.

B. C., Vancouver—Office—City will vote on $225,000 bonds in December for 6 story, 75 x 130 ft. rein.-con., brick and tile, Main and Pender Sts.

BIDS DESIRED

Mass., Beverly — High School — School Com. receiving bids, 3 story and basement, 100 x 150 ft., rein.-con. and brick, plain foundation, Bohier Rd. $700,000. Adden & Parker, 177 State St., Boston, archts. Noted June 8.

Conn., Glastonbury—High School—Nov. 10, by School Bldg. Com., 2 story and basement, brick and steel, plain foundation, Main St. $150,000. Brooks & Glazier, Lewis St., Hartford, archts. Noted July 6.

N. Y., Buffalo—School—Nov. 8, by Bd. Educ., 1401 Telephone Bldg., 3 story, 180 x 250 ft., rein.-con., brick, steel and stone, Newburgh Ave. $500,000. Associated Buffalo Architects, 232 Delaware Ave., archts.

N. Y., Canandaigua—Court House—Nov. 14, by Court House Com. of Bd. Supervs. Ontario Co., Court House, alterations and additions to court house. J. F. Warner, 1036 Granite Bldg., Rochester, archt.; adv. this issue.

N. Y., Jamestown—High School—Jan. 10, by Bd. Educ., 3 story, 150 x 180 ft., brick, Buffalo St. $350,000. Guilbert & Betelle, 541 Broad St., Newark, N. J., archts. Noted June 8.

N. Y., New York—Apartment—West 64th St. Corp., c/o G. F. Pelham, archt. and engr., 200 West 72nd St., 50 x 100 ft., brick, steel and stone, plain foundation, West 64th St. $250,000. Work will be done by separate contracts.

N. Y., New York—Hospital—Nov. 6, by Warren & Wetmore, archts., 16 East 47th St., 7 story, brick, steel and stone, plain foundation, 87th St. and East End Ave., for East End Hospital, 87th St. and East End Ave. $1,000,000.

N. J., Collingswood—High School—P. A. Davis, archt., 1713 Sansom St., Phila., taking bids 3 story, 135 x 150 ft. and 1 story 46 x 86 ft., cut stone and brick, plain foundation, here, for school Bd. $250,000.

Pa., Altoona—Store and Office—W. A. Hoyt, engr., Hutchinson Bldg., will build and award separate contracts for 5 story and basement, 70 x 120 ft. rein.-con. and brick, 11th Ave., for J. Brett, 1309 11th Ave. $150,000.

Pa., Carrick (Pittsburgh P. O.)—Church—St. Basills Roman Catholic Church, 1735 Brownsville Rd., will build 2 story, 63 x 138 ft. brick, Brownsville Rd., by separate contracts. $150,000. H. J. Lang, 1617 Brownsville Rd., archt.

Pa., Phila.—School—Bd. Educ., 19th and Chestnut Sts., taking bids 2 story, rein.-con., brick and steel, plain foundation, 3rd and Duncannon Sts. $250,000. Private plans.

Pa., Phila. — School — Nov. 9, by Bd. Educ., 99th and Chestnut Sts., 3 story and basement, rein.-con., brick, steel and stone, plain foundation, 9th and Oregon Aves., $500,000; 3 story and basement, rein.-con., brick and steel, plain foundation, Germantown Ave. and Southampton St., $350,000. Private plans.

D. C., Wash.—High Schools—Nov. 22, by Dist. Comrs., 509 Dist. Bldg., for 2 junior high schools; adv. this issue.

W. Va., Charleston—Store—Nov. 4, by Warne, Tucker & Patterson, archts., Masonic Bldg., 5 story, 125 x 160 ft., brick, stone and steel, Lee St., for Coyle & Richardson, Capitol St. $175,000. Noted June 22.

Ga., Athens—Schools—Nov. 7, by I. W. Barnett, city engr., two 1 story and basement, each 34 x 232 ft., terra cotta, tile, brick and stucco. Separate bids for construction, steam heating, ventilating and plumbing. Lockwood & Poundstone, Atlanta, archts.

Ga., Atlanta—School—Nov. 10, by Bd. Educ. c/o J. N. Landers, city purch. agt., City Hall, for Colored Junior-Senior High School, 3 story and basement, 68 x 385 ft., concrete, steel and tile, West Hunter and C Sts. E. C. Wachendorff, 620 Forsyth Bldg., archt. A. T. Brown, Forsyth Bldg., engr.

Ga., Atlanta—Store—Nov. 15, by M. Rich & Bros. Co., c/o Hentze, Reid & Adler, archts., Peachtree St., 6 story and basement, 177 x 199 ft., steel, brick rein.-con. and stone, Alabama, South Broad and Forsyth Sts. Spiker & Lose, Forsyth Bldg., engrs. Noted June 22.

Ala., Birmingham — Apartment Hotel — Nov. 15, by J. E. Salie, archt., 620 Empire Bldg., 7 story, 133 x 200 ft., rein.-con., brick and steel, plain foundation, Highland Ave. and Iroquois St., for H. M. Malony. $1,250,000.

Ala., Birmingham—Auditorium—Nov. 20, by H. D. Breeding, archt., Watts Bldg., 180 x 221 ft., terra cotta, brick and steel, concrete pile foundation, 8th Ave. and 21st St. $400,000.

O., Bowling Green—Dormitory—Nov. 25, by Bd. Trustees State Normal College, 3 story and basement, 40 x 150 ft., brick, concrete and stone. $150,000. S. P. Stewart & Son, Bowling Green, archts. Noted April 6.

O., Cleveland—School—Nov. 20, by Bd. Educ., East 6th St. and Rockwell Ave., 2 story, 160 x 300 ft., brick, steel and concrete, West 140th St. and Diana Ave. $500,000. W. R. McCornack, East 6th St. and Rockwell Ave., archt.

O., East Cleveland (Cleveland P. O.)—Apartment—M. Margolin, 548 East 118th St., Cleveland, taking bids 3 story and basement, 69 x 124 ft., brick and timber, 14902 Superior Rd., here. $150,000. M. Weis, 617 Union Bldg., Cleveland, archt.

Mich., Detroit—School—Nov. 21, by Bd. Educ., 2 story and basement, 93 x 105 ft. rein.-con., brick and steel, plain foundation, Kercheval Ave. $150,000. Malcomson, Higginbotham & Palmer, 405 Moffat Bldg., archts.

Ill., Chicago — Church — E. Steinborn, archt., 111 North Dearborn St., receiving bids 2 story and basement, 65 x 125 ft., rein.-con., brick and steel, California Ave. and Hirsch St., for First Austrian Congregation, c/o architect. $200,000.

Wis., South Madison (Madison, P. O.)—High and Grade School—F. L. Kronenberg, archt., Carroll Blk., taking bids 2 story, 60 x 180 ft., brick, rein.-con. and steel, plain foundation. $150,000.

Tex., San Antonio—Cathedral—Nov. 22, by R. Cameron, archt., Central Trust Bldg., constructing Scottish Rite Cathedral. $1,000,000. H. M. Green Co., North Texas Bldg., archts. Noted June 22.

Ont., Owen Sound—School—Nov. 21, by A. Wright, trustee and chn. Bd. Educ., technical school. $300,000. Prices wanted on all materials.

BIDS RECEIVED

N. Y., New York—Armory—Armory Bd. opened bids Oct. 30, general contract reconstructing Squadron A; Manhattan Boro, from W. W. Constr. Co., 51 East 42nd St., $213,640, Lustig & Weil, 103 Park Ave., $255,193; heating work, from Federal Heating Co., 300 Madison Ave., $28,672, E. G. Woolfolk & Co., 15 West 38th St., $28,860, Austin Eng. Co., 121 West 42nd St., $28,971.

N. C., Greensboro—Schools—School Bd. opened bids Oct. 23, two 2 story and basement, brick, (a) Ashboro St., (b) West Lee St., from J. W. Stout & Co., Sanford, (a) $142,833, (b) $183,670; Southeastern Constr. Co., Charlotte, (a) $146,900, (b) $177,990; Hunt & Saddler, Greensboro, (a) $147,628, (b) $174,269. Noted Oct. 12.

Wis., Racine—Vocational School—Bd. of Industrial Educ. opened bids Oct. 24, 3 story, 185 x 220 ft., brick, plain foundation, from Bondgard & Christensen, 2222 Kinzie Ave. $258,242; A. Kappel, 526 South Wisconsin St., $276,000; L. Hansen, 816 College Ave. $290,090. Noted Sept. 21.

Neb., Omaha—High School—Bd. Educ., c/o W. T. Bourke, secy., 603 City Hall, 3 story and basement, 174 x 369 ft., brick and stone, Ames Ave. between 31st and 32nd Sts., general contract from J. E. Wakefield Co., 750 Brandeis Theatre, $626,400; Vaugh Constr. Co., W. O. W. Bldg. $631,159; P. Kiewitz Sons, 754 Omaha Natl. Bank, $623,000, cost plus fee basis. Excavating work will be done by day labor. Noted Feb. 9.

CONTRACTS AWARDED

Mass., New Bedford—School—St. Josephs Roman Catholic Church, Kearsarge St., will build 2 story and basement, brick and steel, by day labor. $150,000. F. A. Rousseau in charge.

Mass., West Newton (Boston P. O.)—High School—City of Newton, 5 story and basement, brick and concrete, Waltham St., to H. C. Cunningham, 23 Central Ave., Lynn, $151,850. Noted Oct. 19.

Conn., Waterbury—Office—Amer. Brass Co., Grand and Meadow Sts., 2 story, 70 x 240 ft., brick and steel, plain foundation, Meadow St., to Tracy Bros. Co., 52 Benedict St. Archts. est. $150,000. Noted March 30.

N. Y., New York—Apartment—Renzo Realty, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., 5 story, 125 x 160 ft., brick, steel and stone, plain foundation, University Ave. and 176th St., by day labor. $200,000.

N. Y., New York—Apartment—Tremont Realty Co., c/o De Rose & Cavalieri, archts. and engrs., 370 East 149th St., 5 story, 60 x 105 ft., brick, steel and stone, plain foundation, Tremont Ave. and Devoe St. by day labor. $150,000.

N. Y., New York—Hospital—Hospital for Joint Diseases, 124th St. and Madison Ave., 3 story, brick, steel and stone addition, plain foundation, to G. Richard Davis, 30 East 42nd St. Noted July 6.

Pa., Altoona—High School—School Dist., 3 story and basement, 224 x 232 ft., 6th Ave. and 15th St., general contract to H. J. Conrath Co., Ariel Bldg., Erie, $551,714; heating and ventilating, to Sanitary Eng. Co., Anderson, Ind., $116,947. Noted Oct. 26.

Pa., Beaver Falls—High School—Bd. Educ., 3 story and basement, 68 x 120 ft. addition, 17th St., to Cook-Anderson Co., 5th Ave., Beaver. Archts. est. $175,000.

Pa., Phila.—Office—Insurance Co. of North America, 232 Walnut St., 20 story, rein.-con., brick and steel, plain foundation, on Parkway, to Stone & Webster, Inc., 147 Milk St., Boston, Mass. $4,000,000. Noted Sept. 28.

Pa., Pittsburgh — Apartment Hotel — Schenley Apartments Co., 3929 Forbes St., 10 story and basement, brick and tile, Forbes and 5th Sts., and Bigelow Blvd., to Mellon-Stuart Co., Oliver Bldg. Archts. est. $3,500,000. Noted Sept. 14.

Ga., Atlanta—Apartment—Real Estate Investment Corp., 4th Natl. Bank Bldg., 5 story and basement, 100 x 105 ft., rein.-con. and brick, rock foundation, to Adair & Senter, Forsyth and Walton Sts. $300,000 cost plus percentage basis.

Fla., Orlando—Bank and Office—Orlando State Bank and Trust Co., 9 story, brick, stone and steel, to A. Bentley & Sons Co., 201-31 Belmont Ave., Toledo, O. Noted Oct. 12.

Tenn., Memphis — Hotel — Tri States Hotel Co., general contract, 15 story, 358 room, brick, stone, tile, terra cotta and steel, North Main and Adams Sts., to J. Alexander Constr. Co., 388 North Front St. Archts. est. $1,500,000.

O., Athens—Gymnasium—Bd. Trustees Ohio University, 2 story and basement, 100 x 160 ft., brick, stone and concrete, on campus, to E. H. Latham Co., 60 East Broad St., Columbus, $219,358. Noted Oct. 26.

O., Cleveland — Apartment — Moreland Development Co., c/o J. Kirby, Discount Bldg., 6 story and basement, 88 x 140 ft., brick, steel, tile and concrete, plain foundation, Shaker Blvd., to Hunting Constr. Co. Discount Bldg. Archts. est. $300,000.

O., Cleveland — Apartments — Moreland Development Co., c/o J. Kirby, Discount Bldg., 4 and 10 story and basement, 38 x 800 ft., brick, steel and concrete, Shaker Blvd. and Coventry Rd., to Hunting Constr. Co., Discount Bldg. Archts. est. $3,000,000.

O. East Cleveland (Cleveland P. O.)—Store and Apartment — Euclid — Taylor Realty Co., c/o R. Ewing, 709 Williamson Bldg., Cleveland, 3 story and basement, 50 x 120 ft., brick, Euclid Ave. and Taylor Rd., here, to W. F. Thompson & Son Co., 5103 Euclid Ave., Cleveland. Archts. est. $150,000.

Mich., Detriot—School—Bd. Educ., 1354 Bway. Ave., 2 story and basement, 120 x 130 ft. with wing, rein.-con., brick and steel, plain foundation, Clinton and Chene Sts., to F. H. Goddard, 2130 Franklin St. $726,193. Noted Oct. 19.

Wis., Madison—Church—Lutheran Memorial Congregation, 2 story, 150 x 200 ft., brick, rein.-con., stone and steel, plain foundation, University St., to Wisconsin Constr. Co., 102 South Orchard St. Archts. est. $300,000.

Buildings (Continued)

Wis., Milwaukee — Apartment — Shelbourne Apartment Co., c/o Herbst & Kuenzli, archts., 114 Grand Ave., 2 story and basement, 85 x 150 ft., brick and concrete, plain foundation, Marietta Ave., to S. Czaplewski & Sons, 878 2nd Ave. Archts. est. $150,000.

Wis., Milwaukee* — Apartment — Beach Realty Co., c/o M. Tullgren & Sons, archts., 425 East Water St., two 3 story and basement, 55 x 72 ft., brick and concrete, plain foundation, Royal Pl., to Raulf Co., 428 Grand Ave. Archts. est. $150,000.

Wis., Milwaukee—Apartment—Vendome Realty Co., c/o Voelz & Siebert, archts., 373 Bway., 3 story and basement, 132 x 136 ft., brick and concrete, plain foundation, Grand Ave. and 32nd Sts., to Kroening Constr. Co., 39th Ave. and Mitchell St. Archts. est. $250,000. Noted July 13.

Wis., St. Francis—Auditorium—Sacred Heart Congregation, 2 story and basement, 48 x 115 ft., brick and concrete, plain foundation, to L. Unger, 626 Armour Ave., Cudahy. Archts. est. $150,000.

Wis., Superior—High School—Bd. Educ., 2 story and basement, 105 x 256 ft., rein.-con., brick and tile, to Lindhart Boyer Constr. Co., Eau Claire, $165,134. Noted Oct. 26.

Ia., Oakdale—Hospital—State Bd. Control, Capitol, Des Moines, general contract 3 story and basement, 45 x 142 ft., rein.-con., brick, tile and stone addition, here, to M. Mildenstein, Interstate Bldg., Cedar Rapids, $171,448.

Kan., Emporia—Hotel—Hotel Broadview Co., 5 story and basement, 130 x 150 ft., rein.-con. and brick, plain foundation, to Siedhoff Constr. Co., Hotel Broadview, Wichita, $200,000.

Mo., Columbia—Hospital—E. E. Brown, business mgr., 117 Jesse Bldg., general contract 3 story, brick, plain foundation, on campus, to Simon Constr. Co., Columbia, for University of Missouri. $112,964. Noted Oct. 5.

Tex., San Antonio—Market House—City let general contract 2 story and basement, 100 x 500 ft. (east wing), to C. Schoenfeld, 203 St. Marys St., $120,600. Archts. est. $200,000.

Colo., Denver — Apartment Houses — Fleisher Constr. Co., 608 Builders' Exch., Minneapolis, Minn., awarded contract for three 3 story and basement, 150 x 150 ft., rein.-con., brick and terra cotta, plain foundations, one on 10th St., one on 11th St. and other on Grant St. $400,000 each. Owner's names withheld.

Wash., Seattle — Office — Doctors & Dentists Building Co., Cobb Bldg., 15 story, terra cotta and brick, 5th and Olive Sts., to Great Northern Constr. Co., 4th and Vine Sts., Seattle. Archts. est. $1,000,000.

Calif., Sacramento—School—Bd. Educ., constructing Fremont School, brick and concrete, general contract to K. E. Parker Co., Clunie Bldg., San Francisco, $142,200. Noted June 22.

Federal Government Work

PROPOSED WORK

N. Y., New York—Dredging—U. S. Engineer, 2nd Dist., plans dredging in Raritan River.

N. Y., Tupper Lake—Electric Distribution, etc.—Spec. 4725—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans electric distribution and street lighting systems, at U. S. Veterans Hospital, here.

Pa., Phila.—Repairs—Spec. 4748—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans repairs to roof, here.

D. C., Wash.—Laboratory, etc.—Interior Dept., rejected bids opened Oct. 24 for laboratory and isolation buildings at St. Elizabeths Hospital for Insane, here. Noted Oct. 12.

Va., Norfolk—Dredging—U. S. Engineer plans dredging in Appomattox River.

W. Va., Huntington—Maneuver Boat—U. S. Engineer plans to purchase maneuver boat for Dam 30.

W. Va., Huntington—Power House—U. S. Engineer plans power house at Dam 30, Ohio River.

W. Va., Huntington—Steel Hull—U. S. Engineer, plans to purchase steel hull for quarter-boat.

Wash., Puget Sound—Dredging—Spec. 4708—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids dredging, here.

Calif., San Diego—Repairs—Spec. 4751—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans repairs to coaling wharf, here.

BRIDGE—WASHINGTON

Following are lowest three bids opened Oct. 10, by C. H. Purcell, dist. engr., U. S. Bureau Pub. Rds., Portland, for Dosewallips River Bridge on Olympic Highway, Jefferson Co., (A) Ward & Ward, Inc., Tacoma; (B) Owens Bros., Port Angeles; (C) American Pile Driving Co., Everett. The unit bids were as follows:

	A	B	C
185 cu.yd. class "E" concrete	$20.00	$19.00	$17.00
138 cu.yd. class "A" concrete	25.00	36.00	27.00
110 cu.yd. class "B" concrete	25.00	16.00	14.00
40,000 lb. reinforcing steel	.07	.045	.065
353,000 lb. structural steel in place (painted)	.075	.0775	.074
4,000 lin.ft. piling	.50	.50	.50
2 timber bumpers	5.00	10.00	10.00
Clearing and grubbing (lump sum)	150.00	150.00	50.00
Extended totals	$41,355	$41,570	$42,153

SEWAGE DISPOSAL PLANT—FT. WORTH, TEX.

Following are lowest three and highest bid opened by city, Sept. 26, for constructing sewage disposal plant, (A) McKinzie Constr. Co., 302 W. Mulberry St., San Antonio (awarded contract); (B) Kroeger & Kroeger, San Antonio; (C) H. W. Greenway & Co., 214 Hemphill St.; (D) Folwell & Ahlskog. The unit bids were as follows:

	A	B	C	D
Plant complete (lump sum)	$699,990.00	$696,000.00	$759,688.00	$898,000.00
100,000 cu.yd. class I excavation	0.55	0.47½	0.55	0.70
10,000 cu.yd. class II excavation	1.25	1.00	1.50	1.90
100 cu.yd. class I concrete	9.50	12.00	11.05	10.50
100 cu.yd. class II concrete	10.50	11.00	11.56	12.00
4,000 concrete forms	0.19	0.10	0.24	0.15
10,000 lb. reinforcing steel	0.05	0.85½	0.06⅛	0.05
1,000 extra man hours	0.50	0.40	0.56	1.25
1,000 extra team hours	1.00	1.00	0.86	1.50
10 tons class "A" pipe	80.00	75.00	73.00	120.00
Extended totals plant complete, plus excavation, and omitting two filters	$525,090	$527,500	$608,373	$825,000

TUNNEL—NEWARK, N. J.

Bids were opened by North Jersey District Water Supply Comn., Newark, Oct. 19, for constructing Great Notch Tunnel and approaches, Contr. No. 3, (A) Heyman & Goodman Co., 15 Exchange Pl., Jersey City (awarded contract); (B) T. A. Gillespie Co., 7 Dey St., New York City; (C) Mason & Hanger Co., 52 Vanderbilt Ave., New York City; (D) P. McGovern, Inc., 50 East 42 St., New York City; (E) F. Snare Corp., 8 West 40 St., New York City. The unit bids were as follows:

	A	B	C	D	E
100 cu.yd. earth excavation in tunnel	20.00	10.00	17.00	9.00	29.50
8,400 cu.yd. excavation trap-rock in tunnel	21.00	21.00	26.00	15.50	29.50
16,400 cu.yd. excavation sandstone in tunnel	18.00	18.00	21.00	15.50	29.50
25 cu.yd. enlargement of tunnel in rock	25.00	28.00	25.00	11.35	25.00
30 M.ft. b.m. timber in tunnel	100.00	150.00	115.00	100.00	130.00
10,900 cu.yd. concrete masonry in tunnel	12.00	9.00	15.00	17.00	17.30
100 cu.yd. excess concrete masonry, tunnel	5.00	5.00	5.00	5.00	5.00
100 cu.yd. dry packing	5.00	5.00	4.00	2.00	10.00
8,000 cu.yd. removal of top soil	1.10	3.25	2.50	1.25	3.50
13,000 cu.yd. earth excavation in open cut	1.00	1.80	2.50	9.00	3.50
11,500 cu.yd. rock excavation in open cut	3.00	6.24	5.50	11.00	7.00
23,100 cu.yd. refill and embankment	1.00	4.40	2.00	7.10	1.50
4,000 cu.yd. surface dressing and grassing	2.20	3.25	3.50	2.50	2.00
3,900 cu.yd. concrete masonry, aqueduct, open cut	12.00	12.00	18.00	17.00	16.00
500 cu.yd. concrete masonry, spec. structures	30.00	22.00	30.00	23.00	21.00
750 cu.yd. reinforced concrete	17.00	14.50	25.00	25.00	21.00
1,100 cu.ft. grout	9.00	6.00	12.00	11.80	17.00
10 cu.yd. brick masonry	35.00	35.00	50.00	25.25	30.00
27,000 bbl. cement	4.00	2.60	3.50	2.65	4.50
48,000 lb. steel for reinforcing concrete	.06	.06	.08	.06	.07
70,700 lb. cast iron, wrought iron and steel	.10	.08	.30	.10	.15
10 M.ft. b.m. timber and lumber not in tunnel	100.00	50.00	115.00	100.00	120.00
50 cu.yd. sand, gravel and broken stone	7.00	3.50	4.00	4.00	4.00
2,300 lin.ft. vitrified pipe	.70	1.00	1.50	.40	1.10
7,700 lin.ft. galvanizing	.06	.03	.08	.07	.05
1,800 cu.yd. drilling holes, rock or masonry	.50	.32	1.00	.25	1.00
Office building (lump sum)	4,000.00	2,700.00	5,000.00	7,800.00	6,000.00
Cleaning up (lump sum)	10,000.00	5,000.00	100.00	4,000.00	5,000.00
Extended totals	$918,297	$978,543	$1,158,441	$1,208,285	$1,386,025

H. T., Pearl Harbor—Piers—Spec. 4687—Bureau Yards & Docks, Navy Dept., Wash., D. C., soon receives bids two 335 ft., rein.-con. piers, 18 ft. wide, incl. dredging and filling. Noted July 13

BIDS DESIRED

Pa., Pittsburgh — Barges — Nov. 25, at Office U. S. Engineer, 3 steel deck barges; adv. this issue.

Va., Norfolk—Roadway—Nov. 21, by Treas. Dept., Wash., D. C., extension of roadway at U. S. Pub. Health Service Hospital, here; J. A. Wetmore, acting superv. archt.; adv. this issue.

Fla., Jacksonville—Dredging—Nov. 27 at office U. S. Engineer, dredging in Key West Harbor; adv. this issue.

Fla., Jacksonville—Lock and Dam—Nov. 25 at office U. S. Engineer, for lock and dam at Mass. Bluff, Oklawaha River.

Tenn., Memphis—Barges—Dec. 2, by Mississippi River Comn., 1st and 2nd Dist., Customhouse, for 6 steel barges; adv. this isue.

Tenn., Memphis—Boilers—Dec. 2, at office Mississippi River Comn., 1st and 2nd Dists., Customhouse, boilers for hydraulic grader; adv. this issue.

Tenn., Memphis—Machinery—Dec. 2 at Office Mississippi River Comn., 1st and 2nd Dists., Customhouse, furnishing turbines, pumps, feed-water heater, boiler-feed pumps and electric light plant; adv. this issue.

Wis., Milwaukee — Dredge Hull, etc. — Nov. 27, at Office U. S. Engineer, 1 dipper dredge hull and house; adv. this issue.

Mo., St. Louis—Earthwork—Nov. 23 at office Secretary Mississippi River Comn., 1311 International Life Bldg., earthwork in Sub-Dist. 1 of Drainage Union Dist. 1, Illinois; adv. this issue.

Calif., San Diego—Covering Railroad Track—Spec. 4737—Nov. 22 by Bureau Yards & Docks, Navy Dept., Wash., D. C., covering railroad tracks at Marine Barracks, here. Noted Oct. 12.

H. T., Honolulu—Dredging—Dec. 1 at office U. S. Engineer, dredging in Harbor, here, 1,250,000 cu.yd.

BIDS RECEIVED

N. C., Cape Hatteras (Hatteras P. O.)—Extension, etc.—Spec. 4706—Bureau Yards & Docks, Navy Dept., Wash., D. C., extension to barracks and painting, here, (1) work complete, from H. M. Lucas, 115 Bruce Pl., Portsmouth, Va., (1) $3,944 (2) $600 (3) $225; H. C. Clark & Son, Delaware City, Del. (1) $4,287 (2) $465 (3) $200; J. F. Wilson, Manteo, (1) $4,542 (60 days). Noted Oct. 19.

Mich., Adrian—Extension—Treas. Dept., Wash., D. C., extension to workroom and driveway, here, from Universal Constr. Co., Ft. Wayne, Ind., (street address not available) $9,240; G. A. Burley Co., Flint, $9,350; A. M. Lundeberg, St. Louis, Mo. (street address not available) $9,830. Noted Oct. 12.

Federal Government (Continued)

CONTRACTS AWARDED

Mass., Fall River — Extension — Treas. Dept., Wash., D. C., extension to workroom at U. S. Post Office, here to Pearce Bros., Inc., 220 West 42nd St., New York City. $9,350 (4 mos.) Noted Oct. 26.

R. I., Providence—Dredging—U. S. Engineer, dredging in Branford Harbor, Conn., to J. S. Packard Dredging Co., 1054 Turks Head Bldg., $3,450.

N. Y., Chelsea—Mechanical Equipment—Treas. Dept., Wash., D. C., mechanical equipment of U. S. Veterans Hospital, here, to W. G. Cornell Co., 19 Patterson St., N. E., Wash., D. C., $68,557. Noted Sept. 28.

Ala., Tuskegee — Telephone System — Treas. Dept., Wash., D. C., automatic telephone in U. S. Veterans Hospital, here, to Michaels & Co., Inc., Norfolk, Va., $8,565 (118 days). Noted Sept. 14.

Tenn., Nashville—Dump Scows—U. S. Engineer, 3 steel dump scows, to Nashville Bridge Co., Shelby Ave. $16,400 each. Noted Sept. 21.

Montana—Road—U. S. Bureau Pub. Rds., grading and surfacing 6.8 mi. Belton-Nyack Sect., Belton-Java Rd., 52,000 cu.yd. earth and 89,250 cu.yd. rock excav., 12,000 cu.yd. crushed rock surfacing, to Siems & Carlson, 412 Realty Bldg., Spokane, Wash., $179,831.

Idaho—Road—Dept. Agriculture, surfacing 7.5 mi. Lolo Pass Rd., gravel and broken stone, to Siems-Carlson, Realty Bldg., Spokane, Wash., $161,505.

Miscellaneous

PROPOSED WORK

Loading Platform, etc.—Boston, Mass.—Boston Elevated R.R. Co., 108 Massachusetts Ave., having preliminary plans prepared underground loading and unloading platform at Park Station; also underground passageway on Tremont St. $250,000. Engineer not announced.

Grandstand—Danbury, Conn.—Danbury Agricultural Society, 291 Main St., plans 2 tier, rein.-con. and steel, at Fair Grounds. $25,000. Engineer not selected.

Athletic Field — Alfred, N. Y. — See "Buildings."

Transmission Line—Norwich, N. Y.—Norwich Gas & Electric Co., plans 44,000 volt high power electric transmission line. To exceed $25,000.

Elimination of Grade Crossings—Pennsylvania — State Hy. Dept., Harrisburg, plans elimination of 6 grade crossings in connection with construction of East Liverpool-Midland Beaver Rd., Route 243, as follows:—one of the Cleveland & Pittsburgh Ry. Co. at Vanport, 2 of Ohio Valley Scenic Ry. at Industry, 2 at Cooks Ferry and one at Barclays Crossings. $300,000.

Fuel Bins — Phila., Pa. — United Gas Impvt. Co., Broad and Arch Sts., plans 2 story, 34 x 110 ft. rein.-con., brick and steel fuel bins, conveyor system, etc., Tioga and Canton Sts. $115,000. Private plans.

Eliminating Grade Crossings — Wilkes-Barre, Pa.—City and Delaware & Hudson R.R. plan eliminating grade crossings. City's share incl. crossings at Throop, Parker, Depot, East Market and Green Ridge Sts., $400,000. W. A. Shunk, city engr.

Underpasses, etc.—North Carolina—State Hy. Comn., Raleigh, soon takes bids grading, draining and constructing substructures for underpasses under Southern Ry. at Gibsonville and Four Mile Siding, Project 532, Guilford Co. Southern Ry. will build superstructures. $33,400. Foregoing estimate does not include superstructure. C. M. Upham, Raleigh, state highway engr. J. B. Akers, Charlotte, ch. engr. Southern Ry.

Golf Course, etc.—Canton, O.—Brookside Country Club, c/o T. H. Harris, pres., 104 Market St., having plans prepared for golf course, and alloting 50 acres for home sites, incl. grading, laying sidewalks, sewers and mains, also constructing 2 story frame clubhouse. $200,000. D. Ross, Pinehurst, N. C., engr. W. Pitkin, 4500 Euclid Ave., Cleveland, engr. for landscaping and alloting.

Transmission Lines—Cleveland, O.—See "Industrial Works."

White Way Lighting System—Cleveland, O. — Plans white way lighting system in Lorain Ave. from West 58th to West 117th Sts., Clark Ave. from West 25th to West 44th Sts., Clark Ave. from West 14th to West 25th Sts., Bway. from East 34th St. to Miles Ave., Lorain Ave. from West Blvd. to West 106th St., Prospect Ave. from East 14th to East 55th Sts. $150,000. G. Beckwith, City Hall, engr.

Elimination of Grade Crossings—Columbus, O.—Norfolk & Western R. R., Roanoke, Va., and city soon receives bids eliminating grade crossings, elevating tracks to provide for arched openings on Main, Broad and Long Sts., Livingston, Fair, Clifton and Mt. Vernon Aves., also a ninth opening will be made at Franklin Park to be used as driveway, here. To exceed $2,000,000. R. H. Simpson, City Hall, engr. J. E. Crawford, Roanoke, ch. engr.

Transmission Line—Terre Haute, Ind.—See "Industrial Works."

Golf Course—Benton Harbor, Mich.—See "Buildings."

Transmission Line—Fond du Lac, Wis.—Eastern Wisconsin Electric Co., 428 North 8th St., Sheboygan, having plans prepared 66,000 voltage transmission line from here to Vandyne. $25,000. Private plans.

Steam Heating System—La Crosse, Wis.—Hunts Hotel Co., c/o E. D. Hunt, mgr., having plans prepared new steam heating system and 2 smokeless portable boilers. $25,000. O. J. Sorenson, 216 Main St., engr.

Water Meters — Sheboygan, Wis. — City plans installing 6,000 water meters. $50,000-$60,000. J. Steimle, clk.

Transmission Line—Stratford, Wis.—Stratford Light and Power Co. having plans prepared transmission line from here to Wausau. $25,000. H. Langer, pres. Private plans.

Ornamental Street Lighting—Waukesha, Wis.—Making plans ornamental street lighting system in business district. $25,000. A. P. Kurantz, City Hall, Kenosha, engr.

Dump Trucks — Big Springs, Tex. — F. C. Lancton in market for 10 dump trucks.

Electrical Distribution System — Cement, Okla. — See "Waterworks."

Hydro-Electric Power System, etc.—Deer Park, Wash.—Mt. Spokane Power Co. sold $100,000 bonds to enlarge present hydro-electric power system, incl. raising dam, new flume, wood pipe line, new dam, canals, machinery, generators, housing transformer wheels, transmission lines, tanks, etc. Nixon-Kimmel Co., S 169 Wall St., engr.

Switchboard Extensions, etc.—Stratford, Ont.—Bell Telephone Co. preparing plans extending switchboard, rearranging and increasing capacity of cables, laying conduits in several streets. $50,000. Plans to do large portion of work by day labor. J. J. Griffin, mgr.

BIDS DESIRED

Shaft—Brooklyn, N. Y.—Nov. 24, by Bd. Estimate & Apportionment, City Hall, New York, for Shore Rd. shaft, here, for freight and passenger railroad tunnel in Boros of Brooklyn and Richmond, under New York Bay, New York City. J. F. Hylan, mayor, chn.; adv. this issue.

Column Foundations—New York, N. Y.—Nov. 10, by Transit Comn., 49 Lafayette St., column foundations for part of Rapid Transit R.R., Flushing Route. G. McAneny, chn.

Concreting Voids—New York, N. Y.—Nov. 9, by Transit Comn., 49 Lafayette St., concreting voids under platform of 8th St. Sta., Route 5, Sect. 4, Manhattan Boro, Agreement "CG." G. McAneny, chn.

Lumber—Ocean City, N. J.—Nov. 21, by State Hy. Dept., Trenton, furnishing 487,400 ft. lumber for use on Ocean-City-Somers Point Bridge, delivery made f.o.b. cars at railroad siding here. A. L. Grover, clk.; adv. this issue.

Electrical Work, Plumbing, Heating, etc.—Johnstown, Pa.—Nov. 27, by C. H. Meyer, secy. Bd. Educ., 601 Swank Bldg., electrical work, plumbing, heating and ventilating for Cochran School, 8th Ward. $130,000. J. E. Adams, Nemo Bldg., archt. Noted Oct. 19 under "Buildings."

Heating and Ventilating System—Wilmore, Pa.—Nov. 6, by C. S. Kniss, secy. School Dist. Summerhill Twp., Beaverdale, heating and ventilating system for Wilmore School. $85,000. W. R. Myton, 1204 1st Natl. Bank Bldg., Johnstown, archt.

Steel—Cleveland, O.—Nov. 9, furnishing and erecting 1,200 ton structural steel for Fairmount Pumping Station. A. V. Ruggles, City Hall, engr.

Grade Separation—Milwaukee, Wis.—Nov. 6, by R. E. Stoelting, comr. Pub. Wks., grade separation of 8th Ave. from Cleveland to Montana Aves., Midland Ave. from Cleveland to about 240 ft. south of Montana Ave., and 300 ft. of approach east and west of Midland Ave. on Montana St., incl. 17,000 cu.yd. fill to subgrade of pavement, 3,440 cu.yd. excav. for retaining walls, 1,250 cu.yd. rein.-con. retaining walls, etc. G. F. Staal, City Hall, engr.

BIDS RECEIVED

Broken Trap Rock Stone, etc.—New York, N. Y.—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., opened bids Oct. 30, furnishing and delivering 4,000 cu.yd. broken trap rock stone and 2,000 cu.yd. broken trap rock screening, from New Haven Trap Rock Co., North Branford, Conn., $2.98, $2.98, $17.800. Noted Oct. 26.

Rip Rap, etc.—New York, N. Y.—Bd. Purch. Municipal Bldg., opened bids Oct. 25, furnishing and delivering rip rap, from O'Brien Bros., 80 South St., $5,000; structural steel, from Bethlehem Steel Bridge Co., 25 Bway., $48,750, English Constr. Co., $48,750, Amer. Bridge Co., 30 Church St., $57,250; oak, pine spruce lumber, from Forest Box & Lumber, 320 Oakland St., Brooklyn, $293.77, Stewart Lumber Co., Metropolitan and Woodward Aves., Brooklyn, $366.44, Robertson Lumber, $411.18, Cooney Eckstein & Co., 302 Bway., $5,499.90, A. R. Sax Lumber, 143 West 33rd St., $26,677, J. A. Maloney & Co., 1170 Bway., $27,574.82, E. R. Mill & Lumber, $28,034.45, G. Elias & Bros., 22 East 17th St., $39,492.71. Noted Oct. 19.

Wire Mesh Fences—New York, N. Y.—Park Bd., Municipal Bldg., opened bids Oct. 26, furnishing and erecting wire mesh fences around certain lawns in various city parks in Manhattan Boro, from Riverdale Constr. Co., 1440 Bway., $79,340; Vulcan Rail & Constr. Co., Maspeth, $87,640; Page Steel & Wire Co., Grand Central Terminal, $106,823. Noted Oct. 19.

Steam Turbine and Accessories—New Orleans, La.—Sewerage & Water Bd., 526 Carondelet St., opened bids Oct. 10, for 6,000 kw. steam turbine and accessories, from General Electric Co., River Rd., Schenectady, N. Y., $140,837; Allis-Chalmers Mfg. Co., West Allis, Milwaukee, Wis., $162,455. Noted Aug. 17.

Clearing Right of Way—Seattle, Wash.—Opened bids Oct. 20, clearing right of way for transmission line on Sect. 3, Skagit River Power Development, from Culliton Bros., 5248 17th Ave. N. E., Proposal A $109,750, Proposal B $120,695; Schacht Constr. Co., Thompson Bldg., Proposal A $115,000, Proposal B $122,120.

CONTRACTS AWARDED

Asphalt Wearing Surface Sand, etc. — New York, N. Y. — H. Bruckner, pres. Bronx Boro, Tremont and 3rd Aves., furnishing and delivering 3,500 cu.yd. asphalt wearing surface sand, to Z. Mahoney, 557 46th St., Brooklyn, $3,900; 3,000 cu.yd. binder stone, to Calvin Tompkins, 30 Church St., $5,220; 350 ton asphalt cement to Warner-Quinlan Co., 79 Wall St., $6,556; 200 ton limestone dust, to E. Meyer Co., 25 Church St., $1,240. Noted Oct. 12.

Foundation, etc.—New York, N. Y. — Transit Comn., 49 Lafayette St., foundation for 3rd addition to shops at Lenox Ave. and 148th St. Yard, to Rosenthal Eng. & Contg. Co., 226 Jackson St., Brooklyn, $295,000; erecting structural steel for above, to Bethlehem Steel Bridge Corp., 111 Bway., $92.60. Noted Oct. 26.

Transmission Line—Atlanta, Ga.—Georgia Ry. & Power Co., Electric and Gas Bldg., will build 60 mi. transmission line from Lindale through Chickamauga to Chattanooga, Tenn., 30,000 kw., 110,000 voltage, by day labor. $500,000. W. P. Hammond, c/o owner, asst. engr.

Heating and Ventilating System, etc.—Youngstown, O.—Bd. Educ. heating and ventilating system in new Princeton School addition, to W. J. Scholl Co., East Commerce St., $70,000; plumbing to Knox Plumbing Co., Youngstown (street address not available), $33,655.

Dock—Detroit, Mich.—Recreation Dept., 504 Elmwood Ave., and Pub. Lighting Comn., East Atwater St., 735 ft. rein.-con. dock on wood piling, 17 ft. wide, 5 ft. high, etc., to Greiling Bros., 100 Walnut Blk. E., Green Bay, Wis., $79,940. Noted Sept. 21.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: **Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.**

Rate:
40 Cents a Line an Insertion

Plans and Specifications **for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.**

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: **Nov. 17.**

Road Work

Bernardsville, N. J.

Notice **is hereby given that sealed bids** will be **received by** the Township Committee **of the Township of Bernards in the** County **of Somerset for the construction of** the following:

Claremont-**Post-Kunhardt** (Mine Mount) Road, Section **First—Estimated amount of** excavation **1180 cubic yards, macadam foundation, 3022.2 square yards, bituminous** binder **7274.65 gallons, dustless screenings** 145.**493 tons,** bituminous surface 14549.3 **square yards,** cross drains 35 feet of 18-inch **C. I. P.** and 50 feet of 12-inch **C. I. P.**

Bids will be received at the office of the Township **Clerk in the Township Office** in Bernardsville, **New Jersey,** on

FRIDAY, **NOVEMBER** 17TH, 1922,

at seven **o'clock P. M., and opened and read** immediately **thereafter.**

Drawings**, specifications** and form of bid, contract **and bond for the** proposed work are on **file in the office** of the Township Clerk **of Bernards Township and the office** of the **Township** Engineer, Col. F. S. Tainter, at **Bernardsville, N. J.,** and may be inspected **by prospective bidders. Plans** will be **furnished on deposit of Ten ($10.00)** dollars **upon application to the said Clerk or** Engineer. **Bids must be made on the** standard **proposal forms** in the manner designated **therein and as** required by the specifications, **same to be enclosed in sealed** special **addressed** envelopes bearing the name and **address of** the bidder and the name and **section of the road** on the outside, and must be **accompanied** by a certified check drawn **to the order** of the Treasurer of the **Township of** Bernards for not less than $1,000, **and shall be delivered at the** above **place on or** before the hour named. Copies **of the standard proposal form will** be furnished **on application. Bids not** enclosed as **above set forth will not be opened.** The Township **Committee reserves the right** to reject **any and all bids. Each bidder** must be **prepared to produce a sufficient** bond approved **by the Township Committee** in a sum **in 100 per cent of the contract** as is required **in and in accordance with** the provisions **of said specifications, condi**tioned for **the faithful performance of the** provisions **of the contract and specifications.** Each bidder **must also accompany his bid** with a statement of equipment property **filled** out.

By order of the Township Committee of the Township of Bernards.

FRANK P. BOWMAN,
Township Clerk.

Dated **Bernardsville, N. J.,**
October 24, 1922.

Bids: **Nov. 29.**

Filtration Plant and Reservoir

San Juan, Porto Rico.

Sealed proposals for the furnishing of all labor and material for the construction of a 8,000,000 **gals. filtration plant and a** 10,500,000 **gals. filtered water concrete res**ervoir **for the City of San Juan will be re**ceived in the **office of the** Commissioner of Public **Service until November 29, 1922, at** 10 A.M.

All plans, **specifications,** instruction to bidders, **blanks, forms for proposals and all** other **information may be obtained at the** office **of the City Commissioner of Public** Works **at San Juan, Porto Rico.**

The **right is reserved to reject any and all** bids.

MARTIN TRAVIESO,
Commissioner of Public Service.

OFFICIAL PROPOSALS

Bids: Nov. 27.

Hard Surfaced Road Project

Washington, N. C.

Sealed proposals will be received by the Beaufort County Road Commission at its office in Washington, N. C. until 2 p.m. November 27th, 1922 for the Construction of two sections of road on the Chocowinity-Aurora Road. One section starting at Chocowinity and extending 4.8 miles towards Aurora; one section at Edwards beisg 2 miles in length.

Bids are desired on asphalt and concrete paving 18 feet wide. The total estimated approximate quantities are; 71,800 sq.yds. of sheet asphalt, asphalt concrete or concrete paving.

452 sq.yds. gravel or water bound macadam **paving 34,895** cu.yds. excavation.

3 culverts, **containing** 54 cu.yds. concrete **and 4250 lbs. steel.**

2 bridges, containing **706 cu.yds.** concrete; 69,240 lbs. steel & 3200 feet of **piling.**

210 ft. 18 in. pipe.
30 ft. 30 in. pipe.
150 ft. 15 in. pipe.

Proposals must be marked **"Proposal for Chocowinity-Aurora Road."**

All bids must be upon blank forms provided in the **Proposal,** Contract and **Specifications.**

Each bid must be accompanied by a **certified check for $10,000,** or satisfactory Bidder's Bond as evidence of good faith. **Bidders bidding on** any part of the work **separately must** accompany their bid by a **certified check or satisfactory** bidder's bond **for an amount** equal to 5% of the amount **of their** bid.

Plans and specifications will be on file at the office of the Commission, in **Washington, N. C.** and copies of the plans, **specifications,** form of proposal, etc. will be mailed upon the applicant making a **deposit of $5.00** one half of which will be returned upon the return of the plans in good condition as stated in the specifications.

The right is reserved to reject any or all bids.

F. C. Kugler, Chairman.
J. D. BULLUCK, Secretary.
H. W. RANKIN., Engineer.

Bids: Dec. 11.

Labor-Material Percentage Contract

New Orleans, La.

Sealed proposals will be received at the Sewerage and Water Board, Room 401, No. 526 Carondelet Street, New Orleans, La., up **to 12** o'clock noon of Monday, December **11th, 1922,** on Labor-Material Percentage **Contract for year 1923.**

Specifications and blank forms of proposal **may be obtained** at the office of the Board.

The right is reserved to reject any or all bids.

October 12th, 1922.

A. G. MOFFAT,
Secretary.

GEO. G. EARL,
General **Superintendent.**

Bids: Nov. 14.

Automatic Sprinkler System

Aberdeen, Wash.

The Port of **Grays Harbor, Aberdeen,** Wash., will receive bids until 10 o'clock A.M., Tuesday, November 14th, 1922, for furnishing and installing an automatic **sprinkler system** in the **Port Transit Shed.** Approximately **366 heads required.**

Further **information** on application.

FRANK H. LAMB, President,
J. A. VANCE, Secretary.

OFFICIAL PROPOSALS

Bids: Nov. 8.

County Road Work

Atlantic City, N. J.

Notice is hereby given that sealed bids **will be received by the Board of Chosen** Freeholders of the County of Atlantic, N. J., at 12 o'clock noon on November 8th, 1922, during a regular meeting of the Board at its meeting room in the Guarantee Trust Building, Atlantic City, N. J., for the reconstruction of Section 6 of Route No. 14 in Hamilton Township, County of Atlantic and State of New Jersey, with a Warrenite-Bitulithic pavement on a six inch (6") **1-3-5** concrete base. The estimated amount of pavement and of base is **8,123.51** square yards, together with excavation, extra embankment, gravel shoulders, drainage provisions and various other details required in the work. The aforesaid bids will be opened and read in public at the time and place stated for receiving them.

Plans, specifications and forms of bid, certificate of surety, contract and bond, as prepared by A. H. Nelson, County Engineer and approved by the State Highway Commission, have been filed at the office of the County Engineer at 636 Guarantee Trust Bldg., Atlantic City, N. J., and at the office of the State Highway Commission in Broad St. Bank Bldg., Trenton, N. J., at which places they may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of said plans and specifications by the County Engineer on consideration of a deposit of $10.00 which deposit will be refunded if the plans and specifications are returned to him in good condition by noon of November 8th, 1922. Each bid must be made on the standard proposal form, in the manner designated therein and **required by the** specifications, must be enclosed in a sealed envelope bearing on the outside the name and address of the bidder and the name of the road and the envelope **must be addressed** to the Board of Chosen Freeholders, Atlantic County, **N. J. Each bid must be** accompanied by **a certificate of surety and** by a certified **check in an amount not less** than 10% of the bid and must be delivered at the place **and on the hour above stated** for receiving bids. A contract will be awarded, if **awarded at all, subject to the** approval of the State Highway Commission ofr New Jersey and also subject to the sale and delivery of bonds, which will be issued for the purpose of paying for the proposed work. The Board reserves the right to reject any or all bids.

By order of the Board of Chosen Freeholders **of the** County of Atlantic, N. J.

F. W. WILLETTS,
Clerk.

Bids: **Dec. 1.**

Cast Iron Pipe and Castings

San Juan, Porto Rico.

Sealed proposals for the furnishing of **about 20,020 tons of cast iron pipe and of** **250 tons of special castings, or its equivalent in steel pipe and specials, delivered at San Juan, Porto Rico, for the City of San Juan, will be received in the office of the Commissioner of Public Service until December 1, 1922, at 10 a.m.**

All plans, specifications, instruction to bidders, blanks, forms for proposals and all other information may be obtained at the office of the City Commissioner of Public Works at San Juan, Porto Rico.

The right is reserved to reject any and all bids.

MARTIN TRAVIESO,
Commissioner of Public Service.

OFFICIAL PROPOSALS

Bids: Nov. 24.

Superstructures, Chimney, Crane and Filter Plant

Memphis, Tenn.

Sealed proposals, addressed to the Board of Commissioners of the Memphis Artesian Water Department, and endorsed with the bidder's name and designation of the work bid upon will be received at the office of the Memphis Artesian Water Department eat Memphis, Ten., until 12 o'clock noon of the 24th day of November, 1922, and then publicly opened and read, for the construction at Memphis, Tenn., of building superstructures for new water supply and for the furnishing and installing of machinery, the work being divided into contracts as follows:

Contract 7. Superstructures, chimney and filter equipment.

Contract 8. Coal and ash handling system.

Contract 9. Three 9 m.g.d. low-head, centrifugal pumps direct conected to reaction water-turbines.

Contract 10. Two 100 k.w. direct-connected unaflow engine generator sets and switchboard.

Bids may be made upon any or all contracts, but a bid upon any contract must include all work under that contract.

Contract 7 includes the brick walls, stone trim, steel frame and roof of the pumping station, approximately 125 feet by 225 feet in plan and 50 feet high; the walls and stone trim of the iron removal plant approximately 90 feet by 160 feet in plan and 25 feet high; the superstructure of the aerator house; tile and cement floor finish; steel sash doors; roofing; plumbing, heating and lighting; a 15 ton 120 foot span traveling crane; a 9 foot by 225 foot radial brick chimney; sand, gravel, pipe laterals and operating tables for eight filters; two dry feed machines; and various incidental work.

Copies of the bidding blanks, bonds, contracts, specifications and drawings may be obtained from the office of the engineers, Fuller & McClintock, 421 Produce Exchange Bldg., Kansas City, Mo., or may be inspected at any of the following offices:

Memphis Artesian Water Department, Memphis, Tenn.

Fuller & McClintock, 170 Broadway, New York City.

Fuller & McClintock, 319 Summit-Cherry Bldg., Toledo, Ohio.

A charge of $20.00 wil be made for each set of specifications which charge will be refunded provided the specifications are returned within 30 days after bids are received.

The Water Commission reserves the right to reject any or all bids, to waive any informalities in the bids received, and to accept any bid or bids which they deem most faforable to the interests of the City of Memphis.

By order of the Board of Commissioners of the Memphis Artesian Water Department.

Bids: Nov. 28.

Highway Bridges

Little Rock, Ark.

Sealed bids will be received until Ten A.M. of Tuesday, November 28th, 1922 at the offices of the Board of Commissioners of Pulaski Road Improvement District Number Ten, for the construction of four bridge structures on Section Three.

The approximate quantities are as follows:

Structural Steel	375,000 lbs.
Reinforcing Steel	96,000 lbs.
Concrete	1,050 Cu. Yds.

All proposals or bids must be accompanied by a certified check drawn on a responsible bank or trust company in the city of Little Rock.

Certified check must be made payable to H. S. Turner, Secretary of Pulaski Road Improvement District Number Ten, for a sum not less than five per cent of the aggregate amount of the proposal.

Specifications and additional information may be secured from the Engineer.

The successful bidder will be required to furnish satisfactory surety construction bond in a sum equaling the amounts of the contracts awarded him.

The right is reserved to reject any, or all, proposals submitted and to waive informalities.

ROY L. THOMPSON, Chairman.
H. S. TURNER, Secretary,
216 Gazette Building,
Little Rock, Ark.
D. A. MacCREA, Chief Engineer.

OFFICIAL PROPOSALS

Bids: Nov. 21.

Lumber

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the following:

Furnishing of 487,400 feet B.M. of lumber for use on the Ocean City-Somers Point Bridge; delivery to be made f.o.b. cars at the railroad siding in Ocean City.

Bids will be received at the office of the State Highway Commission, Broad Street Bank Bldg., Trenton, New Jersey, on Tuesday, November 21st, 1922, at 11:00 a.m., and opened and read immediately thereafter.

Specifications for the lumber and conditions governing bids may be obtained upon application to Mr. A. W. Muir, Superintendent of Maintenance, State Highway Department, Broad Street Bank Bldg., Trenton, New Jersey. Bids must be made upon the standard proposal form in the manner designated therein and as required by the specifications and conditions governing bids, same to be enclosed in sealed special addressed envelopes which will be furnished with the proposal form bearing the name and address of the bidder and the name of the bridge on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000 and be delivered at the above place on or before the hour named.

The State Highway Commission reserves the right to reject any or all bids not in accordance with the conditions governing said bids.

By order of the State Highway Commission.

A. LEE GROVER, Chief Clerk.

Bids: Nov. 20.

Cast Iron Water Pipe

Springfield, Mass.

Sealed proposals will be received by the Board of Water Commissioners of Springfield, Mass., at its office in the Municipal Building, on or before 11 a.m., Monday, November 20, 1922, for the furnishing of cast iron water pipe and special castings.

The proposal shall state price per ton of 2,000 lbs., F.o.b. Armory Station, Springfield, Mass., for each size of pipe and each size and kind of special casting, in accordance with the following schedule.

200	lengths Class E 6" cast iron pipe
2,000	" " E 8" " " "
250	" " E 10" " " "
100	" " E 12" " " "
10	8" Crosses, B. B., Class H
5	10" x 8" Crosses, B. B., Class H
6	6" x 4" Reducers, Class H., B. & S.
50	6" Sleeves, Class H
50	8" Sleeves, Class H
10	10" Sleeves, Class H
15	8" Tees, B. B., Class H
10	10" x 8" Tees, B. B., Class H
1	12" Y, B. & S., Class H

All pipe and special castings to be manufactured in accordance with N. E. W. W. A. specifications.

Proposal shall be in a sealed envelope marked "Proposal for Cast Iron Pipe." It shall also contain a statement as to the dates and rate of delivery for the pipe and special castings.

The right is reserved to eliminate any size from the proposal or to accept the proposal for any sizes without the acceptance of the entire bid. The right is also reserved to reject any or all bids or to accept any bid or any portion of any bid which it may be deemed to the interest of the City of Springfield so to do.

H. M. KING, Superintendent.
Springfield, Mass.
October 27, 1922.

Bids: Nov. 23.

Street Paving

Wilmington, N. C.

Sealed proposals for the construction of approximately 75,000 sq.yds. of hard surface street paving will be received at the office of the Commissioner of Public Works, Wilmington, N. C., until 11 a.m. on the 23rd day of November, 1922.

A certified check to the amount of 5% is required with each bid and the right is reserved to reject any or all proposals.

Plans and specifications may be obtained from the Carolina Engineering Co., 412 Southern Bldg., Wilmington, N. C., G. H. Bishop, Consulting Engineer.

By order of the Board of Commissioners.

R. C. CANTWELL,
Commissioner of Public Works.

OFFICIAL PROPOSALS

Bids: Nov. 17.

Road Work

Tampa, Fla.

Sealed proposals will be received by the Board of County Commissioners of Hillsborough County, Florida, until 11.00 a.m. on November 17th, 1922, for the construction of approximately one hundred and sixty (160) miles of nine (9) and fifteen (15) foot roads, to be paved with either brick, asphalt, block, sheet asphalt, asphaltic concrete, cement concrete, or bituminous macadam, as set forth in the specifications.

Specifications may be obtained on application from the Clerk of the Circuit Court of Hillsborough County, at Tampa, Florida. A deposit of $5.00 will be required for specifications.

A certified check or bidder's bond executed by a reputable bonding company authorized to do business in the State of Florida, in the sum of Five (5%) per cent of bid must be attached up to a bid of Five Hundred Thousand ($500,000.00) Dollars. Any contractor bidding on more than amount of work up to and including the total project may make a check or bidder's bond for only Twenty-Five Thousand ($25,000.00) Dollars, payable to Charles T. Friend, Chairman of the Board of County Commissioners. A bond must be submitted with each proposal.

Bidders may submit proposals on each road separately or on the combined project as a whole, it being understood, however that the Board reserves the right to award this work as they deem best, either separately or as a whole.

The right is reserved to select the type of curbing and paving for each road and to reject any or all bids.

Bids will also be received for road building materials; such materials to conform to the requirements as set forth in the construction specifications. A certified check or bidder's bond must accompany each proposal for materials, payable to Charles T. Friend, Chairman of the Board of County Commissioners, for the sum of One Thousand ($1,000.00) Dollars. The right is reserved to reject any and all bids. Address all bids to C. T. Friend, Chairman Board of County Commissioners, Tampa, Florida.

CHARLES T. FRIEND,
Chairman Board of County Commissioners.
Date, October 13th, 1922.

Bids: Nov. 8.

Road Reconstruction

Atlantic City, N. J.

Sealed bids will be received by the Board of Chosen Freeholders of Atlantic County, N. J., at 12 o'clock noon on Nov. 8th, 1922 during a regular meeting of said board at the Freeholders' Meeting Room in the Guarantee Trust Bldg., Atlantic City, N. J. for the reconstruction of Cedar and Landis Avenues from Mays Landing-Downstown Road in Richland to the line between the Counties of Cumberland and Atlantic, with a Warrenite-Bitulithic pavement on a six inch (6") 1-3-5 concrete base; estimated amount of surface pavement and concrete base required is 44,663 sq.yds. together with gravel shoulders, excavation and embankment, drainage provisions, guard rail and other items; said bids to be opened and read in public at the aforesaid time and place.

Drawings, specifications and form of bid, certificate of surety, contract and bond, covering proposed work, are on file in the Office of the County Engineer at 636 Guarantee Trust Bldg., Atlantic City, N. J., where they may be inspected and a prospective bidder may secure a copy of the specifications and blueprints of the plans upon the deposit of $10, which deposit will be refunded provided the plans and specifications are returned to the County Engineer's office in good condition by noon on Nov. 8th, 1922. Each bid must be made on the standard proposal form in the manner required by the specifications and must be accompanied by a certified check, or cash, in the amount of Ten (10%) per cent of the bid except that the amount need not exceed $20,000.

A contract will be awarded, if awarded at all, within one month of the date of receiving bids and such award will be made subject to the sale and delivery of bonds to be issued for the purpose of financing the reconstruction. The right is reserved to reject any or all bids.

By order of the Board of Chosen Freeholders of Atlantic County, N. J.

F. W. WILLETTS,
Clerk.

Bids: Nov. 14.

State Road Work

Charleston, W. Va.

Sealed proposals will be received by the State Road Commission of West Virginia at its offices in Charleston, West Virginia, until ten o'clock a.m. on the 14th day of November, 1922, and said proposals will be opened and read immediately thereafter at the Kanawha County Court House, Charleston, W. Va., for the construction of the following sections of State Road:

Project 3151—Boone County—4 miles of the Ramage-Madison Road for grading and draining. Certified check for $2,400.00.

Project 3152—Boone County—1.7 miles of the Racine-Peytona Road for grading and draining. Certified check for $1,300.00.

Project 123—Raleigh County—4.2 miles of the Shady Springs-Flat Top Road for grading, draining and paving with Bituminous Macadam. Certified check for $7,000.00.

Project 3051—Pocahontas County—4.23 miles of the Buckeye-Millpoint Road for grading and draining. Certified check for $1,600.00.

Project 3047—Nicholas County—5.7 miles of the Summersville-Gilboa Road for grading and draining. Certified check for $2,500.00.

Project 3054 — Summers County — 4.0 miles, End Project 1067 to the Raleigh County Line, for grading and draining. Certified check for $2,600.00.

Project 3170—Clay County—4.6 miles of the Maysel towards King Shoals Road for grading and draining. Certified check for $3,200.00.

Project 3057—Mason County—9.0 miles of the Pt. Pleasant-Clifton Road for grading, draining and gravel surfacing. Certified check for $3,800.00.

Project 3138—Mason County—5.5 miles of the Henderson-Couch Road for grading, draining and gravel surfacing. Certified check for $3,500.00.

Project 3060-A — Mercer County — 0.6 miles of the Simmons-Freeman Road for grading, draining and paving with Bituminous Macadam. Certified check for $900.00.

Project 3061—Wayne County—9.0 miles of the Echo-Fleming Road for grading and draining. Certified check for $6,000.00.

Project 3062—Wyoming County—3.63 miles of the Iroquois-Amigo Road for grading and draining. Certified check for $3,500.00.

Project 3133—Raleigh County—0.54 mile of the Iroquois-Amigo Road for grading and draining. Certified check for $560.00.

(Note: Projects 3062 and 3133 will be let in one contract.)

Project 3076-B—Calhoun County—11.0 miles of the Grantsville-Arnoldsburg Road, for grading and draining. Certified check for $3,600.00.

Project 3067—Wirt County—12.0 miles of the Elizabeth-Spencer Road for grading and draining. Certified check for $3,600.00.

Project 3021-B—Webster County—11.0 miles Pt. Mountain Randolph County Line Road for grading and draining. Certified check for $5,000.00.

Project 3111—Gilmer County—10.0 miles of the Glenville-Normantown Road for grading and draining. Certified check for $8,000.00.

Project 3154—Upshur County—6.0 miles of the Buckhannon-Randolph Road for grading and draining. Certified check for $2,500.00.

Project 3149—Grant County—2.4 miles of the Petersburg-Hardy County Line Road for grading, draining and paving with Waterbound Macadam. Certified check for $2,000.00.

Project 3012—Hampshire County—8.6 miles of the Junction to Hardy County Line Road for grading and draining. Certified check for $5,000.00.

Project 3107—Mineral County—7.6 miles of the Ridgeley-Alaska Road for grading, draining and gravel surfacing. Certified check for $3,000.00.

Project 3028 — Berkeley County — 4.24 miles of the Martinsburg-Hedgesville Road for grading, draining and paving with Waterbound Macadam. Certified check for $3,500.00.

Proposals will be received only upon State Standard forms in accordance with plan, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates may be obtained from the office of the Division Engineer in whose territory the proposed construction is located, or from the office of the State Road Commission at Charleston, W. Va.

Each proposal must be accompanied by a certified check for the amount noted.

The right is reserved to reject any and all proposals.

State Road Commission of W. Va.
E. B. CARSKADON, Secretary.

Bids: Nov. 14.

County Court House Additions and Alterations

Canandaigua, N. Y.

Public notice is hereby given that the Court House Committee of the Board of Supervisors of Ontario County will meet at the Supervisors' Rooms in the Court House in the city of Canandaigua, N. Y., on November 14, 1922, at 10 o'clock a.m., and then and there will receive and open sealed proposals for making the alterations and additions to the present Ontario County Court House at Canandaigua, N. Y., according to the plans and specifications prepared by J. Foster Warner, Architect, No. 1036 Granite Bldg., Rochester, N. Y.

Bids will be received for the work under three separate contracts as follows:

1. For general construction, which includes all mason work, carpenter work, painting and finishing, marble and tile, electric elevator and electric work.
2. For plumbing.
3. For heating and ventilating apparatus.

No bid will be considered for work under subdivision 1 above set forth unless accompanied by a certified check for $700, payable to the order of Homer E. Snyder, Treasurer of Ontario County.

No bid will be considered for the work under subdivision 2 above set forth, unless accompanied by a check for $150, payable to the order of Homer E. Snyder, Treasurer of Ontario County.

No bid will be considered for the work under subdivision 3 above set forth, unless accompanied by a certified check for $150, payable to the order of Homer E. Snyder, Treasurer of Ontario County.

Proposals must be submitted enclosed in an envelope, securely sealed and endorsed "Proposals for Ontario County Court House," and addressed to Fred A. Russell, Chairman of Court House Committee, and delivered at the Office of the Clerk of the Board of Supervisors of Ontario County at the Court House in the City of Canandaigua, N. Y., on or before November 14, 1922, at 10 o'clock a.m.

Copies of the drawings and specifications will be on file at the office of the Clerk of the Board of Supervisors of Ontario County at his office in the Court House in the City of Canandaigua, N. Y., for the purpose of estimating.

The architect, J. Foster Warner, will provide a limited number of copies of the plans and specifications, which will be loaned to the prospective bidders on deposit of a certified check to the order of the Board of Supervisors of Ontario County in the sum of $25. If plans and specifications are returned on or before the submission of estimates, the check will be returned to the maker, but should the plans and specifications be not returned, the deposit may become forfeited.

Copies of such plans may be obtained from Earle S. Warner, Supervisors' Clerk, at the Court House, Canandaigua, N. Y., with whom the check aforesaid shall be deposited.

The Court House Committee reserves the right to reject any one or all bids filed on the above work.

Dated at Canandaigua, N. Y., October 17, 1922.

FRED A. RUSSELL,
EDWARD L. MOODY,
Court House Committee.

Bids: Nov. 20.

Bridge No. 7 Allegheny River

Pittsburgh, Pa.

Sealed proposals will be received at the office of the County Controller of the County of Allegheny, Pennsylvania, in the Court House, at the corner of Fifth Avenue and Grant Street, Pittsburgh, Pa., until eleven o'clock A.M., Eastern Standard Time, November 20, 1922, and publicly opened after twelve M. of the same date, for the construction, for said County of Allegheny, of a Bridge over the Allegheny River, and its approaches, known as Bridge Number Seven, Allegheny River, and extending from Fortieth Street, near Foster Street, Pittsburgh, Pa., to and across the Allegheny River and to two points in Ohio Street, Borough of Millvale, one at Grant Avenue and the other near Feilbaugh Street.

The entire work will be divided into sections, as follows:

Section 1.—Substructure.
Section 2.—Superstructure.
Section 3.—Paving on Bridge.
Section 4.—Relocation of Ohio Street in Millvale.
Section 5.—Ornamental Work.
Section 6.—Electric Work.

A pamphlet, giving full information as to the work, the conditions regulating bidding, and the various requirements in relation thereto, has been prepared, and copies may be obtained by prospective bidders, on application, at the office of the County Engineer, Room 301 Court House, at Fifth Avenue and Grant Street, Pittsburgh, Pa., or at the office of Benno Janssen, Architect, 802 Century Building, Pittsburgh, Pa.

This pamphlet contains the following:

1. Copy of Public Advertisement.
2. Information for Bidders.
3. Proposal Blank for the use of Bidders.
4. Bidder's Bond for the use of Bidders.
5. Contract Form to be executed by the Contractor.
6. Contractor's Bond to be executed by the Contractor.
7. Specifications.

Plans of the said bridge are on file in the office of the County Engineer and in the office of the Architect, where they may be examined, on request, at all reasonable hours. Copies of said plans may be obtained from the County Engineer by making a deposit of $25.00, which deposit will be refunded upon the return of said plans without marking, disfigurement or other damage, within ten days after the awarding of the contract.

In submitting bids, bidders shall use the special bidding blanks found in said pamphlet, which shall be enclosed in a sealed envelope, addressed to the "County Commissioners of the County of Allegheny, Pennsylvania," and indorsed with the name of the Bidder and marked "Proposal for Bridge Number Seven, Allegheny River," and deposited with the County Controller on or before the time named above.

Each proposal must be accompanied by a bond of a surety company, approved by the Common Pleas Court of Allegheny County, Pennsylvania, or by a certified check on some solvent bank, payable, without restrictions, to the Treasurer of the County of Allegheny, as a guarantee that the bidder, if awarded the contract, will accept the same and faithfully comply with every requirement and condition set forth in the advertisement, and notice to Contractors, as more fully set forth in the Information for Bidders. The amount of the bond or check required for each of the various sections of the work is as follows:

Section 1. Fifty Thousand Dollars ($50,-000.00).

Section 2. Seventy-five Thousand Dollars ($75,000.00).

Section 3. Five Thousand Dollars ($5,-000.00).

Section 4. Ten Thousand Dollars ($10,-000.00).

Section 5. Three Thousand Dollars ($3,-000.00).

Section 6. Two Thousand Dollars ($2,-000.00).

The County Commissioners reserve the right to reject any or all bids and to award the contract for any section of the work separately. The contracts for said work will be awarded or bids rejected as soon after opening the bids as possible.

JOHN P. MOORE,
County Controller.

Bids: Nov. 14.

Paving, etc.

Sumner, Ia.

Sumner, Iowa, will receive bids up to November 14th, 1922, for Pavement, Curb and Gutter. Concrete, Vibrolithic, Bitulithic Asphaltic Concrete, Sheet Asphalt or 3" Brick. Estimated, 34,000 feet Curb and Gutter and 58,000 sq.yds. Pavement. Certified check 10% of bid.

Plans and specifications on file with Town Clerk at Sumner, Iowa, and with Currie Engineering Company at Webster City, Iowa.

Bids: Nov. 13.

Sewer Construction

CONTRACT 33-S

Washington, D. C.

Sealed proposals for building 14,200' of 6" to 15" sewer in Mt. Rainier and vicinity will be received at the office of the Washington Suburban Sanitary Commission, Evans Bldg., New York Ave., Washington, D. C., until 3 p.m., Monday, November 13.

Plans obtainable from Robert B. Morse, Chief Engineer of District, Hyattsville, Md., on returnable deposit of $5.00 for plans.

T. HOWARD DUCKETT,
EMORY H. BOGLEY,
J. BOND SMITH,
Commissioners.

OFFICIAL PROPOSALS

Bids: Nov. 15.

Concrete and Steel Bridges

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the following:

Construction of concrete and steel bridge of two 45'0" spans and 30'0" roadway at M.P. 23.8 over North Branch of Raritan River, Route No. 16, in the Municipalities of Bridgewater and Bedminister, County of Somerset.

Bids for the above will be received at the office of the State Highway Commission, Broad St. Bank Bldg., Trenton, N. J., on November 15, 1922, at 11:00 A.M., and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond form for the proposed work are on file in the office of Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J., and may be inspected by prospective bidders. Plans will be furnished on deposit of ten ($10.00) Dollars, for doing this work upon application to Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J. Bids must be made on the standard proposal form in the manner designated therein and as required by the specifications for this work; same to be enclosed in sealed special addressed envelopes, bearing the name and address of bidder and the work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the State Treasurer for not less than ten (10%) per cent of the amount of the bid, provided the said certified check shall not be less than $500.00 nor more than $20,000 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelope will be furnished on application to Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a Surety Company duly authorized to do business in this State, stating that such Surety Company will provide said bidder with a bond in such sum as is required in and in accordance with the specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER, Chief Clerk

Bids: Nov. 21.

Road Grading

Newton, N. J.

Notice is hereby given that sealed bids will be received by The County of Sussex for grading of Fredon Stillwater Road in the Township of Fredon and the County of Sussex. Estimated amount of excavation required is 34,865 cu.yd. and opened and read in public at the Freeholders Office, Newton, N. J., on November 21, 1922, at 11:30 a.m.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Harvey Snook, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at Newton, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and addres of bidder and name of road on the outside, addressed to The County of Sussex, Newton, N. J., and must be accompanied by a Surety Company Certificate and a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to Engineer.

By order of The County of Sussex.

(Signed) WILLIAM S. VOUGHT, Clerk.

OFFICIAL PROPOSALS

Bids: Nov. 15.

Installing Water Pipe

Albany, N. Y.

Sealed proposals for the installation of a water pipe for Sing Sing Prison, Ossining, N. Y., will be received by the undersigned at his office in the Capitol, Albany, N. Y., until twelve o'clock noon on Wednesday, November 15, 1922, when they will be publicly opened and read. Proposals shall be on the form furnished by the Superintendent of Prisons and shall be accompanied by a draft or certified check payable at sight to the Superintendent of Prisons for ten per centum (10 per cent) of the amount of the proposal. The Engineer's preliminary estimated cost of the work is $17,505.

Each proposal must be addressed to the Superintendent of Prisons, Capitol, Albany, N. Y., and on the outside of the envelope must be clearly and conspicuously written: "Sealed Proposal for Water Pipe Installation at Sing Sing."

The bidder whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds the certified check will be returned to the proposer unless the same has been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Prisons. The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Prisons which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work according to the contract price, and an additional bond, known as the Labor Bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price will be required as surety that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

Plans, sheets one and two, may be seen and detail specifications, engineer's estimate of quantities, proposal blanks, form of contract and form of bond required and other information for proposers may be had at the office of the Superintendent of Prisons, Capitol, Albany, N. Y.; at the offices of the State Engineer and Surveyor, Telephone Building, Albany, N. Y.; Barge Canal Terminal Building, Pier 6, East River, New York City; Barge Canal Terminal Building, Foot of Genesee Street, Buffalo, N. Y.; Weighlock Building, Syracuse, N. Y., and the Barge Canal Terminal Building, Canal Harbor, Rochester, N. Y.

Copies of detail plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of thirty cents (30c), to cover the cost of producing the blue prints.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Prisons of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract if in the judgment of the undersigned the interests of the State will be enhanced thereby.

CHAS. F. RATTIGAN,
Superintendent of Prisons.

Dated: October 26, 1922.

10 Years' Experience as Contract Bond and Compensation Insurance Specialist.
This time spent in personal contact with Underwriters. That is Swart Service—Worth infinitely more but costs no more than the ordinary sort.
SWART
92 William St., New York

OFFICIAL PROPOSALS

Bids: Nov. 29.

Delaware River Bridge Main Towers Contract No. 6

Philadelphia, Pa.

Sealed proposals for the construction of the two Main Towers of the bridge over the Delaware River connecting the City of Philadelphia, Pa., and the City of Camden, N. J., will be received by the Delaware River Bridge Joint Commission at Room 806, Widener Building, Philadelphia, Pa., until 3:00 o'clock P.M. Eastern Standard Time, November 29, 1922, when they will be publicly opened and read. The contract will be awarded, or all bids rejected, within fourteen days after the bids are opened. The right is reserved to reject any or all bids

The two piers on which the towers are to be erected are located in the Delaware River near the pier head lines on the Pennsylvania and New Jersey sides of the river at points approximately opposite to Race Street in Philadelphia and Pearl Street in Camden. The work will include the furnishing, fabricating, painting and erecting of the two steel towers complete, with top saddle castings, as shown in the contract drawings, ready to receive the cables. The work comprises approximately 9,500 tons of steelwork, and must be completed within a period of fifteen months.

Bids must be made upon the blank proposal form, which, together with specifications, bond and contract form, and contract drawings, may be obtained after November 8, 1922, at the office of the Joint Commission upon deposit of $25, which deposit will be refunded upon the receipt of bid or upon their return in good condition.

Each proposal must be accompanied by a certified check for seventy-five thousand dollars, drawn upon a national or state bank or trust company having an office either in Philadelphia or Camden, and payable to the Delaware River Bridge Joint Commission, and sureties' consent must be shown. The bidder or bidders to whom the concract is awarded will be required to give bond in the sum of fifty per cent of the amount of the concract.

WILLIAM C. SPROUL, Chairman.
JOSEPH K. COSTELLO, Secretary.
DELAWARE RIVER BRIDGE JOINT COMMISSION

Bids: Nov. 14.

Assembly Hall and Industrial Building

Letchworth Village, Thiells, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work—Attendants' Home—Assembly Hall and Industrial Building (Girls' Group) at Letchworth Village, Thiells, N. Y., will be received by Mr. Mortimer B. Patterson, President of the Board of Managers of Letchworth Village, at No. 7 Wall Street, New York City, until 12 o'clock Noon on Tuesday, November 14, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3928, 3929, 3930, 3931, 3932, 3933, 3934 and 3935. The right is reserved to reject any or all bids. Drawings and specifications may be examined at No. 7 Wall St., New York City; at Letchworth Village, Thiells, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: October 19, 1922.

CONTRACT BONDS FOR RESPONSIBLE CONTRACTORS
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HARTFORD, CONN. AGENTS EVERYWHERE

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Nov. 13	Fair Oaks, Calif.	Nov. 9
Nov. 14	Newport, Ky.	Oct. 5
Nov. 14	Paris, Mo.	Nov. 9
Nov. 15	Ossining, N. Y. Adv. Nov. 2 and 9.	Nov. 2
Nov. 15	Dallas, Tex.	Nov. 2
Nov. 15	London, Ont.	Nov. 9
Nov. 17	Long Island City, N. Y.	Nov. 9
Nov. 17	New York, N. Y.	Nov. 9
Nov. 20	Springfield, Mass. Adv. Nov. 2 and 9.	Nov. 2
Nov. 20	Phillipsburg, Kan.	Nov. 9
Nov. 23	Auburn, Ind.	Nov. 9
Nov. 24	Memphis, Tenn.	Oct. 26
Nov. 27	Norfolk, Va. Adv. Nov. 9.	Nov. 9
Nov. 29	San Juan, Porto Rico Adv. Oct. 12 to Nov. 9.	Oct. 19
Nov. 29	Bay St. Louis, Miss.	Nov. 2
Dec. 1	San Juan, Porto Rico Adv. Oct. 19 to Nov. 9.	Oct. 19

SEWERS

Nov. 13	Garfield Heights (Cleveland P. O.), O.	Nov. 2
Nov. 13	Wash., D. C.	Nov. 2
Nov. 14	Indianapolis, Ind.	Oct. 26
Nov. 16	Jacksonville, Fla.	Nov. 9
Dec. 11	New Orleans, La. Adv. Oct. 12 to Nov. 9.	Oct. 12

BRIDGES

Nov. 13	Pocatello, Idaho	Nov. 6
Nov. 13	Milton, Fla.	Nov. 9
Nov. 14	Milton, Fla.	Oct. 19
Nov. 14	Denver, Col.	Nov. 9
Nov. 15	New Jersey Adv. Nov. 2 and 9.	Nov. 2
Nov. 18	Berkeley, W. Va.	Nov. 9
Nov. 20	Los Angeles, Calif.	Nov. 9
Nov. 20	Pittsburgh, Pa.	Nov. 2
Nov. 23	Virginia Adv. Nov. 9.	Nov. 9
Nov. 28	Little Rock, Ark. Adv. Nov. 2 and 9.	Nov. 9
Nov. 29	Phila., Pa. Adv. Nov. 2 and 9.	Nov. 2
Dec. 9	Yankton, S. D.	Nov. 9
Dec. 12	Brunswick, Ga.	Nov. 9
Jan. 23	Spokane, Wash	Sept. 21
Sept. 1, 1923,	Sydney, New South Wales, Australia	Aug. 3

EXCAVATION, DRAINAGE, IRRIGATION

Nov. 13	Newark, N. J.	Oct. 26
Nov. 15	Lake Providence, La.	Nov. 2

STREETS AND ROADS

Bids Close		See Eng. News-Record
Nov. 13	Lewiston, Idaho	Nov. 9
Nov. 14	Santa Rosa, Calif.	Oct. 26
Nov. 14	Milton, Fla.	Nov. 9
Nov. 14	Florida	Nov. 9
Nov. 14	Massachusetts	Oct. 26
Nov. 14	Louisiana	Nov. 2
Nov. 14	West Virginia	Nov. 2
Nov. 14	Sumner, Ia.	Nov. 2
Nov. 14	Florida	Nov. 2
Nov. 14	Boston, Mass.	Nov. 9
Nov. 14	Grafton, Mass.	Nov. 9
Nov. 14	Ashburnham, Mass.	Nov. 9
Nov. 15	Oklahoma	Nov. 9
Nov. 15	Brooklyn, N. Y.	Nov. 9
Nov. 15	University (St. Louis P. O.), Mo	Nov. 9
Nov. 15	Greenfield, Ia.	Nov. 9
Nov. 15	Waterloo, Ia.	Nov. 9
Nov. 15	Marlin, Tex.	Nov. 9
Nov. 15	Ebensburg, Pa.	Nov. 9
Nov. 16	Greenville, N. C.	Nov. 2
Nov. 17	Tampa, Fla.	Oct. 26
Nov. 17	Bernardsville, N. J.	Nov. 2
Nov. 17	Michigan	Nov. 9
Nov. 17	Long Island City, N. Y.	Nov. 9
Nov. 18	Logansport, Ind.	Oct. 26
Nov. 18	Bakersfield, Calif.	Nov. 9
Nov. 20	Goderich, Ont.	Oct. 19
Nov. 21	Pascagoula, Miss.	Oct. 26
Nov. 21	Newton, N. J. Adv. Nov. 2 and 9.	Nov. 2
Nov. 21	New York Adv. Nov. 9. ,	Nov. 9
Nov. 21	Edinburg, Tex.	Nov. 9
Nov. 23	Wilmington, N. C.	Nov. 2
Nov. 27	Washington, N. C. Adv. Nov. 2 and 9.	Nov. 2
Dec. 5	Albert Lea, Minn.	Nov. 9
Dec. 22	Spokane, Wash.	Nov. 2
Dec. 30	Quebec	Nov. 2
Dec. 30	Quebec	Nov. 9
Jan. 7	Duluth, Minn.	Sept. 28

BUILDINGS

Nov. 14	Theills, N. Y.	Oct. 26
Nov. 14	Canandaigua, N. Y.	Nov. 2
Nov. 15	Ocean City, N. J.	Oct. 5
Nov. 15	Butler, Pa.	Oct. 26
Nov. 15	Beaumont, Tex.	Oct. 19
Nov. 15	Birmingham, Ala.	Nov. 2
Nov. 15	Atlanta, Ga.	Nov. 2
Nov. 18	Portland, Ore.	Oct. 19
Nov. 20	Birmingham, Ala.	Nov. 2
Nov. 20	Cleveland, O.	Nov. 2
Nov. 21	Owen Sound, Ont.	Nov. 2
Nov. 21	Detroit, Mich.	Nov. 2
Nov. 22	Wash., D. C.	Nov. 2
Nov. 22	San Antonio, Tex.	Nov. 2
Nov. 24	Yonkers, N. Y. Adv. Nov. 9.	Nov. 9
Nov. 25	Bowling Green, O.	Nov. 2
Dec. 1	Oil City, Pa.	Oct. 26
Dec. 1	Abilene, Tex.	Nov. 9
Jan. 2	Olean, N. Y.	Nov. 9
Mar. 23	Shreveport, La.	Nov. 9

FEDERAL GOVERNMENT WORK

Nov. 14	Hospital—Chillicothe, O. Adv. Oct. 19 to Nov. 9.	Oct. 12
Nov. 15	Quarters—Edgewood, Md. Adv. Nov. 9.	Nov. 9
Nov. 15	Radial Brick Stack—Tupper Lake, N. Y.	Oct. 19
Nov. 15	Mechanical Equipment, etc. —Tupper Lake, N. Y.	Oct. 19
Nov. 15	Water Tank—Tupper Lake, N. Y.	Oct. 19
Nov. 15	Refrigerating and Ice-Making Equipment, etc.—Tupper Lake, N. Y.	Oct. 19
Nov. 15	Coal and Ash Handling Equipment, etc. — Tupper Lake, N. Y.	Oct. 19
Nov. 15	Post Office—Vernal, Utah	Oct. 26
Nov. 15	Repairs — Moorhead City, N. C.	Oct. 26
Nov. 16	Post Office—Shawnee, Okla.	Oct. 26
Nov. 17	Re-roofing—Carville, La.	Oct. 26
Nov. 20	Horses and Props—Huntington, W. Va. Adv. Oct. 26 to Nov. 9.	Oct. 26
Nov. 20	Steel Hull—Pittsburgh, Pa. Adv. Oct. 26 to Nov. 9.	Oct. 26
Nov. 20	Roof—Toledo, O.	Oct. 26
Nov. 21	Roadway, Norfolk, Va.	Nov. 2
Nov. 22	Covering Railroad Tracks—San Diego, Calif.	Nov. 2
Nov. 23	Earthwork—St. Louis, Mo. Adv. Oct. 26 to Nov. 9.	Oct. 26
Nov. 23	Earthwork—St. Louis, Mo. Adv. Nov. 2 and 9.	Nov. 2
Nov. 24	Post Office—Chandler, Okla.	Oct. 26
Nov. 25	Dredging—Charleston, S. C. Adv. Oct. 26 to Nov. 9.	Oct. 26
Nov. 25	Barges—Pittsburgh, Pa. Adv. Nov. 2 and 9.	Nov. 2
Nov. 25	Lock and Dam—Jacksonville, Fla.	Nov. 2
Nov. 27	Dredge Hull, etc.—Milwaukee, Wis. Adv. Nov. 2 and 9.	Nov. 2
Nov. 27	Dredging — Jacksonville, Fla. Adv. Nov. 2 and 9.	Nov. 2
Nov. 27	Remodeling—St. Louis, Mo.	Nov. 9
Dec. 1	Steel Hull—Pittsburgh, Pa. Adv. Nov. 9.	Nov. 9
Dec. 1	Barge—Montgomery, Ala. Adv. Oct. 26 to Nov. 9.	Oct. 26
Dec. 1	Dredging—Honolulu, H. T.	Nov. 2
Dec. 2	Boilers—Memphis, Tenn. Adv. Nov. 2 and 9.	Nov. 2
Dec. 2	Barges—Memphis, Tenn. Adv. Nov. 2 and 9.	Nov. 2
Dec. 2	Machinery — Memphis, Tenn. Adv. Nov. 2 and 9.	Nov. 2
Dec. 4	Power Houses—Cape Henry, Va. Adv. Nov. 9.	Nov. 9
Dec. 6	Pumping Units — Boise, Idaho	Oct. 19

MISCELLANEOUS

Bids Close		See Eng. News-Record
Nov. 13	High School Equipment—Wash., D. C.	Oct. 12
Nov. 13	Cement, Fire Clay, etc., Philadelphia, Pa.	Nov. 9
Nov. 14	Broken Trap Rock Stone, etc. —New York, N. Y.	Nov. 9
Nov. 14	Sprinkler System — Aberdeen, Wash. Adv. Nov. 2 and 9.	Nov. 9
Nov. 14	Fire Service Pipe & Valves—Toronto, Ont.	Nov. 9
Nov. 15	Asphaltic Wearing Surface Sand—New York, N. Y.	Nov. 9
Nov. 15	Road Equipment—Illinois. Adv. Nov. 9.	Nov. 9
Nov. 16	Heating and Ventilating Apparatus, etc. — Brooklyn, N. Y.	Nov. 9
Nov. 16	Hoist and Trailers — San Jose, Calif.	Oct. 19
Nov. 16	Steel Shed—New Orleans, La.	Oct. 26
Nov. 21	High School Equipment—Wash., D. C.	Oct. 12
Nov. 21	Lumber—Ocean City, N. Y. Adv. Nov. 2 and 9.	Nov. 2
Nov. 21	Underpasses, etc. — North Carolina	Nov. 9
Nov. 24	Shaft—Brooklyn, N. Y.	Nov. 2
Nov. 27	Electrical Work, Plumbing, Heating, etc. — Johnstown, Pa.	Nov. 2
Dec. 18	Coal Handling Plant — Melbourne, Victoria, Australia	Sept. 21
Jan. 1	Transmission Line—Spokane, Wash.	Nov. 9

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

O., Madison—Plans water and sewerage systems. $75,000. M. Knowles, Inc., Hanna Bldg., Cleveland, engrs.

Mich., North Muskegon—(Muskegon P. O.)—Takes new bids about February, pumping station. $20,000. Former bids rejected. Hoad, Decker, Shoecraft & Drury, 302 South State St., Ann Arbor, engrs. Noted Sept. 14.

Tex., Dallas—Plans main extension and improvement. $25,000. G. Fairtree, city engr.

Tex., Ft. Worth — Plans to vote on $3,000,000 bonds latter part of month, for water and sewerage systems in 12 new wards. J. B. Hawley, consult. engr., Cotton Exch. Bldg., recommends at least $1,000,000 for water. Filter beds must be overhauled and additions built. D. L. Lewis, city engr.

Okla., Weleetka—Had plans prepared and soon takes bids rein.-con. reservoir and concrete spillway. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Calif., Stockton—Nov. 28, to vote on $1,300,000 bonds constructing Valley Spring reservoir on Calaveras River. W. B. Hogan, city engr.

Calif., Tracy—Plans election to vote on $27,000 bonds for 4 and 6 in. w.i. watermain replacements and extensions. W. D. Harrington, city engr.

N. S., Sydney Mines—Nova Scotia Steel & Coal Co. plans pumping plant. $85,000. Private plans.

Ont., Kingston—Plans slow sand mechanical filtration plant, concrete and brick. $350,000. H. Dick, city engr.

Ont., Toronto—York Twp. plans 6 in. c.i. water mains in Maryland and Ovonlea Blvds., Almeda, Millbank, Rotherham, Dentonia Park, Eastborune, Sibley, Thyra, Lassel, Glebmount, Barrington and Muriel Aves. $25,000. F. Barber, 40 Jarvis St., Toronto, engr.

BIDS DESIRED

N. Y., Long Island City—Nov. 17, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Ditmars, Gould and Harold Aves., Crescent, Hallet, Howland and Lowery Sts., 1st Ward; Laburnum, Smart, 7th, 9th and 72nd Aves., 16th, 17th, 18th and 127th Sts., Ave. D and Washington Pl., 3rd Ward;

Waterworks (Continued)

Griffith, Hull, Pleasantview and Wooley Aves., Gwyder, Larch, Mazeau, Van Horn and Woodbine Sts. 2nd Ward, here.

N. Y., New York — Nov. 17, by **N. J. Hayes**, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains and appurtenances in Mosholu Parkway N., Eastern Blvd., Herkimer and Knox Places, Bogart, Bronxwood, Grand, Haight, Hill, Hobart, Hollywood, Hone, Ludlow, Mahan, Monticello, Noble, Riverdale, Sackett and Van Nest Aves., West 174th and East 233rd Sts., Bronx Boro.

Va., Norfolk—Nov. 27, at office W. H. Taylor, 3rd dir. Pub. Wks., 12,000,000 gal. pumping engine. D. H. Maury, 1445 Monadnock Blk., Chicago, consult. engr.; adv. this issue.

Ind., Auburn—Nov. 23, by City at office of G. Potter, city clk., for purchase, installation and complete construction of machinery and general equipment for improvement of waterworks, electric light and power plant, incl. incl. three 500 kva. transformers, 1 generator switch-board panel, 1 centrifugal pump, 700 gal. per minute capacity, one 75 hp. synchronous motor.

Kan, Phillipsburg—Nov. 20, by W. N. McIlvain, city clk., improving waterwork system, Sect. 1, includes filtration plant, two 8 x 8 ft. units and necessary settling basins, 200,000 gal. clear well, connection to city mains, sewers, etc., involves 1,450 cu.yd. excav., 537 cu.yd. rein.-con., 1,300 ft. 8 in. c.i. and 470 ft. 6-12 in. vitr. pipe, etc.; Sect. 2, furnishing and installing necessary filter equipment for two 8 x 8 ft. filter units; Sect. 3, furnishing f.o.b. here, 4 centrifugal pumps. Black & Veatch, Mutual Bldg., Kansas City, Mo., engrs.

Mo., Paris — Nov. 14, improving waterworks system incl. 2,000 ft. 4 and 6 in. c.i. pipe and 6 fire hydrants, also improving electric light system, incl. new distribution and white way system. W. B. Rollins, Ry. Exch. Bldg., Kansas City, engrs. Noted Oct. 26.

Tex., Dallas—City Comn. taking bids 10,000 ft. 20 in. c.i. pipe in Haskell Ave., South Dallas. G. Fairtrace, city engr. J. R. Johns, 128 West Brooklyn St., engr.

Calif., Fair Oaks—Nov. 13, by secy. Fair Oaks Irrigation Dist., furnishing riveted steel slip joint, dipped and soil protected water pipe, 1,400 ft. 14 in., 12 gauge; 4,300 ft. 12 in., 4,200 ft. 10 in. and 1,100 ft. 9 in., 14 gauge; 9,100 ft. 8 in., 1,100 ft. 7 in., 3,800 ft. 6 in. and 4,300 ft. 4 in., 16 gauge. S. Kieffer, 57 Post St., San Francisco, engr.

Ont., London—Nov. 15, by S. Baker, city clk., one motor pumper, 800 gal. per minute, with 40 gal. chemical tank and 1,250 ft. 2½ in. fire hose.

BIDS RECEIVED

Calif., Delhi—See "Miscellaneous."

CONTRACTS AWARDED

N. Y., Elmsford—Bd. Village Trustees, Lawn Ave., extending mains to T. M. Hughes & Co., North Tarrytown, $56,304. Noted Oct. 26.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains on subway bridge over Bronx River, and on highway bridge over New York, New Haven & Hartford R.R., also on Westchester Ave. and Edgewater Rd., to Beaver Eng. & Contg. Co., 57 Chambers St., $10,080. Noted Oct. 12.

Mo., Hamilton—Complete new waterworks system, to C. H. Everett, Hutchinson, Kan., $68,488.

Mo., Milan—For purification plant and extending mains, to J. J. Hoffman, Milan, $13,401 and $29,000 respectively. Noted Oct. 26.

Tex., Coleman—See "Dams."

Sewers

PROPOSED WORK

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., withdrew bids which were to be opened Oct. 23, repairing outlet flume from Jamaica Sewage Disposal Plant to creek flowing into Jamaica Bay; also sewer in 137th and 25th Sts. Will readvertise. Noted Oct. 19.

N. Y., New York — H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., rejected bids opened Oct. 24, sewer in Odell St. Will readvertise. Noted Nov. 2.

N. J., South River—Plans 3,800 ft. trunk sewer in Hillside Ave. $28,000. C. C. Armstrong, South River, engr.

O., Madison—See "Waterworks."

Mich., Ferndale—Plans 10,000 ft. lateral sewers in Rockwell Ave. and various other streets, incl. 3,000 ft. 10 in., 3,000 ft. 12 in. and 4,000 ft. 15 in. vitr. or concrete pipe. $40,000. G. Jerome, 1331 Majestic Bldg., Detroit, engr.

Ia., Washington — Making plans sewers and disposal plant. $200,000. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Kan., Syracuse—Had plans prepared and soon takes bids complete new sewerage system. E. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., engrs.

Tex., Ft. Worth—See "Waterworks."

Calif., Pomona—Plans to vote on $100,000 bonds for new outfall sewer and first unit of disposing system. F. C. Froehde, city engr.

Calif., Tracy—Plans election to vote on $50,000 bonds for sewage disposal plant, Imhoff tank, etc. W. D. Harrington, city engr.

BIDS DESIRED

Fla., Jacksonville—Nov. 16, by City Comn., storm water and sanitary sewers, 26,991 ft. 12 to 54 in. rein.-con. pipe, 29,426 ft. 6 to 15 in. terra cotta pipe, 58,136 ft. 4 in. sub-drain tile and cinders, 184 ft. 8 in. c. i. pipe, 165 storm and sanitary manholes. W. E. Sheddan, city engr.

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., opened bids Oct. 31, sewers in (1) Barclay St., (2) Orontes Ave., (3) Depot Rd. (4) 88th St. (5) 106th St., from Kennedy & Smith, 93 Amity St., Flushing, (1) $2,885, (3) $2,515, (4) $16,987, (5) $2,517; Greene Contg. Co., 734 Vernon Ave., Astoria, (1) $3,122; Peace Bros., 57 North Laurence St., Flushing, (1) $3,293, (2) $2,689, (3) $2,722; G. Ingressia, Corona, (2) $2,476; E. J. Keeley, Jr., (2) $2,797, (3) $2,775; D. A. Gross, (4) $18,107; C. Napolitano, (4) $18,590, (5) $2,480! Spinellas & Muccini, 6102 18th Ave., Brooklyn, (5) $2,452. Noted Oct. 26.

Utah, Salt Lake City—Sewers in Farmers Ward, 30,000 ft. 8 to 36 in. vitr. or concrete pipe, from J. L. Griffith, Kearns Bldg., $126,674; S. Weber, Cullen Hotel, $136,427; Mullins & Palm, Salt Lake City, (street address not available), $136,756. Noted Sept. 28.

CONTRACTS AWARDED

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewer in Waterbury Ave., to Anita Constr. Co., 2975 Marion Ave., $7,172. Noted Nov. 2.

N. Y., Rochester—See "Streets and Roads."

Mich., Detroit—Southern Ave. Arm of Lonyo Rd. Sewer and Lawton Ave. Arm of Morrell St. Sewer, to J. A. Mercier, 216 Hammond Bldg., $33,723, and $34,941 respectively. Noted Nov. 2.

Mich., Springwells—Sect. 16 Barclay Ave. Sewer, to R. A. Mercier, 5435 Wesson Ave., Detroit, $145,000; Sect. 17, Maple Rd. Sewer, Sect. 18, Dix Ave. Sewer and Sect. 19, Eagle and Ford Ave. Sewers, to Liberty Constr. Co., 1026 Book Bldg., Detroit, $8,359, $19,637 and $9,956 respectively. Noted Nov. 2.

Wis., Milwaukee—Sewerage Comn., 508 Market St., furnishing feed water softener and purification system, using zeolite cold process, to Wayne Pump & Tank Co., Anthony Hotel, Ft. Wayne, Ind., $10,810. Noted Oct. 12.

Ia., Dubuque—For 6,285 lin.ft. 24-66 in. sanitary sewers in Dist. 1 and 2,860 lin.ft. 24-27 in. in Dist. 2, to Even-Uhlrich, Stoner Co., Dubuque (street address not available), and Natl. Constr. Co., 309 Putnam Bldg., Davenport. Noted Oct. 19.

Minn., Waseca — Additions to sewerage system: 30,000 lin.ft. outlet sewer, to Reinertson & Patterson, Springfield, Mo., $68,438; storm sewer to Rafdal & Curtis, Medford, $11,777; disposal plant to Ward & Weighton, 510 Davidson Bldg., Sioux City, Ia., $19,720. Noted Sept. 21.

Mo., Odessa—For 35,000 ft. 8 in. sewer, cut 8 ft., and erecting small pumping plant, to Merkle Mchy. Co., 1733 Walnut St., Kansas City, $45,000.

Mo., St. Louis—See "Streets and Roads."

Mo., University (St. Louis P. O.)—C. Crane Willmore Corp., Boatmens Bank Bldg., St. Louis, 11,600 ft. 12-30 in. vitr. clay and 400 ft. 63 in. segmental block sewer in 1st section of University Park subdivision, to McKelvey Constr. Co., 911 Guaranty Bldg., St. Louis, $30,000. Expect to contract on same unit basis for an additional 30,000 ft. in spring, costing $75,000.

Waste Disposal

CONTRACT AWARDED

W. Va., Charleston—Constructing garbage incinerator, to Markham Eng. Co., 11 West Monroe St., Chicago, Ill., $55,550. Noted Oct. 12.

Bridges

PROPOSED WORK

N. Y., Idlewood (Lake View P. O.)—Towns of Hamburg and Evans take bids in about 2 weeks 178 ft. steel span bridge with concrete floor to replace present structure over 18 Mile Creek, on Lakeshore Rd., here. $30,000. G. C. Diehl, 575 Ellicott Sq., Buffalo, engr.

N. J., Trenton—Mercer Co., 400 ft. plate girder viaduct, incl. 75 ft. lift span, over Delaware and Raritan Canal, and tracks of Pennsylvania R.R. on Olden Ave., to L. J. Sieling, Broad St., Phila., $208,903. Noted Oct. 19.

Va., Richmond—Boulevard Bridge Corp. plans steel and concrete bridge over James River from Bird Park to Chesterfield Co. line, 20 ft. road bed, two 5 ft. sidewalks. $175,000. Under supervision of A. J. Saville, dir. of Pub. Wks.

W. Va., Berkeley—Nov. 18, by Comrs. Morgan Co., rein.-con. bridge across Sleepy Creek at point between Baltimore and Ohio R.R. Bridge and nearest ford to said bridge, 105 ft. long, 14 ft. wide, elevation above bed of creek 25 ft.; alternative bids on steel bridge across Sleepy Creek near Baltimore and Ohio R.R. bridge using abutments now discarded, incl. 18 ft. pier, one 125 ft. and one 107 ft. spans, 14 ft. wide, rein.-con. roadway. M. S. Harmison, clk.

Alabama—See "Streets and Roads."

Minn., Thief River Falls—Plans 400 ft. steel bridge over Red Lake River. $50,000. A. H. Akre, clk. Engineer not announced.

Calif., Napa—Napa Co. had plans prepared and takes bids in spring, 2 rein.-con. bridges over Dry Creek, 10 mi. north of here, 120 cu.yd. concrete, 23,300 lb. reinforcing, 300 cu.yd. fill at approaches; rein.-con. bridge over Napa River near Wassum Ranch, 850 cu.yd. concrete, 160,000 lb. reinforcing, 1,200 cu.yd. excav., 2,200 cu. yd. fill. C. H. Buckman, co. surv.

Calif., Santa Ana—Orange Co. had plans prepared bridge over Santa Ana River, 524 ft. long, 24 ft. wide, three 60 ft. spans in center with concrete piers. J. L. McBride, Santa Ana, engr.

BIDS DESIRED

Virginia—Nov. 23, by State Hy. Comn., Richmond, repairing bridge, Route 8, Project S-102; bridges Route 13, Projects S-215 A and B, Route 10, Project F-76 A; improving roadway Route 7Y, Project S-216, Route 7, Project S-185; Route 5, Project F-160A. E. C. Coleman, Richmond, highway comr.

Ga., Brunswick—Dec. 12, by St. Simons Highway Comn., bridges and fills from mainland to St. Simons Island, Contr. 1, clearing and 128,000 cu.yd. embankment; Contr. 2, 75,000 lin.ft. creosoted piling, 805,000 ft. b.m. creosoted timber bridging and 12,000 sq.yd. riprap: Contr. 3, two 208 ft. steel swing spans; Contr. 4, 4,800 cu.yd. clay gravel. S. B. Slack, Atlanta, state bridge engr.

Fla., Milton—See "Streets and Roads."

Fla., Milton—Nov. 14, by Bd. Comrs. Santa Rosa Co., 80 ft. steel bridge over Pond Creek on State Rd. 1; 18 ft. I beam. rein.-con., slab floor, over Till Bayou. C. H. Overman, Bagdad, co. engr.

S. D., Yankton—Dec. 9, by Meridian Hy. Bridge Co., steel superstructure for 5,820 lin.ft. double deck bridge over Missouri River, span length 1,680 ft. $250,000. Former bids rejected. Harrington, Howard & Ash, Orear Leslie Bldg., Kansas City, Mo., engrs. Noted March 2.

Ark., Little Rock—Nov. 28, by Bd. Comrs. Pulaski Rd. Imprt. Dist. 10, 4 bridges. D. A. MacCrea, ch. engr.; adv. this issue.

Col., Denver—Nov. 14, by Manager of Impvts. and Parks, foundation only bridge on 16th St., from Blake to Platte Sts., incl. 1,025 cu.yd. dry excav. for abutments, 3, 100 cu.yd. dry excavation for pedestals, 1,870 cu.yd. dry excav. for river piers, 100 cu.yd. wet excav. for pedestals, 990 cu.yd. wet excav. for river piers, 500 lin. ft. piling for pedestals, 7,000 lin.ft. piling for river piers, 630 cu.yd. rein.-con. in abutments, 2,685 cu.yd. rein.-con. in river piers, 2,000 cu.yd. rein.-con. in pedestals, 25,000 lb. reinforcing in abutments, 38,000 lb. reinforcing in river piers, 41,000 lb. anchor rods in pedestals. $420,000. H. S. Crocker, Tramway Bldg., engr.

Bridges (Continued)

Idaho, Pocatello—Nov. 13, by P. B. Wilson at office Comrs. Bannock Co., one 90 ft. bridge, 3 mi. approaches, on Federal Aid Project 59, near here, 67,000 lb. steel, 19,450 lb. reinforced steel, 14,000 cu.yd. earth and 1,540 cu. yd. rock excav., 304 cu. yd. concrete, 1,800 cu. yd. gravel surfacing, etc. Cost to exceed $25,000. Director of Bureau Highways, Boise, engr.

Calif., Los Angeles—Nov. 20, by Bd. Supervs. Los Angeles Co., bridge on State Highway over mouth of San Gabriel River at Alamitos Bay; bridge on State Highway over Topanga Creek. L. E. Lampton, clk.

BIDS RECEIVED

S. C., Columbia—Richland Co., constructing 2 concrete bridges on Monticello Highway, from General Road & Drainage Co., Liberty Bank Bldg., $26,012; Concrete Constr. Co., 1325 Main St., $26,325; White Constr. Co., Chatham, Va., $29,140.

Ill., Sterling — Whiteside Co. 1,032 ft. rein.-con. arch bridge on 1st Ave. over Rock River, 28 ft. roadway, two 7 ft. sidewalks, (1) State plan, twelve 80 ft. spans, from Powers-Thompson Constr. Co., Joliet, $171,600, J. Moroff & Son, Kankakee, $184,257, Gould Constr. Co., Davenport, Ia., $187,400; (2) Marsh plan, eleven 86 ft. spans Koss Constr. Co., 2818 5th St., Des Moines, Ia., $198,732, Miller-Fifield Constr. Co., L. & J. Bank Bldg., Waterloo, Ia., $219,534, F. E. Marsh & Co., Jefferson Ia., $206,050. Noted Oct. 26.

CONTRACTS AWARDED

S. C., Anderson — See "Streets and Roads."

Fla., St. Petersburg—Gandy Bridge Co. 5 mi. bridge across Tampa Bay from Port Tampa to St. Petersburg Highway, 13,500 ft. rein.-con. and 15,000 ft. sand fill, to Bay Constr. Co., St. Petersburg, $2,000,000.

Alabama—See "Streets and Roads."

Ia., Davenport—Supervs. Scott Cc., 1 pony truss three-90 ft. spans, to J. R. Kane, Charlotte, $27,300; 1 pony truss 70 ft. span, to L. Plumb, Wapello, $5,950.

Ia., Elkader—Supervs. Clayton Co., 5 steel truss bridges, each to have 80 ft. span, one steel truss, with two 90 ft. spans with one 30 ft. I beam approach span, to A. Olson Constr. Co., Waterloo, $86,000.

Ia., Toledo—Supervs. Tama Co., bridges on Primary Rd. Project 276, Group A, one steel truss bridge having three 70 ft. spans, and 2 bridges having two 70 ft. spans, to A. P. Munson, Marion, $47,000; Group B, C and D, one 24 x 24 ft., one 40 x 20 ft., one 32 x 24 ft. and one 28 x 24 ft. I beam bridges, 46 rein.-con. box culverts, 11 rein.-con. culverts and extensions, to Cole Bros., Ames, $41,700.

Wyoming—State Hy. Comn., Cheyenne, 3 concrete bridges, each 104 ft. long, and some grading on Federal Aid Project 116, Sect. A, southwest of Clearmont, Sheridan Co., to J. F. Turpin, Wheatland, $29,104. Engrs. est. $30,000. Noted Oct. 19.

Dams

PROPOSED WORK

B. C., Waneta—Waneta Power Co., takes bids in 1923 for 4,000 hp. diversion dam 40 ft. high, 75 ft. wide, 115 ft. head, in connection with hydro electric development. Total $3,000,000. E. K. Scott, Waneta, engr.

CONTRACTS AWARDED

Tex., Coleman—Earthen dam, spillway, pump house, 155,000 cu.yd. excav., 23,000 ft. 10 in. c.i. pipe, etc., to Tibbetts Constr. Co., 8th St., Ft. Worth, $114,272. Noted Oct. 12.

Railways

PROPOSED WORK

Tennessee—Louisville & Nashville R.R., Traction Bldg., Louisville, Ky., making plans 18 mi. double track. $2,000,000. W. H. Courtenay, Louisville, ch. engr.

Texas—Dallas Ry. Co., Interurban Bldg., Dallas, plans street car line extensions on Lindsley Ave. also on 7 blocks Haskell Ave. from State to Cole Sts. $500,000. R. Meriwether, vice pres. and genl. mgr.

CONTRACTS AWARDED

New York—Transit Comn., 49 Lafayette St., New York City, constructing Sect. 3 of Route 52, part of Rapid Transit R.R., Flushing Route, to Oakdale Contg. Co., Harris and East Aves., Long Island City, $1,635,951. Noted Nov. 2.

Excavation, Drainage, Irrigation

PROPOSED WORK

Fla., Lake Worth — Lake Worth Inlet Dist. Comn. plans election Nov. 28 to vote on $275,000 bonds, dredging inlet from Lake Worth to Atlantic Ocean, to depth of 18 ft.

Ia., Ft. Dodge — Supervs. Webster and Greene Counties rejected bids opened Oct. 17 for Joint D.D. 212 Webster Co. and D.D. 105 Greene Co. Noted Oct. 12.

Mont., Havre—Hill Co. plans to improve Marais River Irrigation Project, 250,000 acres west of here. $500,000. W. G. Paterson, co. clk.

Mont., Ryegate—Golden Valley Co. plans 23 mi. canal in Fish Creek Irrigation Dist., southwest of here. $275,000.

Mo., Clayton—St. Louis Co. River Impvt. Assn., c/o B. Hoekstra, member Bd. Supervs., plans levee and straightening Missouri River between Franklin Co. line and St. Charles so as to throw current to north bank between those points. Will provide protection for 12,000 acres. $150,000-$200,000. W. Elbring, Clayton, engr.

Tex., Dallas — Dallas Impvt. Dist. 5, Court House, plans election soon to vote on $275,000 bonds for 3 mi. of levee and lateral ditches. A. A. Stiles, Austin, state reclamation engr.

Calif., Willows—Jacinto Irrigation Dist. plans drainage improvements. $100,000.

BIDS DESIRED

Va., Richmond — See "Miscellaneous" under proposed work.

CONTRACTS AWARDED

Fla., West Palm Beach—Highland Glades D. D., 20 mi. canals and 63 mi. ditches, 1,430,000 cu.yd. excav., to South Florida Dredging Co., Ft. Lauderdale, $0.0874 per cu.yd.

Mo., Browning—Locust Creek D.D. for drainage system, to Callahan-Walter Constr. Co., 322 Peters Bldg., Omaha, Neb., $325,000.

Streets and Roads

PROPOSED WORK

N. C., Shelby—Plans street and sidewalk paving. $125,000.

Fla., Lakeland—J. T. Horney, Asheville, N. C., soon takes bids constructing 5 mi. streets, and probably waterworks, sewerage and lighting systems, Horney Heights Rds., here. Engineer not selected.

Fla., Tavares—City plans paving 2 mi. road, 24 ft., 2 in. asphalt on 6 in. clay. $32,000. E. J. Close, Tavares, engr.

Alabama—State Hy. Dept., Montgomery, having plans prepared grading, gravel surfacing and 624 ft. creosote timber bridges, on 10.4 mi. Montgomery-Union Springs Rd., Bullock Co.; grading and gravel surfacing 10.032 mi. road from Evergreen to Belleville, Conecuh Co., $143,000; grading and surfacing with chert 16.37 mi. Oneonta-Birmingham Rd., from Oneonta to Birmingham Co. line, Blount Co., $205,000; grading and surfacing with sand clay and clay gravel 21.44 mi. Bee Line Highway from Florida State line to Dale Co. line across Houston Co., $197,000. W. S. Keller, state highway engr.

La., New Orleans — Plans election in November to vote on $5,000,000 bonds for development, extensions, additions and betterments of Public Belt Rd. System. G. Ferrier, Jr., clk. comn. council.

O., Dayton—Plans paving, etc., 1,800 ft. Irwin St. from 3rd to Springfield Sts., 30 ft., $24,977 also 970 ft. Summit St. from Negley to Riverside Sts., 30 ft., $11,420. Work involves 2,500 lin. ft. cement curb and gutter, 9,800 sq. yd. vitr. brick. I. E. Houk, city engr.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and surfacing 14¾ mi. Federal Aid Project 62, 20 ft., concrete, Wayne Co. F. F. Rogers, state highway comr.

Ill., Batavia—Making plans brick, asphalt and concrete paving projects. $65,000. Wells Eng. Co., Geneva, engrs.

Ia., Harvard — Plans paving 8 blocks. $25,000. C. R. Tarut, clk.

Kan., Oskaloosa—Jefferson Co. soon takes bids surfacing 10.75 mi. Federal Aid Project 48, Sect. C, 18 ft. bituminous macadam. W. M. Irwin, Oskaloosa, engr.

Neb., Omaha—Takes bids in December asphaltic paving 22 blocks. $250,000. H. Beal, city engr.

South Dakota—State Hy. Dept., Pierre, plans grading and gravel surfacing 9 mi. Federal Aid Project 120, Moody Co., 65,000 cu.yd. excav., 315 cu.yd. concrete, 13,500 cu.yd. gravel, $64,400; 6.11 mi. Federal Aid Project 124, Codington Co., 9,200 cu. yd. gravel, $35,500. F. D. Hudgins, state engr.

Wyoming—State Hy. Dept., Cheyenne, rejected bids grading and building culverts on 7.8 mi. Yellowstone Highway between Bonneville and Boysen, Sect. A, Federal Aid Project 118, Fremont Co. Noted Oct. 19.

Missouri—State Hy. Dept., Jefferson City, plans 4.482 mi. road through St. Genevieve Co., State Project Route 25, Sect. 5, 5,397 cu.yd. earth and 2,307 cu. yd. rock excav., 1,761 cu. yd. borrow, 16,480 lin. ft. grading, 10,647 cu. yd. gravel surfacing ¼ mi. haul, 18,632 cu. yd. gravel surfacing additional ¼ mi. haul, 1,588.8 cu. yd. concrete masonry, etc.; 1.279 mi. road from Hartville to Mansfield, State Project Route 5, Sect. 86, Wright Co., 6,750 lin. ft. grading, 2,362 cu. yd. gravel surfacing ¼ mi. haul, 49,989 cu. yd. gravel surfacing additional ¼ mi. haul, 12 ft. wide; 4.991 mi. road from Excelsior Springs to Carroll Co. line, 26 ft., State Project Route 10, Sect. 14, Ray Co., 11,033 cu. yd. earth excav., 25.9 cu. yd. concrete masonry, etc.; 2.244 mi. road from St. Louis to Springfield, State Project Route 14, Sect. 77, St. Louis Co., 16,214 cu. yd. earth excav., 202 cu. yd. borrow, 23,699 sq. yd. concrete pavement, 18 ft., 2,699.2 cu. yd. concrete masonry, etc.; 5 mi. road through De Kalb Co., State Project Route 31, Sect. 1, 20,477 cu. yd. earth excav., 3,754 cu. yd. borrow, 208.9 cu. yd. concrete masonry, etc.; 4.606 mi. road on Kingshighway, State Project Route 25, Sect. 12, Perry Co., 13,681 cu. yd. earth excav., 404 cu. yd. borrow, 11,161 cu. yd. gravel surfacing ¼ mi. haul, 254,334 cu. yd. gravel surfacing additional ¼ mi. haul, 44.7 cu. yd. concrete masonry, etc.; 4.489 mi. road from Elsinore to Poplar Bluff, State Project Route 16, Sect. 74, Carter Co., 18,604 cu. yd. earth excav., 1,224 cu. yd. borrow, 67.4 cu. yd. concrete masonry, etc.; 3.094 mi. road from Carter Co. line to Elsinore, State Project Route 16, Sect. 73, Carter Co., 17,725 cu. yd. earth excav., 3,160 cu. yd. borrow, 78.3 cu. yd. concrete masonry, etc.; grading 1.942 mi. and surfacing 1.338 mi. road through Linn Co., State Project Route 5, Sect. 15, 9,882 cu. yd. earth excav., 590 cu. yd. borrow, 3,957 cu. yd. sledged stone base, 3,957 cu. yd. sledged stone base ¼ mi. haul, 68,364 cu. yd. sledged stone base additional ¼ mi. haul, 424 cu. yd. waterbound macadam, 424 cu. yd. waterbound macadam ¼ mi. haul, 7,324 cu. yd. waterbound macadam additional ¼ mi. haul, 1,389 cu. yd. crushed stone, 1,389 cu. yd. crushed stone ¼ mi. haul, 27,468 cu. yd. crushed stone additional ¼ mi. haul, 33,210 gal. binder, 54.5 cu. yd. concrete masonry, etc. B. H. Piepmeier, state highway engr.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, rejected bids opened Oct. 24 reconstructing 2,257 ft. Easton Ave., 50 ft. Noted Nov. 2.

Tex., Benjamin—Knox Co. making plans grading 4.11 mi. Benjamin Sagerton Rd., 24 ft. $25,000. L. Noland, Knox City, co. engr.

Tex., Bonham—Fannin Co. making plans grading and gravel surfacing 8 mi. Bonham-Honey Grove Rd., 18 ft., 111,600 cu. yd. earth excav., 1,025 cu. yd. concrete, 70,000 lb. reinforcing, 13,540 cu. yd. gravel surfacing. $80,000. A. J. Goode, co. engr.

Tex., Boston—Bowie Co. had plans prepared grading and gravel surfacing 16.8 mi. State Highway 1, from Cass Co. line to Corley, 16 ft. $205,000. Hess & Skinner, Southwestern Life Bldg., Dallas, engrs.

Tex., Dallas — City Comn. opens bids about Nov. 15, improving 9 blocks Haskell Ave. from State to Cole Sts., 30 ft., 4,850 lin.ft. curb and gutter, 10,892 sq.yd. wood block or bitulithic asphalt. $46,964. G. Fairtrace, city engr.

Tex., Dallas — City Comn. opens bids about Dec. 1, improving 10th St. from Rosemond to Boundary, 30 ft., 3,800 lin.ft. combined curb and gutter, 11,276 sq.yd. wood block or Uvalde rock asphalt. $50,419. G. Fairtrace, city engr.

Tex., Jasper—Jasper Co. making plans surfacing road already graded 12.3 mi. State Highway 7 from point 8 mi. west of here to Angelina Co. line, 16 ft., $128,835; gravel surfacing 6.5 mi. State Highway 8 from Hortons Switch to Sabine Co. line, 16 ft., 68,200 cu. yd. gravel, $51,600. C. P. Hunter, co. engr.

Streets and Roads (Continued)

Tex., Palestine—Anderson Co. election Nov. 20 to vote on $150,000 bond issue improving highways. C. Stewart, co. judge.

Tex., Paris—Lamar Co., making plans gravel surfacing 9.24 mi. State Highway 19 south of here, 12 ft., 8,124 cu. yd. gravel, 12,984 cu. yd. sledged rock. $75,200. W. M. Fooshee, co. engr.

Tex., Senter—Shelby Co. making plans grading and gravel surfacing 6 mi. State Highway 35 from Timpson to Bobo, 16 ft., 15,000 cu. yd. roadway and 20,000 cu. yd. borrow excav., 132 sq.yd. concrete, 12,520 cu. yd. gravel surfacing. $64,386. I. R. Titus, Timpson, engr.

Idaho—State Hy. Comn., Boise, making plans grading and gravel surfacing 10.7 mi. Idaho-Pacific Highway, Federal Aid Project 65, from Georgetown to Caribou Co. line, 20 ft. $95,000. D. P. Olson, dir. highways.

Calif., Merced—Merced Co. rejected bids paving 13.4 mi. Dos Palos and Volta sections of Pacheco Pass Highway. Will probably readvertise. A. E. Cowell, Merced, engr. Noted June 22.

Calif., San Francisco — City and San Francisco Co., had plans prepared improving Ulloa St. between 22nd and 27th Aves., 2,778 lin.ft. concrete curb, 380 lin.ft. 10 in. ironstone pipe culvert, 2,642 sq.ft. artificial stone walks, 79,573 sq.ft. asphaltic paving, etc. $27,500. M. M. O'Shaughnessy, city engr.

Calif., San Francisco — City and San Francisco Co. having plans prepared constructing boulevard connecting Lincoln Park with Sutro Heights. $60,000. M. M. O'Shaughnessy, city engr.

Calif., San Francisco — City and San Francisco Co. plan street improvements. $284,000. M. M. O'Shaughnessy, city engr.

Calif., San Rafael—Marin Co. having surveys made constructing 4 mi. permanent road from Roys Mill to Shafter Bridge. Rd. Dist. 5. G. Dodge, co. surv.

Calif., Santa Rosa—Had plans prepared improving College Ave. between Mendocino and 4th Sts., 83,000 sq. ft. 1½ in. warrenite on 4 in. asphaltic concrete, 83,000 sq. ft. grading; Slater St. between College Ave. and Spencer Sts., 41,337 sq .ft. 1½ in. warrenite on 4 in. asphaltic concrete, 41,337 sq. ft. grading. L. L. Mills, city engr.

Ontario — Colonization Rds. Dept., Toronto, will have survey made this winter for 100 mi. gravel trunk road from North Bay to Cobalt. $1,000,000. C. H. Fullerton, Parliament Bldg., Toronto, ch. engr.

Ont., Hamilton—Having plans prepared concrete pavements on Mountwood Ave. and King St. W., asphalt pavements on Caroline St. and cement sidewalks and curbs from Bond to Coine Aves. $62,000. Work will probably be done by day labor under direction of E. R. Gray, city engr.

Ont., Oshawa—Plans 7,000 sq.yd. asphaltic pavements on Glendon Ave., Clark, Huron, and Drew Sts., Huron and Tyler Crescents, 24 ft. wide, with concrete base, curbs and gutters. $30,000. W. Smith, town engr.

BIDS DESIRED

Mass., Ashburnham—Nov. 14, by Selectmen of town of Ashburnham, at office of Div. of Highways, State House, Boston, paving 4,221 ft. road, 20 ft.-25 ft., here, bituminous macadam. $40,000. A. W. Dean, Boston, state highway engr.

Mass., Grafton—Nov. 14, by Selectmen of Town of Grafton at office of Div. of Highways, State House, Boston, paving about 3,000 ft. road, bituminous macadam, here. $25,000. A. W. Dean, Boston, state highway engr.

New York—Nov. 21, by H. S. Sisson, comr. State Hy. Dept., Albany, improving highways in Chautauqua, Columbia, Nassau, Orange, Saratoga, Suffolk, Otsego and Wayne Counties, also reconstructing highways in Montgomery, Onondaga, Orange and Tompkins Counties. J. C. Finch, secy.; adv. this issue.

N. Y., Brooklyn—Nov. 15, by E. Riegelmann, boro pres., Boro Hall, resurfacing Albany Ave., asphalt; repaving Church Ave., Empire Blvd. and Ave. R, etc., permanent asphalt; laying cement sidewalks on Montgomery St.

N. Y., Long Island City—Nov. 17, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing and laying sidewalks on 101st (Jerome) Ave. from Van Wyck to Liberty Aves., grading for width of 30 ft. centrally located in Liberty Ave. from 101st Ave. to Sutphin Blvd.; paving for width of 20 ft. centrally located with permanent sheet asphalt on concrete in 101st (Jerome) Ave. from Van Wyck to Liberty Aves., Liberty Ave. from 101st Ave. to Sutphin Blvd.

Pa., Ebensburg — Nov. 15, by Supervs. Susquehanna Twp., c/o Controller Cambria Co., 3.25 mi. road from Emeigh Run to Plattsville, 18 ft., concrete or brick on concrete. $150,000. C. E. Schlicher, Spangler, engr.

Virginia—See "Bridges."

Florida—Nov. 14, by State Hy. Dept., Tallahassee, constructing 10 mi. Rd. 7, Federal Aid Project 34, Escambia Co.; 7.76 mi. Rd. 4, Federal Aid Project 36, St. Lucie Co.; alternative bids on 3 in. penetration macadam on 8 in. rock, 3 in. asphalt with binder course on 8 in. rock or 6 in., 8 in., 6 in. plain concrete surface. W. F. Cocke, state highway engr.

Fla., Milton—Nov. 14, by Comrs. Santa Rosa Co., clearing, grading and surfacing 8.04 mi. road, 10 acres clearing, 22,891 cu. yd. embankment, 15,080 cu. yd. excav., 14,300 cu. yd. sand-clay surfacing in place; 2.014 mi. Jay-Century Rd., 2,363 cu. yd. sand-clay surface, 10 acres clearing, 27,456 cu. yd. embankment, 630 ft. pile trestle. C. H. Overman, Bagdad, co. engr.

Michigan—Nov. 17, by State Hy. Dept., Lansing, grading and surfacing 3.978 mi. Assessment Dist. Rd. 326, Branch Co., 13,095 cu.yd. excav., 21,005 sq.yd. gravel or stone-gravel, 4.229 mi. Assessment Dist. Rd. 283, Branch and Hillsdale Counties, 8,401 cu.yd. excav., 29,707 sq.yd. gravel or stone-gravel; 4.188 mi. Assessment Dist. Rd. 348, Branch and Calhoun Counties, 13,208 cu.yd. excav., 22,067 sq.yd. gravel or gravel-stone. F. F. Rogers, state highway comr. Noted Nov. 2.

Ia., Greenfield—Nov. 15, by Comrs. Adair Co., grading 4.2 mi. Greenfield-Fontanelli Rd., Federal Aid Project 173, Sect. B, 129,055 cu.yd. excav., 16,000 ft. 6 in. tile, etc. C. H. Lehmkuhl, Greenfield, engr.

Ia., Waterloo—Nov. 15, by Comrs. Black Hawk Co. grading 13 mi. Primary Rd. Project 233, from Benton Co. Line south of La Porte city, northwest to here, 137,143 cu.yd. excav., 59,000 ft. 6 in., 18,140 ft. 8 in. 8,460 ft. 10 in. tile drain, etc. W. D. Johnson, Waterloo, engr.

Minn., Albert Lea—Dec. 5, by F. Tavis, aud. Freeborn Co., 15 mi. State Project 13-02, Federal Aid Project 285, 210,000 cu. yd. excav., etc., $45,000; 1 mi. State Project 1-06, Federal Aid Project 304, 21,600 cu.yd. excav., portable and monolithic culverts, $5,000. State Hy. Dept., St. Paul, engrs.

Mo., University (St. Louis P. O.)—Nov. 15, by F. Pitzman, engr., 619 Chestnut St., St. Louis, improving 5,000 ft. University Park subdivision; 1st unit, 8,850 lin.ft. concrete curb and 18 in. gutter, 50,000 sq.ft. 4 in. sidewalk, 310 sq.ft. alley entrances, for C. Crane Willmore Corp., Boatmens Bank Bldg., St. Louis. $25,000.

Tex., Dallas—Jan. 1, by City Comn., improving 4,200 ft. Pacific Ave., Uvalde rock or bitulithic asphalt. $100,000. G. Fairtrace, city engr.

Tex., Edinburg—Nov. 21, by G. P. Brown, judge Hidalgo Co., grading and surfacing 13.92 mi. State Highway 12, Federal Aid Project 301, 18 ft., (a) 18 x 6 in. rein.-con. base with 1 in. cold rolled asphalt top, (b) rein.-con. base with 2 in. hot mix asphalt top, (c) macadam base with 2 in. hot mix asphalt top, or (d) 2 course rein.-con. using 2 in. Texas Trap rock for top course, 385 cu.yd. concrete, 41,529 lb. reinforcing, 46,198 cu.yd. roadway, 9,362 cu. yd. borrow, (a and b) $588,000, (c) $557,500, (d) $543,500. P. S. Devine, Pharr, co. engr.

Tex., Marlin—Nov. 15, by E. M. Dodson, judge Falls Co., grading, gravel surfacing and bridging 9.22 mi. State Highway 44, Federal Aid Project 297, 16 ft., 8.16 acres clearing, 49,057 cu.yd. roadway, 50,450 cu. yd. borrow, 745.4 cu.yd. concrete, 23,466 cu.yd. gravel surfacing, etc. $108,179. J. P. Wehrung, Chilton, co. engr.

Oklahoma—Nov. 15, by M. L. Cunningham, state engr., Capitol Bldg., Oklahoma City, hard surfacing 7.419 mi. Federal Aid Project 79, Pittsburgh Co., 5.663 mi. Federal Aid Project 80, Pittsburg Co.; constructing 3.172 mi. shale road, Federal Aid Project 77, Latimer Co.; 1,955 ft. concrete road, Federal Aid Project 36, Latimer Co.; 7.739 mi. gravel road, Federal Aid Project 83, Le Fore Co.

Idaho—Nov. 13, by W. Osborn, dist. engr. State Highway Dept., Lewiston, gravel surfacing 22 mi. North and South Highway, between Genesee and Moscow, Federal Aid Project 18, Latah and Nez Perce Counties, 23,080 cu.yd. gravel. Cost to exceed $25,000.

Quebec—Dec. 30, by J. L. Boulanger, deputy minister, Dept. Rds., Quebec, building Levis-Rimouski Highway, 1.71 mi. concrete road in Lauzon, 3.92 mi. tar macadam in Lauzon, 29.97 mi. rabble in municipalities of St. Valier, Berthier, St. Roch-des-Aulaies, L'Isle Verte, Trois Pistoles, Notre Dame du Portage. M. Nectkar, ch. engr.

BIDS RECEIVED.

Pennsylvania—State Hy. Dept., Harrisburg ,opened bids Nov. 3, Route 276, Cambria Co., from Leechburg Constr. Co. Inc., Leechburg, $135,920, Burd Constr. Co., Cresson, $142,655, S. Gamble Co., Glass St., Carnegie, $144,454; Route 200 Crawford Co. from J. C. Devine Co., Alliance, O., $63,536, Fort Pitt Constr. Co., 207 Martin Bldg., Pittsburgh, $65,790, C. H. Fry Constr. Co., Cherry and 19th Sts., Erie, $71,457. Applications 1092 and 1096, Warren Co., from F. C. Chiodo, Sheffield, $164,490, F. D. Ross, 137 Main St., Bradford, $173,280, Kavanaugh De Niro Constr. Co., 417 Terminal Bldg., Youngstown, O., $185,039. Noted Oct. 19.

Pa., Phila.—Grading and improving (1) Bridge St. from Summervale Ave. to Langdon St., Bouvier St. from 67th to 68th Aves., Clarkson St. from Rising Sun to Olney Aves. (2) Annsbury St. from 4th to 5th Sts., Chew St. from 12th to 13th Sts., Delphine St. from 3rd to 4th Sts., Gale St. from 4th to Mascher Sts., Lindley St. from 2nd to 3rd Sts. (3) Luray St. from Rising Sun Ave. to Palethorpe St., 17th St. from Rockland to Ruscomb Sts., 67th Ave. from Ognotz Ave. to 20th St. (4) Landsdowne Ave. from 66th to Haverford Aves., from D. De Lisle, 4842 Lithgow St. (1) $27,063; T. L. Flannigan, 2404 East Montgomery St., (1) $29,657; R. B. Wenner, Phila., (street address not available), (1) $29,986; Eastern Paving Co., Colonial Trust Bldg., (2) $27,913 (3) $26,836 (4) $40,733; Barber Asphalt Paving Co., Land Title Bldg., (2) $29,174 (3) $28,378.

S. C., Columbia—Richland Co., constructing 11 mi. topsoil road on Monticello Highway, from White Constr. Co., Chatham, Va., $56,161; C. E. Teague, Augusta, Ga. (street address not available) $63,430; B. A. Havird & Co., Newberry, $65,306. Noted Oct. 26.

O., Cleveland—Cuyahoga Co. opened bids Oct. 28, paving Brookpark Rd. 4, 12,300 cu. yd. earth excav., 1,980 cu. yd. concrete base, (a) 9,900 sq. yd. waterbound macadam, (b) 9,900 sq. yd. brick surface, from E. Gedney, Parkway Dr., (a) $54,004, Enterprise Paving & Constr. Co., 8444 Bway, (b) $58,441; engrs. est $58,636; Short, Crossview and Chestnut Rds., 1,200 cu. yd earth excav., 31,600 cu. yd. waterbound macadam, from Ohio Contg. Co., Elyria, $95,913, Burke Constr. Co., Schofield Bldg., $107,850, engrs. est. $107,853. Noted Oct. 26.

Michigan—State Hy. Dept., Lansing opened bids grading and surfacing 4.355 mi. State Trunk Line Rd. 22-6, Sect. B, Benzie Co., from Pierson & Allswede, Hersey, $27,123, Smitley, Bruce & Stockwell, Harrison, $27,513, W. J. Cadwell, Boyne City, $28,311. Noted Oct. 26.

Wis., Milwaukee—Grading 75,000 cu.yd. or 122,000 cu.yd. area north of harbor entrance, (1) Area A, (2) Area B, from R. Kircharski, 796 Rogers St. (1) $0.30 (2) $0.33; Peppard, Burrill & Lynch, 2025 Kenwood Parkway, Minneapolis, Minn., (1) $0.433 (2) $0.52; C. Haworth, 288 Cedar St., Wauwatosa, (1) $0.49 (2) $0.56. Noted Oct. 12.

South Dakota—State Hy. Dept., Pierre, opened bids Oct. 31, gravel surfacing (1) 10.1 mi. Federal Aid Project 47, Lincoln Co. (2) 14.09 mi. Federal Aid Project 81, Beadle Co. (3) 15.37 mi. Federal Aid Project 32, Edmunds Co. (4) 12.36 mi. Federal Aid Project 74, Douglas Co., from Klamp & Ferguson, Algona, Ia., (1) $39,094; Tobin & Maloney, Maidson, (1) $39,118 (2) $32,538 (3) $32,077 (4) $34,354; W. R. Larson Constr. Co., 520 Secy. Natl. Bank Bldg., Sioux Falls, (1) $39,715 (2) $33,521 (4) $33,202; H. F. Johnson, Aberdeen, (2) $33,239; B. O'Leary, Roscoe, (3) $30,648; C. M. Hansen, Stratford, (3) $33,713; Gotzmeyer-Lenz Co., Minneapolis, Minn., (street address not available), (4) $34,754.

Tex., Austin—Travis Co. surfacing 3.2 mi. Highway 20 between here and Manor, 16 ft., (a) 5½ in. crushed stone base, (b) 1½ in. bituminous topping, from Travis Co., c/o G. S. Mathews, co. judge, Austin, (a) $18,694, (b) $19,697; R. D. Winder, 2304 Neches St., (a) $20, 260, (b) $22,414; Haden & Austin, P. O. Box 1223, Houston, (b) $15,219. Noted Oct. 26.

Streets and Roads (Continued)

Calif., Fresno—Improving Thorne Ave. between Hedges and Belmont Sts., from California Road & Street Impvt. Co., Bank of Italy Bldg., $43,521; Thompson Bros., G and Divisadero Sts., $44,385; Federal Constr. Co., Call Bldg., San Francisco, $43,906. Noted Sept. 28.

Calif., Merced—Merced Co. improving Rd. Dist. 3, from T. A. Hanrahan, 1361 P St., Fresno, $374,990; Valley Paving & Constr. Co., Merced, $385,363; Warren Constr. Co., Bacon Bldg., Oakland, $392,500.

Calif., Tracy—Improving portions East 6th, 6th, West 4th and 4th Sts., from J. E. Johnson, Stockton Savings & Loan Bank Bldg., Stockton, $47,616; J. A. Costello, Jr., 1083 Shotwell St., San Francisco, $52,852; Clark & Henery Constr. Co., 38 South Sutter St., Stockton, $53,666. Noted Oct. 19.

CONTRACTS AWARDED

N. Y., Buffalo—To Rock Asphalt & Constr. Co., Morgan Bldg., paving Collingwood Ave., $4,372, Olympic Ave. $6,931, Lovering Ave. $16,634, Gesl St. $10,387, Peckham St. $45,050; to H. P. Burgard Co., 1968 Fillmore Ave., Roebling Ave., $23,500, all asphalt on concrete.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading Hallett St., to Welsh Bros. Contg. Co., 32 Queens St., Astoria, $15,347; paving 101st and 115th Sts., to Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, $28,105 and $11,810 respectively; 5th St. and grading, curbing and laying sidewalks on 115th St., to F. J. Clancy, 460 Lockwood St., Astoria, $22,090 and $6,725 respectively; 126th St., to Soviero & Britten, 10111 114th St., Richmond Hill, $4,296; Beach 25th St., to R. A. Hess, Inc., 14 Queens St., Astoria, $6,305. Noted Oct. 26.

N. Y., New York—H. Bruckner, pres. Bronx Boro, sheet asphalt paving on Park Ave., to C. D. Beckwith, 2875 Bway., $13,096; grading, setting curb and laying sidewalks on Norman Ave., to M. DelBalso, 660 East 221st St., $8,283; Duryea Ave., to C. DelBlasio, 337 7th Ave., Mt. Vernon, $3,298; Pelham Parkway, to Spadaro & Turriamo, 3185 East Tremont Ave., $33,937. Noted Nov. 2.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., repaving Manhattan and Amsterdam Aves., etc., sheet asphalt on concrete, to Asphalt Constr. Co., 2197 Madison Ave., $23,943 and $17,004 respectively. Noted Oct. 26.

N. Y., Rochester—For 4,000 yd. Medina block pavement and 1,539 ft. 24-30 in. segmental block sewers in Joseph Ave. between Herman and Clifford Sts. to T. Holohan, 163 Lewis St., $47,574. Engrs. est. $55,000. Noted Sept. 21.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, repaving Castleton Ave. from Bard to Burgher Aves. and Castleton Ave. from Bard to Cebra Aves., to J. E. Donovan, 2205 Richmond Terrace, Port Richmond, $32,352 and $53,486 respectively; Richmond Ave. to W. P. McDonald, 342 Madison Ave., New York, $28,215. Noted Oct. 26.

N. C., Spring Hope—Constructing various streets, laying sidewalks, granite curbs and concrete gutters, to R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, $50,000.

S. C., Anderson—Anderson Co. improving 8 mi. Anderson-Liberty Highway, to W. R. Carson, Anderson, $25,612; bridge on above road, to C. M. Guest, Anderson, $7,694. Noted Aug. 31.

S. C., Greenville—Greenville Co., improving 4.03 mi. Dunhams Bridge Rd., to J. L. Carroll, Orangeburg, $26,648; 1.99 mi. Kays Bridge Rd., to W. E. Gossett, Goose Creek, $8,220. Noted Sept. 21.

S. C., Pickens—Pickens Co., constructing 7 mi. Pickens-North] Carolina Rd., to J. B. Ross, Dillsboro, N. C. Former contract rescinded. Noted Oct. 5.

Fla., Dade City—Pasco Co., to Finley-Method Co., Graham Bldg., Jacksonville, grading and paving with asphalt on 8 in. rock, Rd., 2, $214,211, Rd. 3, $90,402; grading and paving on sand-clay base, Rds. 4 and 5, $25,538, Rds. 6 and 7, $33,720, Rd. 8, $34,310, Rds. 9, 10 and 11, $74,488. Noted Sept. 28.

Fla., Melburne—Grading, paving, curbing and laying sewers in various streets, 16,200 cu. yd. excav., 42,850 sq. yd. bituminous surface, 42,850 sq. yd. macadam, 500 ton crushed rock shoulder, 9,106 lin. ft. concrete and 66,420 lin. ft. wood curbing, to J. B. McCrary Co., 3rd Natl. Bank Bldg., Atlanta, Ga., $74,284.

ROAD WORK—BROWNSVILLE, TEX.

Following are lowest three bids opened Oct. 9, by Comrs. Cameron Co., for constructing 10.48 mi. Highway No. 12, Sect. "F," (A) F. P. McElwrath, Corsicana (awarded contract); (B) S. W. Bituminous Co., San Antonio; (C) Dodds & Wedergertner, San Benito. The unit bids were as follows:

	A	B	C
17,431 cu.yd. earth roadway excavation	$0.16	$0.30	$0.20
24,810 cu.yd. earth borrow excavation	16	27	.20
11,089 cu.yd. st. earth overhaul 100 ft. sta.	03	.04	.06
577 cu.yd. structural excavation dry	75	85	1.00
279.94 cu.yd. class "A" concrete (1:2:4)	24.00	22.50	25.00
26,790 lb. reinforcing steel	05½	.06	.06
112 lin.ft. bridge railing, type "C"	1.50	1.50	2.00
110,650 sq.yd. two-course concrete pavement	2.83	2.87	2.90
294,605 lb. pavement reinforcing material	.05	.05½	.06
Extended totals	$343,754	$354,705	$357,082

ROAD WORK—UTAH

Following are lowest three bids opened Oct. 18, by State Rd. Comn., Salt Lake City, for constructing 4.5 mi. road from Brigham to Corinne, Boxelder Co., (A) Gibbons & Reed, Kearne Bldg., Salt Lake City; (awarded contract); (B) O. Nelson, Logan, (C) H. G. Gilkerson, 217 Hess Bldg., Salt Lake City. The unit bids were as follows:

	A	B	C
4,416 cu.yd. common excavation	$0.80	$0.90	$1.00
428 cu.yd. excavation for open drains	30	1.50	40
10,980 cu.yd. borrow	30	40	1.00
3,000 sta. yd. overhaul class "A"	03	02	04
3,900 yd. mi. overhaul class "B"	35	35	40
11,800 sq.yd. reinforcing (pavement)	02	04	03
43,238.3 sq.yd. 7½-in. concrete pavement	1.15	1.28	1.19
10,712 lin.ft. elastite joint filler, placing	02	02	02
500 cu.yd. riprap	4.50	2.50	4.00
123 cu.yd. structural excavation	1.00	1.25	1.50
8,733 lb. reinforcing (structures)	01½	03	02½
72.6 cu.yd. concrete class "A"	15.00	16.00	18.00
37.6 cu.yd. concrete class "B"	14.00	16.00	17.50
24 lin.ft. pipe handrail, including painting	10	2.00	1.50
416 lin.ft. concrete pipe 18-in.	1.00	1.10	.60
324 lin.ft. concrete pipe 24-in.	1.25	1.40	1.00
168 lin.ft. corr. iron pipe 12-in.	40	.60	.30
80 lin.ft. corr. iron pipe 18-in.	50	70	.50
244 lin.ft. wooden headers 4 in. x 6 in.	20	15	.15
31 lin.ft. plain concrete curb and gutter	1.20	.80	1.40
22 lin.ft. curved concrete curb and gutter	1.30	1.00	1.60
2 culvert cleanout castings	5.00	3.00	15.00
Extended totals	$63,759	$71,099	$74,481

Alabama—State Hy. Dept., Montgomery, grading, surfacing and constructing bridge on York-Livingston-Gainesville Rd., 102 ft. 6 in. steel span, 865 lin.ft. creosote timber trestle, earth approach, 2½ in. bituminous macadam (penetration) surfacing, to Stanley & Singer Constr. Co., Lafayette, $75,552. Noted Oct. 19.

O., Cleveland — Cuyahoga Co. paving Bunts Rd., asphalt, to Cleveland Trinidad Paving Co., The Arcade, $64,295, engrs. est. $72,627; Brainard Rd., waterbound macadam, to Lane & Freeman, Newman-Stern Bldg., $67,224, engrs. est. $77,513. Noted Nov. 2.

Michigan — State Hy. Dept., Lansing, grading and surfacing 4.325 mi. State Trunk Line Rd. 10-33, Sect. A, Cheboygan Co., 31.157 cu.yd. excav., 40,561 sq.yd. gravel, to Arenac Constr. Co., Standish, $39,705.

Michigan — State Hy. Dept., Lansing, grading and surfacing 4.321 mi. State Trunk Line Rd. 26-6, Sect. B, Ontonagon Co., 22,340 cu.yd. excav., 36,336 sq.yd. gravel, to S. Fredeen, Rockland, $44,622.

Mich., Detroit—To Detroit Asphalt Paving Co., 20 McGraw Bldg., 2½ in. sheet asphalt pavements on Broadstreet Ave. $44,260, Cherrylawn Ave. $9,806, Davison Ave. $48,689, Dumbarton Rd. $26,908, Lueschner Ave. $20,692; to G. R. Cooke, 1260 Penobscot Bldg., Greendale Ave. $36,885, Goddard Ave. $13,072; to Cleveland Trinidad Paving Co., 402 Hammond Bldg., Rochester Ave. $41,716. Noted Oct. 26.

Ia., Newton—Jasper Co. gravel surfacing 8.63 mi. primary road east and west of Colfax, 26 ft., 13,460 cu. yd. gravel, to P. C. Flutter, Colfax, $33,928.

Wyoming—State Hy. Comn., Cheyenne, grading, surfacing and building culverts on 4.5 mi. road, from Clearmont to Double Crossing on Sheridan-Gillette Rd., Federal Aid Project 116, Sect. A, Sheridan Co. to F. H. Fraser, Sheridan, $30,782; 3.75 mi. Yellowstone Highway north of Manderson, Federal Aid Project 113, Big Horn Co., to Threet Bros., Lovell, $29,061; grading and surfacing 15.1 mi. Lincoln Highway, Thayer Junction to Rock Springs, Federal Aid Project 137, Sweetwater Co., to Bagley Bros., Wheatland, $67,177. Noted Oct. 19.

Missouri—State Hy. Dept. at div. office Gallatin, 12.32 mi. road from Winston and Gallatin to Trenton, 24 ft., State Aid Project 20.206, Daviess Co., to Capitol Constr. Co., 1207 Cherry St., Des Moines, Ia., $38,539. Noted Oct. 26.

Missouri—State Hy. Dept., Jefferson City, 6.015 mi. road north and south of Livingston, 24 ft., State Project 20.193, Livingston Co., 41,362 cu. yd. earth excav., 17,680 cu. yd. borrow, 259.8 cu. yd. concrete masonry, etc., to E. P. Olson, 2901 Monterey St., St. Joseph, $25,144.

Missouri—State Hy. Dept., Jefferson City, 4.789 mi. State Project Route 42, Sect. 4, 16 ft., Oregon Co., to W. F. Plummer, Inc., 536 Monroe St., Springfield, $32,932; 4.789 mi. road through Shannon east and west, 24 ft., State Project Route 2, Sect. 60, Shannon Co., to Coopers Constr. Co., St. Louis (street address not available), $44,806; 1,687 mi. road from Monett to Springfield, 24 ft., State Project Route 16, Sect. 19, Lawrence Co., to Baker & Koontz, Carthage, $47,451; 4.943 mi. road from St. Clair line south, 24 ft., State Project Route 13, Sect. 46, Polk Co., to M. E. Gillioz, Monett, $30,590; 4.943 mi. road from Nevada to Eldorado Springs, 24 ft., State Project Route 26, Sect. 6, Vernon Co., to Moss & Moss, Nevada, $14,430; 5 sections of roads from Warrenton to St. Charles, St. Charles Co., to Moreno-Burkham Co., Syndicate Trust Bldg., St. Louis, $676,000. Noted Oct. 12.

Missouri—State Hy. Dept. at div. office Liberty, 10.6 mi. road from North Kansas City to Liberty, 18 ft., Federal Aid Project 99, Clay Co., to Amer. Paving Co., 411 Finance Bldg., Omaha, Neb., $315,196. Noted Oct. 26.

Mo., Kansas City—Bd. Pub. Wks., to D. T. Brosnahan, 3233 Karnes Blvd., 9,129 sq.yd. brick block pavement on Prospect St. from 35th to 39th Sts., $3.96 per sq.yd., 2,462 lin.ft. 6 in. drain tile, $0.20.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, improving 5,080 ft. Watson Rd., 18 ft., rein.-con., to Webb-Kunze Constr. Co., 5927 Fyler Ave., $137,744. Noted Nov. 2.

Mo., St. Louis—Cornet & Zeibig Trust, 719 Chestnut St., improving 25,000 ft. Pennsylvania, Wise and other streets, Westmoor subdivision in Richmond Heights, 15,000 lin.ft. concrete curb and gutter, 75,000 sq.ft. 4 in. sidewalk, 40,000 sq.yd. asphaltic macadam, 1,000 ft. 63 in. segmental and 24,000 ft. 8-24 in. vitr. clay sewer pipe, to McKelvey Constr. Co., 911 Title Guaranty Bldg., about $200,000.

Mo., St. Louis—J. A. Hodges, 3127 South Grand Blvd., improving 3,600 ft. Parkwood Subdivision, Morganford and Loughborough Aves., 26 ft., 30,000 sq.ft. 4 in. sidewalk, 31,000 cu.yd. earth excav., 80,000 sq.ft. waterbound macadam, 5,200 ft. 8-36 in. vitr. sewer pipe, to McKelvey Constr. Co., 911 Title Guaranty Bldg., about $33,730.

Mo., St. Louis—H. E. Prettyman Organization, 7th St. near Olive St., improving 10,-

Streets and Roads (Continued)

000 ft. Kingshighway Park subdivision, 17,000 lin.ft. concrete curb and gutter, 84,000 sq.ft. 4 in. sidewalk, 50,000 cu.yd. earth excav., 25,000 sq.yd. asphaltic macadam, 8,000 ft. 8-27 in. vitr. clay sewer pipe; also grading and paving 8 mi. various streets, 26-80 ft., in Pennsylvania Park subdivision, Richmond Heights, 200,000 lin.ft. concrete sidewalk, 100,000 cu.yd. earth excav., 26,400 sq.yd. asphaltic macadam, 400 ft. 8 ft. rein.-con., 500 ft. 63 in. segmental block and 62,460 ft. 8-30 in. vitr. clay sewer pipe, to McKelvey Constr. Co., 911 Title Guaranty Bldg., $135,000 for former project and unit prices ranging from $200,000-$225,000 (depending on work) for latter project.

Tex., Bonham—Fannin Co. grading, gravel surfacing and bituminous topping Road Dist. 4, 16 ft., 62,174 cu. yd. roadway excav., 36,478 gal. bituminous material, 1,743 cu. yd. cover material, 26,165 cu. yd. gravel, 7,473 cu. yd. crushed stone, 65,214 lb. reinforcing and 191,680 lb. structural steel, etc., to F. P. McElwrath, Corsicana, $114,537. Engrs. est. $125,000. Noted Oct. 19.

Tex., Coleman—Coleman Co. grading and surfacing 17.34 mi. Santa Anna Rockwood Rd., 16 ft., to Womack Constr. Co., Sherman, $129,278; 4.43 mi. Howe Rd., 16 ft., to Kuykendall & Shelton, Temple, $28,792; 6.14 mi. Coleman Baird Rd., 16 ft., to McCall-Moore and Scarbrough & Davis, Waco, $50,751.

Tex., Ft. Worth—Tarrant Co. grading and gravel surfacing 10.31 mi. Arlington Mansfield Rd., Sect. B, Project 9, to Tibbetts Constr. Co., 8th St., $48,197; structures to McCoy-Richards, Arlington, $8,084. Noted Oct. 19.

Okla., Pawhuska—Paving various streets with Trinidad asphalt, to Hamilton Constr. Co., Bartlesville, $41,842.

Colorado—State Hy. Dept., Denver, gravel surfacing 3.609 mi. Spanish Trail, 18 ft., Federal Aid Project 71-B, La Plata Co., to Peterson Shirley & Gunther, 1st Natl. Bank Bldg., Denver, $62,274, engrs. est. $54,099; 5.302 mi. road beginning at Grand Valley and extending toward De Beque, Federal Aid Project 210-A, Garfield Co., to F. L. Hoffman, 527 Mining Exch. Bldg., Denver, $52,209, engrs. est. $67,921; concrete paving 1.519 mi. road beginning at Broomfield and extending toward Lafayette, Federal Aid Project 222-B, Boulder Co., to Miller, Douglas & Haines, 100 South York St., Denver, $56,885, engrs. est. $72,000. Noted Oct. 5.

California—State Hy. Comn., Sacramento, grading and 5 in. gravel surfacing 13.5 mi. highway between Sneath Road and Half Moon Bay Rd., Div. 4, Route 55, Sects. A and B, San Mateo Co., to P. L. Burr, 823 Sheldon Bldg., San Francisco, $336,814. Noted Oct. 26.

Calif., Fresno—Grading and paving Ferger Ave. between Olive and Belmont Sts., to Thompson Bros., G and Divisadero Sts., $35,382. Noted Nov. 2.

Calif., Newport Beach—Improving Central Ave. and other streets, 390,555 sq. ft. 5 in. concrete paving, 685,887 sq. ft. 8 in. concrete paving, 29,287 lin. ft. 6 in. concrete curbing, 76,362 sq. ft. concrete sidewalk and 149,133 sq. ft. clay surfacing, etc. to California Constr. Co., Union Bldg., San Diego, $404,623. Noted July 6.

Ont., Toronto—Will build 2,000 sq.yd. asphalt pavements on Main St. $10,527, 25,000 sq.ft. concrete sidewalks on Oakdene Crescent $2,651, and Baliol St., $5,117; extending and grading Pailton Crescent, $10,750, by day labor. R. C. Harris, city engr.

Industrial Works

PROPOSED WORK

Mass., Worcester—Home Accessories Corp., 44 Pearl St., plans 2 story factory addition, brick, Gardner and Taintor Sts. $40,000. E. T. Chapin, 340 Main St., archt.

Mass., Worcester—Parker Wire Goods Co., 18 Grafton St., plans 1 story plant addition, brick and steel, Washington St. $75,000. Architect not announced.

Conn., New Haven—Ward Baking Co., Southern Blvd. and South Marys St., New York City, plans 2 story and basement, factory, brick and concrete, Lombard St., here. Architect not announced.

N. Y., New York—M. Low, c/o L. Shemart, arct. and engrs., 194 Bowery, soon takes bids 3 story, 100 x 125 ft., brick, steel and concrete garage, plain foundation, Amsterdam Ave. and 57th St.

N. Y., New York—H. Stern Lumber Co., c/o W. H. Gompert, archt. and engr., 171 Madison Ave., soon takes bids rein.-con., brick and steel plant, plain foundation, 69th St. near Ave. A. $100,000.

N. J., Newark—Dugan Bros., 287 Bway., Brooklyn, N. Y., having plans prepared by M. N. Shoemaker, archt. and engr., 15 Central Ave., brick, steel and concrete bakery, plain foundation, Abington Ave. and 3rd St., here. $200,000.

Md., Baltimore—Amer. Can Co., 120 Bway., New York City, plans rein.-con. and steel factory, concrete pile foundation, Boston and Hudson Sts., here. $350,000.

Ky., Jackson—Kentucky Utilities Co., plans 1 story and basement, power plant. H. Gillem, genl. mgr.

O., Akron—General Tire & Rubber Co., 1708 East Market St., had plans prepared by Osborn Eng. Co., archts. and engrs., 2848 Prospect Ave., Cleveland, 1 and 3 story, 40 x 180 ft. and 60 x 100 ft., brick, steel and concrete factory additions. $100,000. M. O'Neil, pres.

O., Columbus—Teachout Door Sash & Glass Co., 100 West Spring St., had plans prepared by C. W. Bellows, archt., 69 Ruggery Bldg., 2 story and basement, 125 x 125 ft., brick and concrete warehouse, North Water St., $65,000.

Wis., La Crosse—La Crosse Fur & Hide Co., 202 South Front St., having plans prepared by O. J. Sorenson, archt., 216 Main St., 2 story and basement, 22 x 92 ft. and 20 x 30 ft. storage plant addition, brick and concrete, plain foundation, South Front St. $42,000.

Wis., Racine—F. J. Greene Eng. Wks., 1028 Douglas Ave., soon takes new bids 3 story, 53 x 100 ft. factory, brick and concrete, plain foundation, Douglas Ave. Former bids rejected. $50,000. E. B. Funston Co., Janes Blk., archts.

Colo., Denver—McMurtry Mfg. Co., 1533 Arapahoe St., having plans prepared by A. Gove, archt., 1608 Bway., 2 or 4 story, 40 x 125 ft., paint factory, 26th and Blake Sts. $60,000.

Calif., Dinuba—Central California Ice Co., P and Mono Sts., Fresno, plans ice plant, South M and Ventura Sts., here.

Calif., Merced—California Packing Corp., 101 California St., San Francisco, had preliminary sketches prepared by P. L. Bush, engr., 101 California St., San Francisco, several large cannery buildings, 23rd St. from P to R Sts. and 22nd St. between Q and R Sts.

Calif., San Francisco—Goodrich Rubber Co., 401 Mission St., had plans prepared by H. C. Baumann, archt., 251 Kearny St., 6 story and basement rein.-con., warehouse and loft, 2nd St. between Brannan and Townsend Sts. $150,000.

Ontario—Temiskaming & Northern Ontario Ry., North Bay, plans to rebuild stations and freight sheds destroyed by fire at North Cobalt, Haileybury and Heaslip, brick and timber construction. $200,000 to $300,000. S. B. Clemont, North Bay, ch. engr.

BIDS DESIRED

O., Norwood—A. Kahn, archt., 1000 Marquette Bldg., Detroit, Mich., taking bids and opens same about Nov. 22, 2 story, 320 x 500 ft. automobile factory, 25 ft. high, rein.-con. and flat slab construction, plain foundation, Smith Rd., here, for Chrevolet Motor Co., Genl. Motors Bldg., Detroit, Mich.

Mich., Muskegon—Central Paper Co. taking bids 3 story and basement, rein.-con. and brick factory, concrete pile foundation, Lake St., $200,000. Prices wanted on 700 ton special steel, 1,350,000 common brick, 100,000 cu. ft. concrete, 60,000 sq. ft. 6 in. and 40,000 sq. ft. 4 in. concrete flooring, 55,000 sq. ft. 3 in. concrete roofing, 5,600 yd. concrete, 2,000 cu. yd. excav.

Ill., Chicago—X. L. Refrigerating Co., Inc., 1834 West 59th St., receiving bids 1 story, 125 x 132 ft., rein.-con., brick and steel factory, 59th and Aberdeen Sts. $60,000. A. G. Lund, 453 West 63rd St., archt.

Ill., Chicago—Rawson & Eisenberg, archts., 5 North La Salle St., receiving bids 3 story, 100 x 125 ft., rein.-con., brick and steel, Wabash Ave. $75,000. Owner's name withheld.

Ill., Chicago—Dubin & Eisenberg, archts., 14 West Washington St., receiving bids 3 story, 75 x 98 ft., rein.-con., brick and steel factory addition, for Kosher Star Sausage Mfg. Co., 1006 West Maxwell St. $75,000.

Wis., La Crosse—O. A. Merman, archt., 210 Linker Bldg., taking bids and opens same about Nov. 13, 1 story and basement, 60 x 146 ft., brick and concrete garage, plain foundation, 6th and State Sts., for Cameron Motor Car Co., 127 South 6th St. $40,000.

Wis., Stevens Point—F. & G. Auto Parts Co., 425 Madison St., taking bids 1 story and basement, 35 x 102 ft. addition to garage, brick and concrete, plain foundation. $40,000. Private plans.

Mo., Paris—See "Waterworks."

CONTRACTS AWARDED

Mass., Pittsfield—General Electric Co., River Rd., Schenectady, N. Y., 1 story, 100 x 516 ft. factory, brick and steel, here, to Austin Co., Bulletin Bldg., Phila. Archts. est. $150,000.

Cann., New London—Edward Bloom Co., Elm St., 2 story, 56 x 238 ft. factory addition, rein.-con. and brick, plain foundation, Elm St., to P. S. Van Kirk Co., c/o owner. $80,000.

N. Y., Brooklyn—B. A. Davies, c/o B. Driesler, Jr., archt. and engr., 153 Remsen St., 1 story, 100 x 200 ft., brick, steel and concrete garage, plain foundation, Empire Blvd., by day labor. $115,000.

N. Y., New York—Reid Ice Cream Co., 79 West 132nd St. 2 and 3 story, 99 x 200 ft. factory with 200 ft. shed, 30 ft. wide on one end and 55 ft. wide on other end, west of 5th Ave. from 141st to 142nd Sts., to Turner Constr. Co., 244 Madison Ave.

N. J., Linden—H. B. Hardenburg & Co., Inc., 1 story and partial basement, 171 x 171 ft., brick and timber factory, with miscellaneous buildings incl. garage, to Turner Constr. Co., 244 Madison Ave., New York City.

Pa., Pittsburgh—Mack International Moto Truck Corp., 5911 Center Ave., 1 story and basement, 120 x 280 ft. sales and service garage, Liberty and Gross Sts., to Feltyberger Reed Constr. Co., Peoples Bank Bldg. Archts. est. $60,000.

Pa., Scranton—T. F. Leonard Estate, 505 Lackawanna Ave., 2 story, 80 x 130 ft. concrete, brick and steel garage, Adams Ave., to Anthracite Bridge Co., 300 Geffet St. Noted Oct. 12.

D. C., Wash.—Evening Star Newspaper Co., 11th St. and Pennsylvania Ave., 5 story and partial basement, containing 12,000 sq.ft. floor space, paper warehouse, rein.-con., Canal St. near 2nd St., to Turner Constr. Co., 244 Madison Ave., New York City.

Tenn., Knoxville—Louisville & Nashville R.R., Louisville, Ky., 2 story, 50 x 600 ft., steel and concrete freight house, here, to H. K. Ferguson Co., 6523 Euclid Ave., Cleveland, O., $150,000. Noted Sept. 21.

Tenn., Nashville—Baptist Sunday School Bd., 8th Ave., 2 story and basement, printing and publishing plant, concrete and brick, 10th and Payne Aves., to H. P. Jacobs & Co., Independent Life Bldg., $158,000.

O., Cleveland—J. Sands, East 55th St. and Sweeney Ave., 1 story, 60 x 100 ft., brick and steel machine shop, 10205 Harvard Ave., to Dresser-Minton Co., The Arcade. Archts. est. $40,000. Noted Nov. 2.

Wis., Marinette—H. A. White, 2000 Hall Ave., 1 story, 67 x 102 ft. garage, brick and concrete, plain foundation, Hall Ave., to H. J. Selmer Co., McCartney, Natl. Bank Bldg., Green Bay. Archts. est. $15,000.

Wis., Milwaukee—C. H. Krouse Milling Co., 37th Ave. and Burnham St., 1 story, 80 x 140 ft. warehouse, brick and timber, Burnham St., to W. F. Tubesing, 129 West Chestnut St., Wauwatosa. Archts. est. $45,000.

Wis., Milwaukee—Luick Ice Cream Co., 183 Ogden Ave., 1 story, 120 x 120 ft. brick and concrete garage, plain foundation, Van Buren St., to S. W. Tallmadge, 445 Milwaukee St. Archts. est. $75,000. Noted Oct. 26.

Kan., Atchison—Blair Milling Co., 300 South 4th St., 6 story and basement 128 ft. high, 36 x 83 ft. plant, 50,000 bu. storage capacity, to Jones Hettelsater Constr. Co., 706 Mutual Bldg., Kansas City, Mo. Noted Sept. 21.

Tex., Waco—Texas Fireproof Storage Co., 4 story and basement, 50 x 100 ft. warehouse and garage, brick and steel, plain foundation, 11th and Mary Sts., to J. E. Johnson Constr. Co., Waco, $100,000.

Industrial Works (Continued)

Calif., Los Angeles—W. P. Fuller Paint Co., 945 South Main St., 2 story, 120 x 125 ft., factory and warehouse, to Lepper & Laisy, Johnson Bldg., $44,600.

Calif., Oakland—J. E. French Co., 124 Grand Ave., 1 story, rein.-con., service garage and auto salesroom, southeast Bway. and Moss Ave., to G. P. Jensen, 320 Market St., San Francisco, $65,000.

Alta, Calgary—Imperial Oil Co. Ltd., 56 Church St., Toronto, Ont., oil refinery, here, to McDonald Bros., 518 9th Ave. Archts. est. $2,500,000.

Buildings

PROPOSED WORK

Mass., Amherst—Church—Wesley Methodist Church plans 1 story and basement, brick, stone and steel. $150,000. K. S. Putnam, 78 Main St., Northampton, archt.

Mass., Gardner—Town Hall—Town having revised plans prepared by B. Brown, archt., 88 Beacon St., Boston, and takes bids about Dec. 1, 2 story, 80 x 110 ft., rein.-con. and stone. $300,000. R. N. Wiley, chn. building com. Noted Jan. 26.

Mass., Springfield — Hotel — Hampden Hotel Co., Chestnut St., had plans prepared by Architectural and Eng. Assn., 145 State St., 10 story, 40 x 150 ft., brick and steel addition, Chestnut St. $150,000. C. Shean, mgr.

Mass., West Springfield (Springfield P. O.)—High School—Town had plans prepared by C. G. Loring, archt., 7 Water St., Boston, 3 story, 100 x 200 ft., brick. $225,000. A. L. Pease, 22 Elm St., member building com. Noted May 25.

Conn., New Britain — Hotel — United Hotels Co. of America, c/o H. L. Stevens & Co., archts. and engrs., 522 5th Ave., New York City, having plans prepared 5 or 6 story, brick, steel and concrete, West Main St. $500,000. Noted June 22.

Conn., New Britain—Schools—City plans 3 story, 16 room addition to Smalley School, $185,000, and 2 story and basement, 12 rooms, East St. Section. $157,000, both brick and steel. E. C. Goodwin, ch. School Bd. Architect not selected.

N. Y., Mt. Vernon — Apartment — A. Gevirty, 273 Primrose Ave., soon takes bids 4 story, 205 x 310 ft., brick, steel and stone, plain foundation, Hartly and Gramattan Aves. $200,000. Sibley & Featherston, 101 Park Ave., New York, archts. and engrs.

N. Y., New York—Apartment—G. S. P. Kleeberg, care H. A. Jacobs, archt. and engr., 64 East 55th St., soon takes bids altering 6 story, 25 x 100 ft., brick, steel and stone, 126 East 54th St. $175,000.

N. Y., New York—Police Station—Dept. Police, 240 Center St., plans 4 story, 60 x 75 ft., brick, steel and stone, plain foundation 182d St. and Wadsworth Ave. $175,000. R. Enright, comr. Private plans.

N. Y., New York—Store, Showroom and Office—Ren Zone Realty Co., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., soon takes bids 9 story, 65 x 100 ft., brick, steel and stone, plain foundation, 156 West 34th St. $200,000.

N. Y., New York—Theatre, Store and Office—Fourteen Ninety-one Bway. Corp., 485 5th Ave., plans brick, steel and stone, plain foundation, 1491 Bway. $350,000. A. Zukor, pres. R. B. Smith, 452 5th Ave., archt. and engr.

N. Y., Portchester—Lodge—Portchester Lodge B. P. O. E. 863, 140 North Main St., having plans prepared by W. H. McElfatrick, archt. and engr., Columbia Theatre Bldg., New York, 4 story, 50 x 160 ft., brick, steel and stone, plain foundation. $150,000.

N. Y., Utica—Theatre and Office—N. Robbins, c/o Avon Theatre, soon takes bids 6 story, brick, steel and stone, plain foundation, Columbia and University Sts. $500,000. E. C. Horn & Son, 1476 Bway., New York, archts. and engrs.

N. J., Plainfield—Hospital—Muhlesberg Hospital having preliminary plans prepared by Crow, Lewis & Wick, archts. and engrs., 200 5th Ave., New York, brick, steel and stone addition, plain foundation. $500,000. F. W. Hubbard, building chn.

Pa., Altoona—Lodge—Archie Maxwell Lodge of Odd Fellows, 1112 15th St., plans 3 story and basement, 90 x 120 ft., brick, steel and stone, 12th Ave. $150,000. G. A. Wood, 4025 5th Ave., trustee.

Pa., Harrisburg — Lodge — Knights of Pythias Inc., 4th and Kelker Sts., conducting campaign to raise $150,000 for 5 story and basement, 100 x 120 ft. brick, steel and stone, 4th and Kelker Sts.

Pa., Phila. — Victory Hall — Following architects were selected to compete in competition for designing Victory Hall to be erected on Parkway, P. P. Cret, 112 South 16th St.; C. G. Klauder of Day, Klauder, Franklin Bank Bldg.; Wilson, Eyre & McElvain, 1003 Spruce St.; A. Evans, G. W. Casey and H. E. Kleinfelder, of Furness, Evans & Co., 315 South 15th St.; Mellor, Meigs & Howe, 205 South Juniper St., Rankin, Kellog & Crane, 1012 Walnut St.; E. V. Seelers, 101 South Juniper St.; H. Trumbauer, Land Title Bldg., and Zantzinger, Borie & Medary, Otis Bldg. $5,000,000.

W. Va., Charleston—Office—Kanawha Valley Bank, 1 Capitol St., takes bids about Mar. 1, 16 story, 110 x 120 ft., Capitol and Lee Sts. $2,000,000. Architect not named.

N. C., Greensboro—Church—Grace Methodist Protestant Church, plans church, Edgeworth and Gaston Sts. $200,000. J. M. Millikan, committeeman.

N. C., Washington—Schools—Voted $300,000 bonds for new schools. Noted Sept. 28.

N. C., Winston-Salem—School—Plans school, Patterson Ave. $225,000. J. G. Hanes, mayor. Architect not announced.

Ky., Louisville—Hospital—Kentucky Baptists had plans prepared by Joseph & Joseph, archts., Francis Bldg., 6 story, Barrett Ave. $500,000. M. P. Hunt, chn.

O., Cleveland—School—Bd. Educ., Royalton Twp., having preliminary plans prepared by Fulton, Taylor & Cahill, archts., 8120 Euclid Ave., 2 story and basement, brick, steel and concrete, Royalton Twp. $150,000.

O., Lakewood (Cleveland P. O.)—Apartment—J. F. Mullholland, Leader News Bldg., Cleveland, is interested in company being formed and plans 6 story and basement, on lot 150 x 500 ft., brick, steel and concrete, 11834 Edgewater Dr. $1,500,000. Architect not selected.

Ill., Chicago—Apartment—M. Lazar and L. Siegel c/o A. E. Himelblau, archt., 179 West Washington St., having plans prepared 3 story, 125 x 147 ft., rein.-con., brick and steel, Wilson St. and Central Park. $275,000.

Ill., Chicago—Apartment—L. Siegel c/o A. E. Himelblau, archt., 179 West Washington St., having plans prepared 3 story, 150 x 171 ft., rein.-con., brick and steel, Austin and Ontario Sts., $350,000.

Ill., Chicago — College — University of Chicago, 134 South La Salle St., having plans prepared by Coolidge & Hodgdon, archts., 208 South La Salle St., following buildings, 4 story hospital, 3 story library, dispensary, 3 story pathological laboratory and 2 story bond chapel, all rein.-con., steel and Bedford stone, University Ave., Midway. Plaisance and Engleside Sts. Total $2,500,000.

Ill., Chicago—Theatre—Katz & Ohrenstein, c/o C. W. and G. L. Rapp, archts., 190 North State St., associated with J. Fortin, archt., 600 Blue Island Ave., having plans prepared 6 story, 150 x 170 ft. theatre, Madison and Austin Sts. $3,000,000.

Wis., Milwaukee—Apartments—J. Hunholz, 2310 Vliet St., having plans prepared two 4 story and basement, 50 x 100 ft., brick and concrete, plain foundations, Marshall and Biddle Sts. $125,000 each. Private plans.

Wis., Milwaukee—Business—B. E. Nickoll, 109 Wisconsin St., plans 4 story, 100 x 110 ft., brick and concrete addition, 3rd St. and Grand Ave. $200,000. Architect not selected.

Wis., North Milwaukee—High School—Joint School Dist. 17, having preliminary plans prepared by Van Ryn & De Gelleke, archts., 114 Grand Ave., Milwaukee, 2 story and basement, brick, tile and concrete, plain foundation, 36th St. $150,000. E. F. Neumann, clk.

Wis., Racine—Vocational School—Bd. of Industrial Educ. having revised plans prepared by J. M. Matson, archt., 533 Baker Bk., 3 story, 185 x 220 ft., brick, plain foundation. $300,000. Former bids rejected. Noted Sept. 21.

Ia., Ames—Library—State Bd. Educ., State House, Des Moines, having plans prepared by Proudfoot, Bird & Rawson, archts., 810 Hubbell Bldg., Des Moines, rein.-con. and stone, on college campus, here. $400,000. W. H. Gemmell, secy.

Ia., Pella—School—Central College plans building on campus. $175,000. Architect not selected.

Minn., Northfield — Science Hall — St. Olafs College having revised plans prepared by Collidge & Hodgdon, archts., 208 South La Salle St., Chicago, 2 story, 75 x 125 ft., rein.-con. and brick. $300,000.

Kan., Manhattan—School—Voted $250,000 bond issue for school. C. A. Lanty, city clk.

Kan., Topeka—Office—Kansas Life Insurance Co., 701 Jackson St., having plans prepared by T. W. Williamson & Co., archts., Central Natl. Bank Bldg., office. $150,000.

Mo., Kirksville—High School—Nov. 21, to vote on $190,000 bonds 3 story Junior High School, etc., rein.-con. and brick, plain foundation.

Tex., Austin—College—State Bd. Regents having plans prepared by H. M. Green Co., archts. and engrs., North Texas Bldg., Dallas, 3 story and basement, rein.-con., brick and stone, plain foundation, University Campus. $400,000. L. Stark, Orange, chn. Bd. Regents.

Tex., Breckenridge — Office and Club — Knights of Pythias plan 5 story and basement, 75 x 150 ft. $150,000 bonds sold. Architect not selected.

Tex., Memphis—Court House—Hall Co. having plans prepared by C. H. Page & Bros., archts. and engrs., Austin Natl. Bank Bldg., Austin, 3 story and basement. $150,000.

Calif., Marysville — Store, Office and Club—Knights of Columbus, plan 4 story. $200,000. T. Carlin, grand knight. Architect not selected.

Calif., Modesto—Lodge and Office—Native Sons of Golden West, Woodmen or the World, Redmen, and other fraternal organizations will organize hall association to finance construction of 4 story, lodge and office building. $150,000.

Calif., Oakland—Hotel—Lake View Hotel Corp., plans 8 story, 160 x 193 ft., rein.-con., Oak St. opposite Lake Merritt. $1,000,000. H. Barker, Key Route Inn, promoter. M. I. Diggs, Easton Bldg., archt.

Calif., Sacramento — Auditorium — City Council plans auditorium. $150,000. H. W. Funcke, chn.

Calif., Sacramento—Lodge and Club—B. P. O. E. Lodge, 824 J St., plans to purchase 100 x 160 ft. site on 11th and J Sts., and erect lodge and club. $500,000.

Calif., San Francisco—Commercial—Macdonald & Kahn, 130 Montgomery St., having plans prepared two 3 story and basement, 100 x 137 ft. each, rein.-con., 2nd St. near Bryant St. $150,000. Private plans.

Calif., San Francisco — Office — Spring Valley Water Co., 375 Sutter St., having plans prepared by W. Polk & Co., archts., Hobart Bldg., 6 story and basement, rein.-con., West Mason St. between Post and Geary Sts. To exceed $150,000.

Calif., San Jose—Economics—State having plans prepared by G. B. McDougall, state archt., Forum Bldg., Sacramento, 2 story, rein.-con., at State Normal School, here. $180,000.

Calif., Santa Ana — Hospital—A. B. Westell, organizer of Santa Ana Valley Hospital Assn., plans hospital. $200,000.

Que., Montreal—Church—St. Thomas Asquinas Fabrique 124 Convent St., plans 62 x 148 ft., 140 ft. high incl. bell tower, Convent St. $150,000.

Ont., Stratford—School—Bd. Educ. plans 3 story and basement, 30 room, rein.-con., brick, steel and stone. $350,000. Architect not selected.

Ont., Toronto — Exhibition — Canadian Natl. Exhibition, King St. E., plans 1 story automobile and truck building, machinery building, etc., concrete, brick and steel, at Exhibition Park. $1,000,000. Architect not selected.

BIDS DESIRED

Mass., Boston—Apartment—Coleman & Gilbert 331 Huntington Ave, receiving bids and open same about Nov. 12, 6 story, rein.-con., wood pile foundation, Gainsborough St. $500,000. F. A. Norcross, 46 Cornhill, archt. Noted Sept. 21.

Mass., Boston—Police Station—Nov. 14, by Public Buildings Dept., City Hall, 10 story, 65 x 90 ft., brick, stone and steel, plain foundation, Sears and Milk Sts. $500,000. J. Purdon, 8 Beacon St., archt. B. Brown, 88 Broad St., engr. Noted Oct. 19.

N. Y., Olean — School—Jan. 2, by Bd. Educ., 2 story, 105 x 168 ft., brick, Main St. $200,000. A. E. Schoenberg, 101 North Union St., archt. Noted Sept. 14.

N. Y., Yonkers—High School—Nov. 24, by Bd. Educ., for Chas. E. Gorton High School, Palisade Ave. and Shonnard Pl. E. A. Fitch, chn.; adv. this issue.

La., Shreveport—Office—March 23, by J. B. Slattery, Shreveport, 16 story and basement, 75 x 150 ft. rein.-con., plain foundation, Texas and Marshall Sts. $1,000,000. Mann & Sterns, A. O. U. W. Bldg., Little Rock, Ark., archts. and engrs. Noted Nov. 2.

Ill., Chicago — Apartment — B. L. Steif, archt., 64 West Randolph St., receiving bids 3 story, 125 x 143 ft., rein.-con., brick and

Buildings (Continued)

steel, Loyola St., for H. Emerman, 4750 Sheridan Rd. $250,000.

O., Cleveland—Apartments—G. A. Grieble, archt., Sloan Bldg., taking bids ten 3 story and basement, 45 x 60 ft., brick and timber, East 73rd St. and Euclid Ave., for Garden Court Realty Co., c/o architect. $300,000.

Ill., Chicago—Apartment—Harris & Jillson, archts., 190 North State St., receiving bids 14 story, 150 x 250 ft., rein.-con., brick and steel apartment, the first unit of 14 story, 150 x 1,000 ft. project which will be built in four units, between Argyle and Ainslee Sts., facing Lake Michigan. Total cost $5,000,000.

Tex., Abilene—Dormitory—Dec. 1, by Bd. Trustees Simmons College, 3 story, 85 x 160 ft., brick and concrete, plain foundation, for Simmons College. $160,000. D. Castle, Abilene, archt. R. O. Jameson, 342 South Rosemont Ave., Dallas, engr.

Calif., Bakersfield — Hospital — Nov. 18, by Supervs. Kern Co., group of buildings for hospital, brick, stone and terra cotta. To exceed $500,000. C. H. Biggar, Bank of Italy Bldg., archt. Noted Sept. 21.

Calif., Oakland—Bank and Office—H. McCullough, supt. of construction, 1641 Allston Way, Berkeley, receiving bids 5 story annex, Shattuck Ave. and Center St., here, for Mercantile Trust Co. $150,000. J. W. Plachek, 2014 Shattuck Ave., Berkeley, archt.

Calif., Visalia—Bank and Office—A. Cuneo, Bank of Italy, Powell and Market Sts., San Francisco, receiving bids 5 story, rein.-con., here. $250,000. R. F. Felchlin Co., Bank of Italy Bldg., Fresno, archt.

BIDS RECEIVED

D. C., Wash.—Showroom and Store—C. W. Semmes (Dodge Bros. agents), 1132 Connecticut Ave., N. W., showroom and store, from F. L. Wagner, 1413 H St. and A. L. Smith Co., Woodward Bldg. Archts. est. $200,000. Noted Feb. 23.

Wis., Oshkosh—School—School Bd. 2 story, brick, tile and concrete, plain foundation, Punhoqua School, from L. F. Schroeder Co., 13 East 1st St., Fond du Lac, $156,121; Fluor Bros. Constr. Co., 52 State St., $157,440; A. Nielson Constr. Co., Neenah, $158,173. Noted Oct. 12.

Ia., Des Moines—Hospital—Polk Co. Hospital Assn., opened bids Oct. 31, 2 story and basement, rein.-con., brick, tile and stone, Prospect Rd. and Hickman St., from Sugarman Constr. Co., 8th and Tuttle Sts., $137,214; J. E. Tusant & Son, 330 3rd St., S. W., $139,448; W. F. Kucharo & Co., 622 Hubbell Bldg., $147,949.

Ia., Dubuque—Convent—Sisters of St. Francis, St. Marys Convent, 69 Emmett St., 4 story and basement, 56 x 170 x 288 ft. rein.-con., brick, tile and stone, from P. Steenberg Constr. Co., 535 Endicott Bldg., St. Paul, Minn., $304,416; J. A. McDonald Constr. Co., 752 Builders Exch. Bldg., Minneapolis, Minn., $310,365; Colwell-Long Co., 251 6th Ave. S., Minneapolis, Minn., $318,834. Noted Oct. 19.

CONTRACTS AWARDED

Mass., Boston—Apartment—Beacon Court Trust Co., c/o C. J. Warren, archt., 185 Devonshire St., 9 story, 80 x 120 ft., brick, stone and concrete, wood pile foundation. 1440 Beacon St., to H. D. Watts Co., Garrett Bldg., Baltimore, Md., $1,200,000.

N. Y., Brooklyn—Office—Brooklyn Edison Co., 360 Pearl St., 12 story, brick, steel and stone, plain foundation, Willoughby and Pearl Sts., to Cauldwell-Wingate Co., 381 4th Ave. Archts. est. $1,000,000. Noted Oct. 12.

N. Y., New York—Apartment—M. Brown, care C. E. Cullen, archt. and engr., 101 Park Ave., will build 14 story, 75 x 100 ft., brick, steel and stone, plain foundation, 7th Ave. and 54th St., by day labor.

N. Y., New York—Apartment—C. T. Moore, care P. C. Hunter, archt. and engr., 191 9th Ave., 6 story, 85 x 100 ft., brick, steel and stone, plain foundation, 8th Ave. and 22nd St., by day labor. $250,000.

N. Y., New York—Apartment—Tremont Ave. Building Corp., c/o C. Schaefer, Jr., archt. and engr., 394 East 150th St., 6 story, 100 x 100 ft., brick, steel and stone, plain foundation, Crotona Ave., by day labor. $200,000.

N. Y., New York — Apartments — West 190th St. Corp., c/o Meisner & Uffner, archts. and engrs., 501 East Tremont Ave., two 6 story, 80 x 100 ft. and 75 x 100 ft., Grant Ave. $350,000; 6 story, 75 x 105 ft., Rochambeau Ave and Gun Hill Rd., $150,000 all brick, steel and stone, plain foundations, by day labor. M. Gellman, pres.

N. Y., New York—Office—Estate of E. Charles, care Severance & Van Alen, archts. and engrs., 372 Lexington Ave., 6 story, 45 x 100 ft., brick, steel and stone, plain foundation, Madison Ave. and 43rd St., by day labor. $150,000.

Pa., Stroudsburg—Bank Stroudsburg Natl. Bank general contract, altering and building 3 story addition Main St., to Willis-Egelholf Co., 101 Park Ave., New York, City. Archts. est. $150,000.

D. C., Wash.—Auditorium—Washington Auditorium Bldg., Comn., care R. N. Harper, chn., 1406 G St., N.W., general contract masonry and superstructure, for steel fireproof auditorium, 19th St. between E. St. and New York Ave., to Parsons & Hyman, Wash. (street address not available) $451,700; steel to Lehigh Structural Steel Co., Real Estate Trust Bldg., $104,000; erection to J. McDonald & Co., Bond Bldg., $30,000. Noted May 11.

Ala., Montgomery—Office—W. L. Shepherd, Exch. Natl. Bank Bldg., 8 story and basement, rein.-con., Moulton and Montgomery Sts., to Huggar Bros., Bell Bldg. Archts. est. $275,000.

Tenn., Nashville — Apartment — Glenn Court Realty Co. general contract 3 story, 24 apartments, garages and servants' houses, concrete, brick and steel, to G. B. Howard Co., 139 4th Ave. N., $200,000. Noted Oct. 19.

O., Brookville—School—Bd. Educ. general contract 2 story and basement, 95 x 218 ft., rein.-con. and brick, plain foundation, to L. Colvin, 16th and Meridian Sts., In-Indianapolis, Ind., $166,174. Noted Oct. 12.

O., Logan—High School—B. Bright, clk. Bd. Educ., 2 story and basement, 106 x 136 ft., brick and concrete, to J. S. Isabel, Bexley (Columbus, P. O.), $127,830. Noted Oct. 26.

Mich., Detroit—Church—Third Church of Christ Scientist, c/o G. D. Mason & Co., archts., 508 Griswold St., 2 story, 110 x 130 ft. rein.-con., brick, steel and stone, plain foundation, 2nd Ave., to Walbridge-Aldinger Co., 2356 Penobscot Bldg., $200,000.

Mich., Hamtramck — (Detroit, P. O.) — Parish House—St. Ladislaus Parish, 3 story, 110 x 170 ft. rein.-con., brick and steel, plain foundation, Jos. Campau Ave., to J. Finn & Son, 7720 Plymouth Rd., Detroit. Archts. est. $200,000.

Ill. Chicago—Apartment—H. McLennan, c/o Fugard & Knapp, archts., 64 East Van Buren St., 12 story, Delaware Ave. and De Witt Pl., to McLennan Co., c/o Wrigley Bldg., $1,100,000.

Ill., Chicago—Apartment—H. Zisook, 4451 Vincennes Ave, 3 story, 122 x 132 ft., rein.-con., brick and steel, 5453-63 Everett St., to Rune & Son, 6142 Rhodes Ave. Archts. est. $200,000.

Mo., Kansas City—Apartment—C. O. Jones, 308 Commerce Bldg., 11 story and basement, 48 x 126 ft., rein.-con. and brick, 911 Holmes St., by day labor. $500,000. Owner taking bids on sub contracts. E. O. Brostrom, 621 Reliance Bldg., archt.

Mo., Marshall—High School—Bd. Educ., 3 story, 150 x 152 ft., rein.-con., brick, stone and terra cotta, to G. H. Gassman, Arkansas City, Kan., $213754. Noted Sept. 28.

Mo., St. Joseph—Business W. F. Kirkpatrick, 8th and Felix Sts., general contract 4 story and basement, 116 x 120 ft., rein.-con., brick and stone, 7th and Francis Sts., to Lawhorn Constr. Co., 905 Edmond St., $145,470.

Okla., Tulsa — Bank — Exchange Natl. Bank, 3rd and Boston Sts., will build 13 story and basement, 75 x 90 ft., rein.-con., steel, granite and brick, by day labor. $1,500,000. Structural steel to Kansas City Structural Steel Co., 21st and Metropolitan Aves., Kansas City, Kan.; granite to Clark & Co., Rockwell, Minn.; face brick to Lumberman Supply Co., 806 American Natl. Bldg., Oklahoma City. Noted Oct. 19.

Calif., Sacramento—Library, etc.—State Dept. Pub. Wks., constructing library, court and office buildings, carpentry and mill work, to Reilly & Nemetz, 180 Jessie St., San Francisco, $166,200; mechanical equipment, to Latourette-Fical Co., 907 Front St., $90,000; metal furring, lathing and plastering and imitation stone, to P. Bradley, 180 Jessie St., San Francisco, $169,800; sheet metal work and skylights, to Forderer Cornice Wks., 269 Potrero Ave., San Francisco, $32,740; glass and glazing, to W. P. Fuller Co., 1016 2nd St., $28,842; interior stone work, to Bruner Marble Co., Marsh-Strong Bldg., Los Angeles, $34,100; marble, mosiac and terrazzo work, to American Marble Co., 25 Columbia Sq., San Francisco, $222,400. Noted Oct. 19.

Calif., San Francisco — Loft — Cebrian Estate, c/o G. A. Applegarth, archt., Claus Spreckels Bldg., 4 story and basement, rein.-con., Fremont and Mission Sts., to P. J. Walker Co., Monadnock Bldg., $225,000. Noted Nov. 2.

Que., Montreal—Clubhouse—Knights of Columbus of Montreal Dist., 5 story, 85 x 140 ft., incl. two assembly halls, 25 x 75 ft. swimming tank, Mountain St., to J. Quinlan & Co., 1165 Greene Ave., $254,000.

Federal Government Work

PROPOSED WORK

Mass., South Boston (Boston P. O.)—Extension—Spec. 4753—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans extension Naval dry dock, here.

O., Fairfield (Dayton P. O.)—Aviation Field—Director Air Service, U. S. Army, Wash., D. C., plans aviation, experimental and flying field, here.

Tex., Liberty—Channel Improvements—Dist. Engineer, Galveston, making plans channel improvements from here to mouth of Trinity River.

Wash., Puget Sound—Fuse and Detonator House—Spec. 4750—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans fuse and detonator house, here.

BIDS DESIRED

Pa., Pittsburgh—Steel Hull—Dec. 1 at office U. S. Engineer, 1 steel dipper dredge hull; adv. this issue.

Md., Edgewood—Quarters—Nov. 15 at office Constructing Quartermaster, Edgewood Arsenal, for 20 sets officers quarters; adv. this issue.

Va., Cape Henry—Power Houses—Dec. 4 at office U. S. Engineer, Norfolk, power houses incl. wells, tanks, etc. at Ft. Story, here; adv. this issue.

Mo., St. Louis—Remodeling—Nov. 27 by Treas. Dept., Wash., D. C., remodeling second floor, etc., U. S. Custom House, here. J. A. Wetmore, acting superv. archt.

BIDS RECEIVED

R. I., Providence—Dredging—U. S. Engineer, Providence, maintenance dredging in Milford Harbor, Conn., 41,200 cu. yd. from J. S. Packard Dredging Co., 1004 Turks Head Bldg., $0.253 per cu. yd.; Bridgeport Dredge and Dock Co., 1024 Main St., Bridgeport, Conn., $0.2725; L. E. Dodge, 30 Church St., New York City, $0.3875. Noted Oct. 5.

N. Y., Buffalo—Superstructure—U. S. Engineer, Federal Bldg., stone and concrete superstructure on breakwater in harbor, here, from Amer. Constr. Co., Marion Bldg., Cleveland, O., $447,609; Greiling Bros. Co., 100 Blk. East Walnut St., Green Bay, Wis., $480,096; Empire Eng. Co., River Rd. and East Ave., North Tonawanda, $524,058. Noted Oct. 5.

Md., Annapolis—Deferrization Plant, etc.—Spec. 4682—Bureau Yards & Docks, Navy Dept., Wash., D. C., deferrization plant for radio station at Naval Academy, here, from H. E. Crook Co., 28 Light St., Baltimore, $13,750 (120 days); D. M. Andrew Co., Sisson and 26th Sts., Baltimore $13,900 (120 days); Bean Bros., 210 Prince St. $14,067 (120 days) alternate add $450. Noted Oct. 19.

Va., Yorktown—Standpipe, etc.—Spec. 4609—Bureau Yards & Docks, Navy Dept., Wash., D. C., standpipe and piping at Navy Mine Depot, here, from Penn Bridge Co., Beaver Falls, Pa., $29,480 (150 days); Newport Contg. and Eng. Co., Law Bldg., Newport News, $30,319 (150 days); Pittsburgh-Des Moines Steel Co., 959 Munsey Bldg., Wash., D. C., $34,500 (140 days). Noted Oct. 19.

Calif., Richmond—Repairing Superstructure, etc.—U. S. Engineer, Custom House, San Francisco, repairing and reshaping existing superstructure, placing 9,000 ton rock riprap, building 80 ft. revetment, 8,000 yds. dredging, here, from Healy-Tibbitts Constr. Co., 9 Main St., San Francisco, dredging $0.90 per cu.yd., riprap $9 per ton, alternate for riprap 10% dirt $1.90 per ton; Daniel Contg. Co., Cunard Bldg., San Francisco, dredging $1 per cu.yd., riprap $3.20 per ton. Noted Oct. 26.

CONTRACTS AWARDED

N. Y., New York—Laundry—Treas. Dept., Wash., D. C., for construction incl. mechanical equipment, laundry building, for U. S. Veterans Hospital, Bronx, here, to Niewenhous Co., Inc., Park Ave. and 161st St. Noted Oct. 12.

FEDERAL POWER COMMISSION

Applications for Licenses and Permits

Applications

349—**Alabama Interstate Power Co., Attalla, Ala.—Wants preliminary permit for 4 dams on Tallapoosa River in Elmore, Tallapoosa and Randolph Counties.**

350—**F. I. Reed, Anchorage, Alaska — Wants preliminary permit for power development in Eklutna River, near Alaskan Railroad, near Matanuska.**

SEWERAGE SYSTEM—DOVER, N. J.

Bids were opened Oct. 23, by Bd. Aldermen and Bd. Sewerage, Municipal Bldg., for installing sewerage system. (A) C. F. Goeringer Constr. Co., 51 S. Washington St., Wilkes-Barre, Pa.; (B) C. Ippolito, 252 Main St., Orange; (C) Interstate Constr. Co., 52 Van Ripen Ave., Jersey City; (D) J. Sigretto, Bernardsville. The unit bids were as follows:

	Vitrified Tile				Concrete Pipe			
	A	B	C	D	A	B	C	D
38,540 lin.ft. 8-in., 0-6	$1.73	$1.35	$1.63	$2.17	$1.68	$1.25	$1.66	$2.07
66,880 lin.ft. 8-in., 6-8	1.90	1.95	1.93	2.67	1.85	1.85	1.86	2.56
12,960 lin.ft. 8-in., 8-10	2.10	3.00	2.45	3.16	2.05	2.90	2.38	3.05
1,195 lin.ft. 8-in., 10-12	2.70	4.39	3.50	3.68	2.65	4.29	3.43	3.57
320 lin.ft. 8-in., 12-14	3.50	5.06	4.00	4.16	3.45	4.96	3.93	4.05
115 lin.ft. 8-in., 14-16	4.40	7.74	6.00	4.70	4.35	7.64	5.93	4.59
20 lin.ft. 8-in., 16-18	5.45	9.53	10.70	5.19	5.40	9.43	10.63	5.08
3,800 lin.ft. 10-in., 0-6	2.10	1.67	1.82	2.37	2.00	1.57	1.72	2.24
3,650 lin.ft. 10-in., 6-8	2.30	2.35	2.31	2.88	2.20	2.25	2.21	2.75
970 lin.ft. 10 in., 8-10	2.55	3.26	3.85	3.37	2.45	3.16	3.75	3.24
200 lin.ft. 10 in., 10-12	3.20	4.27	5.25	3.89	3.10	4.17	5.15	3.76
160 lin.ft. 10 in., 12-14	4.00	6.84	7.50	4.37	3.90	6.14	7.40	4.24
20 lin.ft. 10 in., 14-16	4.90	8.07	10.00	4.91	4.80	7.97	9.90	4.78
10 lin.ft. 12 in., 0-6	2.45	1.90	3.00	2.54	2.33	1.80	2.87	2.38
110 lin.ft. 12 in., 6-8	2.65	2.43	3.50	3.05	2.53	2.33	3.37	2.89
620 lin.ft. 12 in., 8-10	2.95	3.39	5.00	3.54	2.83	3.29	4.87	3.38
150 lin.ft. 12 in., 10-12	3.60	4.43	7.00	4.06	3.48	4.33	6.87	3.90
20 lin.ft. 12 in., 12-14	4.40	6.46	9.00	4.53	4.28	6.36	8.87	4.37
10 lin.ft. 15 in., 0-6	2.85	2.53	3.55	3.67	2.60	2.33	3.20	3.60
710 lin.ft. 15 in., 6-8	3.10	3.23	4.00	4.38	2.85	3.03	3.65	4.31
1,280 lin.ft. 15 in., 8-10	3.45	4.05	5.00	5.04	3.20	3.85	4.65	4.97
200 lin.ft. 15 in., 10-12	4.10	5.42	7.00	5.75	3.85	5.22	6.65	5.68
30 lin.ft. 15 in., 12-14	4.90	6.33	9.50	6.44	4.65	6.13	9.15	6.37
10 lin.ft. 15 in., 14-16	5.90	7.96	11.00	7.15	5.65	7.76	10.65	7.08
10 lin.ft. 18-in., 0-6	3.50	3.43	4.55	4.19	3.10	3.15	3.98	4.18
590 lin.ft. 18 in., 6-8	3.90	4.22	5.20	4.88	3.50	4.02	4.63	4.87
1,360 lin.ft. 18 in., 8-10	4.65	4.91	6.50	5.56	4.25	4.71	5.93	5.55
30 lin.ft. 18 in., 10-12	5.95	6.02	8.00	6.26	5.55	5.82	7.43	6.25
10 lin.ft. 20 in., 0-6	4.25	3.79	6.40	4.46	3.75	3.59	5.45	5.45
10 lin.ft. 20 in., 6-8	4.60	4.74	7.25	5.16	4.10	4.54	6.30	5.25
580 lin.ft. 20 in., 8-10	5.40	5.37	8.60	5.83	4.90	5.17	7.65	5.92
30 lin.ft. 20 in., 10-12	6.75	6.13	10.00	6.54	6.25	5.93	9.05	6.63
10 lin.ft. 20 in., 12-14	8.25	9.01	12.00	7.24	7.75	8.81	11.05	7.33
32 tons cast iron pipe	90.00	200.00	150.00	100.00	.....	.....	.....	.....
600 manholes, 8 ft	95.00	75.00	75.00	100.00	.....	.....	.....	.....
100 manholes, ext. depth	9.00	18.00	10.00	.01	.....	.....	.....	.....
200 M.B.M. lumber sheet	50.00	65.00	75.00	80.00	.....	.....	.....	.....
50 M.B.M. lumber foundation	60.00	75.00	75.00	80.00	.....	.....	.....	.....
50 cu.yd. concrete A 1:3:5	16.00	20.00	15.00	14.00	.....	.....	.....	.....
50 cu.yd. concrete B 1:2:4	18.00	25.00	18.00	15.00	.....	.....	.....	.....
12,000 cu.yd. rock excavation	3.50	6.00	5.00	4.00	.....	.....	.....	.....
30 cu.yd. extra excavation	2.50	4.00	3.50	2.50	.....	.....	.....	.....
200 5 in. deep house	1.10	3.50	7.50	10.00	.....	.....	.....	.....
1,000 5 in. house connections	1.35	2.50	.50	1.50	.....	.....	.....	.....
Extended totals, vitrified pipe	$388,164	$421,881	$422,262	$498,801	.....	.....	.....	.....
Extended totals, concrete pipe	.....	.....	.....	.....	$379,497	$407,933	$410,338	$484,574

Federal Power Commission (Continued)

351—A. P. Gray, Alta Vista Hotel, Pueblo, Colo.—Wants preliminary permit for 3 power projects at headwaters of South Colony Creek in Santa Isabela Natl. Forest, Custer Co.

352—Idaho Power Co., 7th and Bannock Sts., Boise, Idaho—Wants license for transmission line from American Falls to Pocatello.

353—Home Power Co., Skagway, Alaska—Wants preliminary permit small development on North Fork Skagway River, 5 mi. from Skagway.

354—R. W. Morrison, Chemical Bldg., St. Louis, Mo.—Wants preliminary permit for dam 30 ft. high in Rio Grande in Webb Co., Tex.

355—M. C. Seagrave, 593 Market St., San Francisco, Calif.—Wants preliminary permit combined power and irrigation project incl. dam and reservoir on headwaters North Fork Consumnes River and 5 mi. canal to power house on same stream.

356—Dept. Pub. Service, 207 South Bway., Los Angeles, Calif.—Wants license for power plant in Haiwee Narrows, 2 mi. below Haiwee Reservoir on Los Angeles Aqueduct, Inyo Co.

Miscellaneous

PROPOSED WORK

Grain Elevator—Baltimore, Md.—Baltimore & Ohio R.R. plans steel concrete elevator, 3,000,000 bu. capacity, Locust Point, to replace those destroyed by fire. H. A. Lane, ch. engr. J. S. Metcalf Co., 108 South LaSalle St., Chicago, archts.

Coaling Station, etc.—Richmond, Va.—Richmond Fredericksburg & Potomac R.R. Co., Broad St., plans coaling station and locomotive terminal in Acca yards. $900,000. Bids now on excavation. S. B. Rice, engr. M. W.

Stadium—Lincoln, Neb.—State having preliminary plans prepared by Davis & Wilson, archts., 575 Security Mutual Bldg., stadium, 40,000 seating capacity. $450,000. Noted May 4.

Electrification of Railways—Ontario—G. Lee, chn. Temiskaming & Northern Ontario Ry., North Bay, submitted report to Premier Drury, recommending electrification of 253 mi. main line and 40 mi. branch lines, incl. trolley line, transmission lines, bonding, substations, electric locomotives, and possible hydro electric generating stations. $9,000,000. S. B. Clement, North Bay, ch. engr.

Hydro Electric Development—Waneta, B. C.—See "Dam."

BIDS DESIRED

Heating and Ventilating Apparatus, etc.—Brooklyn, N. Y.—Nov. 16, by Superintendent Bd. Educ., 500 Park Ave., New York, heating, ventilating and temperature regulation apparatus in Thomas Jefferson High School, here. $125,000. C. B. J. Snyder, Concord St. and Flatbush Ave. extension, engr.

Asphaltic Wearing Surface Sand—New York, N. Y.—Nov. 15, by J. Miller, pres. Manhattan Boro, Municipal Bldg., furnishing and delivering 2,000 cu.yd. asphaltic wearing surface sand. $2,000.

Broken Trap Rock Stone, etc.—New York, N. Y.—Nov. 14, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., furnishing and delivering 4,000 cu.yd. broken trap rock stone and 2,000 cu.yd. broken trap rock stone screenings. Former bids rejected. Noted Nov. 2.

Cement, Fire Clay, etc.—Phila., Pa.—Nov. 13, by J. Armstrong, purch. agt., 10,000 bbl. portland cement in cotton sacks, $25,000; 200 bags fire clay, 25 bbl. high temperature cement, 3,000 fire clay bricks.

Underpasses, etc.—North Carolina—Nov. 21, by State Hy. Comn., Raleigh, grading 2 underpasses and building sub-structures under Southern R.R. at Gibsonville and Four Mile Siding, State Project 532, Guilford Co., 12,800 cu.yd. excav., 1,790 sq.yd. 2 in. asphaltic paving on 5 in. concrete, 1,160 cu.yd. concrete. $33,400. C. M. Upham, state highway engr. Noted Nov. 2.

Sprinkler System—Aberdeen, Wash.—Nov. 14, by Port of Grays Harbor, furnishing and installing automatic sprinkler system in Port Transit Shed. F. H. Lamb, pres.; adv. this issue.

Transmission Line — Spokane, Wash. — Jan. 1, by Washington Water Power Co., 825 Trenton St., having surveys made extending transmission line to connect with Okanogan, incl. 36 mi. 60,000 volt transmission line from Coulee City to Chelan Falls and 18 mi. 60,000 volt transmission line from Chelan Falls to Pateros. $100,000. A. Greisser, Spokane (street address not available) engr.

Fire Service Pipe and Valves—Toronto, Ont.—Nov. 14, by C. A. Maguire, mayor, high pressure fire service, 20 in. c.i. pipe, 12 and 20 in. stop valves, 20 in. check valves, five 24 in. stop valves and one 24 in. check valve. $30,000 to $40,000. R. C. Harris, city engr.

BIDS RECEIVED

Dock Wall, etc.—Buffalo, N. Y.—Commissioner Pub. Wks., Municipal Bldg., opened bids Nov. 2 (1) crib and concrete wall (2) low landing dock (3) rein.-con., bridged walk, from Great Lakes Dredge & Dock Co., Morgan Bldg., (1) $97,000 (2) $9,000 (3) $13,000; Cleveland Eng. Constr. Co., The Arcade, Cleveland, O., (1) $132,275 (2) $12,500; Empire Eng. Co., Inc., North Tonawanda (1) $135,468 (3) $10,257; G. Parks & Sons, Inc., 217 15th St., (2) $8,850. Noted Oct. 26.

Concrete Pipe—Delhi, Calif.—Division of Land Settlement, (State of California), laying 68 mi. of 8 to 18 in. concrete pipe, from T. Cogo, Fresno, (street address not available) $33,138; Merced Concrete Pipe Co., Merced, $37,748; J. Kristich, Knightsen, $39,625. Prices do not include construction of trenches. Noted Oct. 19.

CONTRACTS AWARDED

Coarse Aggregate—New York, N. Y.—J. Miller, pres. Manhattan Boro, Municipal Bldg., furnishing and delivering 1,000 cu.yd. coarse aggregate for concrete, to Rosoff Sand & Gravel Corp., 152 West 42nd St., $2,900. Noted Oct. 26.

Rip Rap—New York, N. Y.—Bd. Purch., Municipal Bldg., furnishing and delivering rip rap, to O'Brien Bros., 80 South St., $5,000. Noted Nov. 2.

Wire Mesh Fences—New York, N. Y.—Park Bd., Municipal Bldg., furnishing and erecting wire mesh fences around certain lawns in various city parks in Manhattan Boro, to Riverdale Constr. Co., 1440 Bway. $79,340. Noted Nov. 2.

Cranes—Apollo, Pa.—A. McCarthy, purch. agt. for Apollo Steel Co., Warren Ave., taking bids two 15 ton cranes.

Crane—Bridgeville, Pa.—Universal Steel Co. taking bids one 10 ton crane.

Cranes — Freedom, Pa. — W. C. Phelps, purch agt. for Pennsylvania R.R., Union Sta., Pittsburgh, taking bids two cranes for Conway shop, here.

Road Equipment—Illinois—Nov. 15, by Dept. Pub. Wks. and Buildings, Div. Purchases and Supplies, Springfield, for 27 portable heating kettles, 32 graders, etc. H. H. Kohn, supt.; adv. this issue.

Transmission Line—Dallas Tex.—Dallas Power & Light Co., Interurban Bldg., will build power line from Jackson St. substation to main plant on Griffin St., completing loop system, by day labor. $53,000. J. Oram, care Owner, engr.

Grandstand—Tanforan, Calif.—G. A. Applegarth, archt. Claus Spreckels Bldg., San Francisco, receiving bids steel frame and wood grandstand, 5,000 seats, here, for Pacific Coast Jockey Club, 1st Natl. Bank Bldg., San Francisco. H. Spreckels, secy. $80,000.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Nov. 15.

Installing Water Pipe

Albany, N. Y.

Sealed proposals for the installation of a water pipe for Sing Sing Prison, Ossining, N. Y., will be received by the undersigned at his office in the Capitol, Albany, N. Y., until twelve o'clock noon on Wednesday, November 15, 1922, when they will be publicly opened and read. Proposals shall be on the form furnished by the Superintendent of Prisons and shall be accompanied by a draft or certified check payable at sight to the Superintendent of Prisons for ten per centum (10 per cent) of the amount of the proposal. The Engineer's preliminary estimated cost of the work is $17,505.

Each proposal must be addressed to the Superintendent of Prisons, Capitol, Albany, N. Y., and on the outside of the envelope must be clearly and conspicuously written: "Sealed Proposal for Water Pipe Installation at Sing Sing."

The bidder whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds the certified check will be returned to the proposer unless the same has been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Prisons. The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Prisons which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work according to the contract price, and an additional bond, known as the Labor Bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price will be required as surety that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

Plans, sheets one and two, may be seen and detail specifications, engineer's estimate of quantities, proposal blanks, form of contract and form of bond required and other information for proposers may be had at the office of the Superintendent of Prisons, Capitol, Albany, N. Y.; at the offices of the State Engineer and Surveyor, Telephone Building, Albany, N. Y.; Barge Canal Terminal Building, Pier 6, East River, New York City; Barge Canal Terminal Building, Foot of Genesee Street, Buffalo, N. Y.; Weighlock Building, Syracuse, N. Y., and the Barge Canal Terminal Building, Canal Harbor, Rochester, N. Y.

Copies of detail plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of thirty cents (30c), to cover the cost of producing the blue prints.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Prisons of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract if in the judgment of the undersigned the interests of the State will be enhanced thereby.

CHAS. F. RATTIGAN,
Superintendent of Prisons.

Dated: October 26, 1922.

OFFICIAL PROPOSALS

Bids: Nov. 28.

Highway Bridges

Little Rock, Ark.

Sealed bids will be received until Ten A.M. of Tuesday, November 28th, 1922 at the offices of the Board of Commissioners of Pulaski Road Improvement District Number Ten, for the construction of four bridge structures on Section Three.

The approximate quantities are as follows:

Structural Steel	375,000 lbs.
Reinforcing Steel	96,000 lbs.
Concrete	1,050 Cu. Yds.

All proposals or bids must be accompanied by a certified check drawn on a responsible bank or trust company in the city of Little Rock.

Certified check must be made payable to H. S. Turner, Secretary of Pulaski Road Improvement District Number Ten, for a sum not less than five per cent of the aggregate amount of the proposal.

Specifications and additional information may be secured from the Engineer.

The successful bidder will be required to furnish satisfactory surety construction bond in a sum equaling the amounts of the contracts awarded him.

The right is reserved to reject any, or all, proposals submitted and to waive informalities.

ROY L. THOMPSON, Chairman.
H. S. TURNER, Secretary,
216 Gazette Building,
Little Rock, Ark.
D. A. MacCREA, Chief Engineer.

Bids: Nov. 21.

Lumber

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the following:

Furnishing of 487,400 feet B.M. of lumber for use on the Ocean City-Somers Point Bridge; delivery to be made f.o.b. cars at the railroad siding in Ocean City.

Bids will be received at the office of the State Highway Commission, Broad Street Bank Bldg., Trenton, New Jersey, on Tuesday, November 21st, 1922, at 11:00 a.m., and opened and read immediately thereafter.

Specifications for the lumber and conditions governing bids may be obtained upon application to Mr. A. W. Muir, Superintendent of Maintenance, State Highway Department, Broad Street Bank Bldg., Trenton, New Jersey. Bids must be made upon the standard proposal form in the manner designated therein and as required by the specifications and conditions governing bids, same to be enclosed in sealed special addressed envelopes which will be furnished with the proposal form bearing the name and address of the bidder and the name of the bridge on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000 and be delivered at the above place on or before the hour named.

The State Highway Commission reserves the right to reject any or all bids not in accordance with the conditions governing said bids.

By order of the State Highway Commission.

A. LEE GROVER, Chief Clerk.

OFFICIAL PROPOSALS

Bids: Nov. 21.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m., on Tuesday, November 21, 1922, for the improvement of highways in the following counties:

CHAUTAUQUA ......(one highway: 4.25)
COLUMBIA.........(one highway: 4.27)
NASSAU.............(one highway: 0.24)
ORANGE............(one highway: 1.90)
SARATOGA..........(one highway: 1.33)
SUFFOLK...........(one highway: 0.24)
OTSEGO.............(one highway: 7.2[illegible])
WAYNE.............(one highway: 2.24)

Also for the reconstruction of the following:

MONTGOMERY......(two contracts: 1.50 & 2.50)
ONONDAGA.........(one contract: 2.04)
ORANGE.....(two contracts: 1.43 & 1.74)
TOMPKINS..........(one contract: 1.99)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.

J. C. FINCH,
Secretary.

Bids: Nov. 20.

Cast Iron Water Pipe

Springfield, Mass.

Sealed proposals will be received by the Board of Water Commissioners of Springfield, Mass., at its office in the Municipal Building, on or before 11 a.m., Monday, November 20, 1922, for the furnishing of cast iron water pipe and special castings.

The proposal shall state price per ton of 2,000 lbs., F.o.b. Armory Station, Springfield, Mass., for each size of pipe and each size and kind of special casting, in accordance with the following schedule.

200 lengths Class E 6″ cast iron pipe
2,000 " " E 8″ " " "
250 " " E 10″ " " "
100 " " E 12″ " " "
10 8″ Crosses, B. B., Class H
5 10″ x 8″ Crosses, B. B., Class H
6 6″ x 4″ Reducers, Class H., B. & S.
50 6″ Sleeves, Class H
50 8″ Sleeves, Class H
10 10″ Sleeves, Class H
15 8″ Tees, B. B., Class H
10 10″ x 8″ Tees, B. B., Class H
1 12″ Y, B. & S., Class H

All pipe and special castings to be manufactured in accordance with N. E. W. W. A. specifications.

Proposal shall be in a sealed envelope marked "Proposal for Cast Iron Pipe." It shall also contain a statement as to the dates and rate of delivery for the pipe and special castings.

The right is reserved to eliminate any size from the proposal or to accept the proposal for any sizes without the acceptance of the entire bid. The right is also reserved to reject any or all bids or to accept any bid or any portion of any bid which it may be deemed to the interest of the City of Springfield so to do.

H. M. KING, Superintendent,
Springfield, Mass.
October 27, 1922.

OFFICIAL PROPOSALS

Bids: Nov. 21.

Road Grading

Newton, N. J.

Notice is hereby given that sealed bids will be received by The County of Sussex for grading of Fredon Stillwater Road in the Township of Fredon and the County of Sussex. Estimated amount of excavation required is 34,865 cu.yd. and opened and read in public at the Freeholders Office, Newton, N. J., on November 21, 1922, at 11:30 a.m.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Harvey Snook, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at Newton, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and addres of bidder and name of road on the outside, addressed to The County of Sussex, Newton, N. J., and must be accompanied by a Surety Company Certificate and a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to Engineer.

By order of The County of Sussex.
(Signed) WILLIAM S. VOUGHT, Clerk.

Bids: Dec. 11.

Labor-Material Percentage Contract

New Orleans, La.

Sealed proposals will be received at the Sewerage and Water Board, Room 401, No. 526 Carondelet Street, New Orleans, La., up to 12 o'clock noon of Monday, December 11th, 1922, on Labor-Material Percentage Contract for year 1923.

Specifications and blank forms of proposal may be obtained at the office of the Board.

The right is reserved to reject any or all bids.

October 12th, 1922.

A. G. MOFFAT,
Secretary.

GEO. G. EARL,
General Superintendent.

Bids: Nov. 29.

Filtration Plant and Reservoir

San Juan, Porto Rico.

Sealed proposals for the furnishing of all labor and material for the construction of a 8,000,000 gals. filtration plant and a 10,500,000 gals. filtered water concrete reservoir for the City of San Juan will be received in the office of the Commissioner of Public Service until November 29, 1922, at 10 A.M.

All plans, specifications, instruction to bidders, blanks, forms for proposals and all other information may be obtained at the office of the City Commissioner of Public Works at San Juan, Porto Rico.

The right is reserved to reject any and all bids.

MARTIN TRAVIESO,
Commissioner of Public Service.

Bids: Nov. 14.

Automatic Sprinkler System

Aberdeen, Wash.

The Port of Grays Harbor, Aberdeen, Wash., will receive bids until 10 o'clock A.M., Tuesday, November 14th, 1922, for furnishing and installing an automatic sprinkler system in the Port Transit Shed. Approximately 366 heads required.

Further information on application.

FRANK H. LAMB, President,
J. A. VANCE, Secretary.

The more I see of the way some contractors allow their Contract Bond and Compensation Insurance to be manhandled the more I realize that Barnum was right.

SWART
92 William St., New York

OFFICIAL PROPOSALS

Bids: Nov. 15.

Concrete and Steel Bridges

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the following:

Construction of concrete and steel bridge of two 45′0″ spans and 30′0″ roadway at M.P. 23.8 over North Branch of Raritan River, Route No. 16, in the Municipalities of Bridgewater and Bedminister, County of Somerset.

Bids for the above will be received at the office of the State Highway Commission, Broad St. Bank Bldg., Trenton, N. J., on November 15, 1922, at 11:00 A.M., and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond form for the proposed work are on file in the office of Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J., and may be inspected by prospective bidders. Plans will be furnished on deposit of ten ($10.00) Dollars, for doing this work upon application to Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J. Bids must be made on the standard proposal form in the manner designated therein and as required by the specifications for this work; same to be enclosed in sealed special addressed envelopes, bearing the name and address of bidder and the work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the State Treasurer for not less than ten (10%) per cent of the amount of the bid, provided the said certified check shall not be less than $500.00 nor more than $20,000 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelope will be furnished on application to Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a Surety Company duly authorized to do business in this State, stating that such Surety Company will provide said bidder with a bond in such sum as is required in and in accordance with the specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER, Chief Clerk.

Bids: Nov. 27.

Hard Surfaced Road Project

Washington, N. C.

Sealed proposals will be received by the Beaufort County Road Commission at its office in Washington, N. C. until 2 p.m. November 27th, 1922 for the Construction of two sections of road on the Chocowinity-Aurora Road. One section starting at Chocowinity and extending 4.8 miles towards Aurora; one section at Edwards beisg 2 miles in length.

Bids are desired on asphalt and concrete paving 18 feet wide. The total estimated approximate quantities are; 71,800 sq.yds. of sheet asphalt, asphalt concrete or concrete paving.

452 sq.yds. gravel or water bound macadam paving 34,895 cu.yds. excavation.

3 culverts, containing 54 cu.yds. concrete and 4250 lbs. steel.

2 bridges, containing 706 cu.yds. concrete; 69,240 lbs. steel & 3200 feet of piling.

210 ft. 18 in. pipe.
30 ft. 30 in. pipe.
150 ft. 15 in. pipe.

Proposals must be marked "Proposal for Chocowinity-Aurora Road."

All bids must be upon blank forms provided in the Proposal, Contract and Specifications.

Each bid must be accompanied by a certified check for $10,000, or satisfactory Bidder's Bond as evidence of good faith. Bidders bidding on any part of the work separately must accompany their bid by a certified check or satisfactory bidder's bond for an amount equal to 5% of the amount of their bid.

Plans and specifications will be on file at the office of the Commission, in Washington, N. C. and copies of the plans, specifications, form of proposal, etc. will be mailed upon the applicant making a deposit of $5.00 one half of which will be returned upon the return of the plans in good condition as stated in the specifications.

The right is reserved to reject any or all bids.

F. C. Kugler, Chairman,
J. D. BULLUCK, Secretary.
H. W. RANKIN, Engineer.

OFFICIAL PROPOSALS

Bids: Nov. 23.

Bridge and Road Work

Richmond, Va.

Bids will be received at the Office of the Virginia State Highway Commission, Corner 10th & Marshall Streets, Richmond, Va., until 12 o'clock noon, Thursday, November 23rd, for the construction of:

1.—PROJECT S-102, Route 8, Repairs to Bridge over Piscataway Creek, in Essex County, involving approximately 2,640 Lin. Ft. Piles, 16,000 Ft. Lumber.

2.—PROJECT S-216, Route 7Y, from Washington's Old Home, to the intersection with Route 7, 1.74 miles of 20′ Gravel roadway involving approximately 7.49 acres clearing and grubbing; 6,621 Cu.Yds. Unclassified excavation; 328 Lin.Ft. Pipe; 21.56 Cu.Yds. Class "B" Concrete.

3.—PROJECT S-185, Route 7, from Wilderness to Lignum, 8.44 miles of soil roadway, involving approximately 38,100 Cu.Yds. unclassified excavation; 556 Lin.Ft. Pipe; 111 Cu.Yds. Class "B" Concrete; 185 Cu.Yds. Class "A" Concrete; 14,500 Lbs. reinforcing steel; 2,100 Lin.Ft. Standard wooden Guard rail.

4.—PROJECTS S-215 A & B, Route 13—(A) Bridge over Appomatox River in Prince Edward County. Length: 292′ 10″. Roadway 19 Ft. involving approximately 282.6 Cu.Yds. Class "A" Concrete; 475 Cu.Yds. Cement Rubble masonry; 41,700 Lbs. reinforcing steel; 112,000 Lbs. structural steel. (B) APPROACHES to Bridge, involving approximately 33,178 Cu.Yds. borrow excavation, 3,614.4 Sq.Yds. of 7″ x 18′ concrete roadway; 2,256 Lin.Ft. wooden guard rail.

5.—PROJECT F-76A, Route 10—(A) Bridge over Buffalo Creek in Prince Edward County. Length 228 feet. 19 ft. roadway, involving approximately 376.3 Cu. Yds. Class "A" Concrete; 63,760 Lbs. reinforcing steel; 1,280 Lin.Ft. Piles. (B) APPROACHES to bridge, involving approximately 8,500 Cu.Yds. of borrow excavation.

6.—PROJECT F-160A, Route 5, Franklin to Carrsville in Nansemond and Isle of Wight Counties, 5.5 miles, 18 feet, 6″-8″-6″ deep, concrete roadway, involving approximately 7.0 acres clearing and grubbing; 19,765 Cu.Yds. unclassified excavation; 25,900 Cu.Yds. borrow excavation; 135 Cu.Yds. Class "B" Concrete; 102 Cu.Yds. Class "A" Concrete; 768 Lin.Ft. standard wooden guard rail.

A certified check or bidders bond must accompany each bid. Amount of certified checks, as follows: Project S-216, $650.00; Project S-185, $3,000.00; Project S-102, $250.00; Project S-215, Bridge and approaches, $2,500.00; Project F-76A, $750.00; Project F-160A; $5,000.00. Amount of bidders bond 20% in excess of certified checks.

Plans and specifications are on file at the office of the Virginia State Highway Commission, Corner 10th & Marshall Streets, Richmond, and at the offices of the following District Engineers: Projects S-216 and S-102, Fredericksburg, Va.; S-215, Lynchburg; F-76A, Richmond; S-185, Manassas; F-160A, Suffolk. Additional plans for bidders for the above projects can be obtained upon application to the State Highway Commissioner, upon receipt of $5.00, payable to the Assistant Commissioner, $2.50 of which will be refunded when plans are returned in good condition within two weeks after bids are opened. Plans for the bridges can be secured from W. F. Hobart, 805½ E. Franklin St., Richmond, upon payment of 36c. each. Specifications and bidding proposals may be obtained by request from the Office of the State Highway Commissioner.

Engineers will be at the following places to show prospective bidders over the Projects:

Project S-216—Monday, November 13th, Office of the District Engineer, Fredericksburg, Va., at 10 a.m.

Project S-185—10 A.M. Tuesday, November 14th, at Hotel Waverly, Culpeper, Va.

Projects S-215 and F-76A — 10 A.M. Thursday, November 16th, at Prince Edward Hotel, Farmville, Va.

Project F-160A—8 A.M. at Office of District Engineer, at Suffolk, Va.

Project S-102—1 P.M. Friday, November 10th, at the Monumental Hotel, Tappahannock, Va.

The State Highway Commission reserves the right to reject any or all bids.

STATE HIGHWAY COMMISSION
H. G. SHIRLEY,
Chairman.

G. P. COLEMAN,
Commissioner.
November 3, 1922.

OFFICIAL PROPOSALS

Bids: Nov. 28.

Draw Bridge

Cambridge, Mass.

Sealed proposals will be received at this office until 12 o'clock noon of Tuesday, Nov. 28, 1922, for furnishing and erecting a single leaf movable draw span for the First Street Bridge over Broad Canal in Cambridge, Mass.

The draw span will be of trunnion bascule type, according to plans of the Strauss Bascule Bridge Company, and will be about 51½ ft. long and about 54 ft. wide with two main plate girders, overhead counterweight and electric motors and operating machinery complete.

The draw bridge will be erected on foundation now being constructed under another contract.

Plans and specifications may be examined after Wednesday, Nov. 15, 1922, and any further information may be obtained at the office of the City Engineer. Copies of the plans and specifications may be obtained of the City Engineer by the payment of ten ($10.00) dollars, which will be repaid to any one returning the plans and specifications in good order to the office of the City Engineer, Cambridge, Mass.

All bids must be upon the form furnished and must state price both in writing and in figures, and must be signed by the bidder with full name and address. Each bid is to be accompanied by a properly certified check for five hundred ($500.00) dollars, payable to the city of Cambridge, said check to be returned to the bidder, unless forfeited as specified below.

A satisfactory bond will be required for the faithful performance of the contract. The person or persons to whom the contract may be awarded will be required to appear at the office of the City Engineer with the sureties offered by him or them and execute the contract within four days (not including Sunday) from the date of notification of such award, and the preparation and readiness for signature of the contract; and in case of failure or neglect to do so, he or they will be considered as having abandoned it, and the check accompanying the proposal shall be forfeited to the city of Cambridge. The City Engineer reserves the right to reject any and all bids in accordance with and as provided by the City Ordinances. It is understood that the parties in presenting their proposals thereby agree that the same are offered subject to the terms, conditions and limitations hereinbefore specified.

Proposals to be addressed to the City Engineer and endorsed "Proposal for furnishing and erecting movable draw span of the First Street Bridge over Broad Canal, Cambridge, Mass.

L. M. HASTINGS,
City Engineer.
Cambridge, Mass., November 6, 1922.

Bids: Dec. 1.

Cast Iron Pipe

CONTRACT 17,
BALDWIN FAIRMONT PROJECT

Cleveland, Ohio.

Sealed proposals will be received at the Office of Commissioner of Purchases and Supplies, Room 219, City Hall, until 12 o'clock noon, official Cleveland time, December 1, 1922, for furnishing and laying about 2,700 tons of 48-inch and 36-inch cast-iron pipe and other miscellaneous work for the Division of Water, and will be opened and read in the Council Chamber immediately thereafter.

Each bid must be accompanied by a certified check on a solvent bank for two thousand five hundred dollars ($2,500) drawn, payable to the City of Cleveland as surety for the acceptance of the contract. Each bid must be made in accordance with the plans and specifications which may be obtained at the Division of Water, Drafting Room 213, City Hall, upon the deposit of five dollars ($5.00) per set. Said deposit to be redeemed upon the return of said copies in good condition. No proposal will be entertained unless made on blank forms furnished by the Division of Water and delivered at the Office of the Commissioner of Purchases and Supplies previous to 12 o'clock noon on the day above specified.

The city reserves the right to reject any or all bids.

CLEVELAND WATER DEPT.
A. V. RUGGLES,
Commissioner of Water.

OFFICIAL PROPOSALS

Bids: Dec. 1.

Cast Iron Pipe and Castings

San Juan, Porto Rico.

Sealed proposals for the furnishing of about 20,020 tons of cast iron pipe and of 250 tons of special castings, or its equivalent in steel pipe and specials, delivered at San Juan, Porto Rico, for the City of San Juan, will be received in the office of the Commissioner of Public Service until December 1, 1922, at 10 a.m.

All plans, specifications, instruction to bidders, blanks, forms for proposals and all other information may be obtained at the office of the City Commissioner of Public Works at San Juan, Porto Rico.

The right is reserved to reject any and all bids.

MARTIN TRAVIESO,
Commissioner of Public Service.

Bids: Nov. 11.

Road Work Equipment

Springfield, Ill.

Sealed proposals for the following machinery for the State of Illinois Department of Public Works and Buildings, Division of Purchases and Supplies, Division of Highways, will be received by the undersigned until ten o'clock a.m. November 15, 1922:

Twenty-seven Portable Heating Kettles.
Thirty-two Graders.
Forty-four Road Drags.

Full information will be furnished upon application to the undersigned.

The right is reserved to reject any and all bids.

Department of Public Works and Buildings. C. R. MILLER, Director.
Division of Purchases and Supplies.
H. H. KOHN, Superintendent.
November 1st, 1922.

OFFICIAL PROPOSALS

Bids: Nov. 21.

Storm Water Culvert

New Smyrna, Fla.

Sealed bids will be received by the City Commission of New Smyrna, Florida, at 11 o'clock, Tuesday, the 21st day of November, 1922, at the office of the City Manager at the City Hall, for the construction of a flume or storm water culvert, to be located along the north side of Canal Street where the present open canal is located between Myrtle Street and the river just east of Hillsborough Street.

The length of the structure to be constructed is approximately 3,000 ft. and 9 ft. wide, and the principal items of work are as follows:

2,500 sq.yds. reinforced concrete slabs.
1,400 cu.yds. concrete walls.

An alternate design provides for a circular storm water culvert 7 feet in diameter to be built of plain concrete.

Plans and specifications will be on file at the office of the City Manager at the City Hall in New Smyrna on or after noon the 14th day of November, 1922.

Cash or certified check for $2,500.00 made payable to the city of New Smyrna, Florida, must accompany each bid as evidence of good faith and as a guarantee that if awarded the contract, the bidder will execute the contract and give bond as required.

Each bidder will be required to furnish with his bid a letter from a surety company, licensed to do business in Florida, stating that the surety company will furnish the bond required in case the bidder is successful in securing the contract. Bond will be required in the sum of 25 per cent. of the total estimate of cost.

The right is reserved to reject any or all bids. P. P. PILCHER, City Manager.

Sealed Bids will be Received by the

BOARD OF ESTIMATE AND APPORTIONMENT
CITY OF NEW YORK

at its meeting room in the Council Chamber, Room 16, City Hall, Borough of Manhattan, until 12 o'clock noon on

FRIDAY, NOVEMBER 24, 1922

For the Construction of the Shore Road Shaft in the Borough of Brooklyn for a Freight and Passenger Railroad Tunnel to be Built in the Boroughs of Brooklyn and Richmond and Under New York Bay, New York City.

A statement of the quantities of the various items of work and further information are given in the invitation to bid forming part of the contract. At the above place and time the bids will be publicly opened and read. The award of the contract, if awarded, will be made by the Board as soon thereafter as practicable. The Board reserves the right to reject any and all bids.

A bond in the sum of two hundred thousand dollars ($200,000) will be required for the faithful performance of the contract.

No bid will be received or considered unless accompanied by a certified check upon a National or State bank, or trust company of The City of New York, or a check of such bank or trust company signed by a duly authorized officer thereof, drawn to the order of the Comptroller of The City of New York to the amount of ten thousand dollars ($10,000).

The time allowed for the completion of the work is ten months after notification of the endorsement of the Comptroller's certificate as to the appropriation of funds upon the executed contract.

Pamphlets containing invitation to bid, form of bid, contract and specifications, plans, etc., can be obtained at the office of the Chief Engineer of the Board of Estimate and Apportionment, Room 2700, Municipal Building, Manhattan, for the sum of $5.00 per set which will be refunded upon their return in good condition within thirty (30) days.

For further particulars apply to the office of the Chief Engineer at the above address.

BOARD OF ESTIMATE AND APPORTIONMENT,
JOHN F. HYLAN, Mayor, *Chairman.*

OFFICIAL PROPOSALS

Bids: Nov. 29.

Delaware River Bridge Main Towers

Contract No. 6

Philadelphia, Pa.

Sealed proposals for the construction of the two Main Towers of the bridge over the Delaware River connecting the City of Philadelphia, Pa., and the City of Camden, N. J., will be received by the Delaware River Bridge Joint Commission at Room 806, Widener Building, Philadelphia, Pa., until 3:00 o'clock P.M. Eastern Standard Time, November 29, 1922, when they will be publicly opened and read. The contract will be awarded, or all bids rejected, within fourteen days after the bids are opened. The right is reserved to reject any or all bids.

The two piers on which the towers are to be erected are located in the Delaware River near the pier head lines on the Pennsylvania and New Jersey sides of the river at points approximately opposite to Race Street in Philadelphia and Pearl Street in Camden. The work will include the furnishing, fabricating, painting and erecting of the two steel towers complete, with top saddle castings, as shown in the contract drawings, ready to receive the cables. The work comprises approximately 9,500 tons of steelwork, and must be completed within a period of fifteen months.

Bids must be made upon the blank proposal form, which, together with specifications, bond and contract form, and contract drawings, may be obtained after November 8, 1922, at the office of the Joint Commission upon deposit of $25, which deposit will be refunded upon the receipt of bid or upon their return in good condition.

Each proposal must be accompanied by a certified check for seventy-five thousand dollars, drawn upon a national or state bank or trust company having an office either in Philadelphia or Camden, and payable to the Delaware River Bridge Joint Commission, and sureties' consent must be shown. The bidder or bidders to whom the concract is awarded will be required to give bond in the sum of fifty per cent of the amount of the concract.

WILLIAM C. SPROUL, Chairman,
JOSEPH K. COSTELLO, Secretary,
DELAWARE RIVER BRIDGE JOINT COMMISSION

Bids: Nov. 27.

12,000,000 Gallons Pumping Engine

Norfolk, Va.

Sealed proposals will be received at the Office of the Director of Public Works, City of Norfolk, Virginia, until 12:00 o'clock noon on the 27th day of November, 1922, for one 12,000,000 Horizontal, Cross Compound, Crank and Fly Wheel, Condensing Pumping Engine of the double opposed type.

Instructions to Bidders, Form of Proposal, Specifications, Contract and Form of Bond may be inspected, at the Office of the Director of Public Works, Norfolk, Virginia, or at the Office of the Consulting Engineer, Dabney H. Maury, 1445 Monadnock Block, Chicago, Ill., and a complete set of all of the above papers may be obtained by intending bidders either from the Director of Public Works or from the Consulting Engineer, upon application accompanied by a check or Postal Order for Fifteen ($15.00) dollars, payable to B. Gray Tunstall, City Treasurer, which amount will be refunded to the party depositing it on the return of all the foregoing papers in good order.

A certified check on an approved bank either in the City of Norfolk, or in the City of New York, or in the City of Chicago, in the sum of $500.00, and payable to B. Gray Tunstall, City Treasurer, must accompany each bid, subject to the conditions expressed in the Instructions to Bidders and Form of Proposal.

The City of Norfolk reserves the right to reject any or all bids.

WALTER H. TAYLOR, 3rd.
Director of Public Works.

TO SUB-LET

Excavation, Earth and Rock, Grading, etc.

About 85,000 Yards.
New York Highway Contract.
Work to be started immediately.
M-237, Eng. News-Record
10th Ave. at 36th St., New York City.

OFFICIAL PROPOSALS

Bids: Nov. 24.

High School

Yonkers, N. Y.

The Board of Education will receive proposals for the erection of the Charles E. Gorton High School, on Palisade Avenue and Shonnard Place, Yonkers, New York, (excepting Heating, Plumbing and Electrical work).

Plans and specifications will be ready for inspection in the office of the Board of Education in the High School Building, November 3rd. A deposit of $15 for each set taken from the office will be required. Plans may be taken by general contractors only.

Proposals must be made on blank forms which will be furnished at the office of the Board.

The building must be complete in every respect and ready for occupancy December 1st, 1923.

Inasmuch as the work specified is to be devoted to public use, time is of the essence of the contract, and for failure of the contractor to fully complete the same on or before the time specified, the sum of Twenty-five Dollars a day will be deducted from the contract price, as liquidated damages, for each day that shall elapse until the final completion of the contract.

Each proposal must be accompanied by a certified check, payable to the Board of Education for five per cent of the amount of such proposal, which will be retained by the Board until a satisfactory bond is filed and the contract executed. All other checks will be returned to the bidders as soon as the proposals are opened, and the result of the competition declared.

The bidder to whom the contract may be awarded will be required to furnish a security bond for one-quarter of the contract price named in his bid, and a liability policy from companies approved by the Board. Each proposal must be inclosed in a securely sealed envelope, endorsed with the name of the bidder and the work for which the proposal is made, and must be delivered to the Secretary of the Board on or before 5:00 o'clock p.m., Friday, November 24th, 1922.

The Board reserves the right to reject any and all proposals.

EDWARD A. FITCH,
Chairman.
ROSCOE S. CONKLING.
JOHN W. BURKE.
Committee on Architecture and Construction

U. S. GOVERNMENT

PROPOSAL FOR STEEL BARGE—U. S. Engineer Office, Montgomery, Ala. Sealed proposals will be received here until 11 a.m., Dec. 1st, 1922, and then opened, for one 80 ft. x 26 ft. x 5 ft. steel barge. Further information on application.

U. S. ENGINEER OFFICE, HUNTINGTON, W. VA., October 20, 1922. Sealed proposals will be received here until 11 a.m. (Eastern time), November 20, 1922, and then opened, for furnishing and delivering horses and props for Ohio River Dam No. 32. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., Nov. 23, 1922, for constructing about 380,000 cubic yards of earthwork in the Kings Lake Drainage District, Mo. Further information on application.

U. S. ENGINEER OFFICE, Charleston, S. C.—Sealed proposals will be received here until noon, November 25, 1922, and then opened, for dredging western channel and Sampit River, Winyah Bay, S. C. Further information on application.

PROPOSALS FOR 20 OFFICERS' QUARTERS.—Office of the Constructing Quartermaster, Edgewood Arsenal, Md. Sealed proposals will be received in this office until 11:00 a.m., November 15, 1922, and then opened, for the construction of twenty sets of officers' quarters, at Edgewood Arsenal, Md. Plans and specifications may be obtained at this office, upon the deposit of $10.00, which will be refunded upon the return of same in good condition. The right is reserved to accept any or to reject all bids for this project.

U. S. GOVERNMENT

UNITED STATES ENGINEER OFFICE, NORFOLK, VA. Sealed proposals will be received here until 12 M, December 4, 1922, and then opened, for constructing two power houses, with wells, fuel tanks, railroad tracks, etc., Fort Story, Cape Henry, Va. Further information on application.

U. S. ENGINEER OFFICE, PITTSBURGH, PA. Sealed proposals for constructing and delivering one steel dipper dredge hull afloat at Pittsburgh, Pa., will be received at this office until 12 noon (Eastern time), December 1, 1922, and then opened. Information on application.

SEALED PROPOSALS will be received and publicly opened by the Director of the U. S. Veterans Bureau in the office of the Quartermaster General, 2306 Munitions Building, Washington, D. C., at 11:00 A.M., November 14, 1922, for the construction of a 400 bed neuro-psychiatric hospital at Camp Sherman, Chillicothe, Ohio. Work will include construction of twenty-two buildings, built of reinforced concrete and brick, complete with water, lighting, heating and sewer systems, roads and walks. Plans and specifications may be obtained after October 14, upon deposit of $100, from the Quartermaster General, 2312 Munitions Building, Washington, D. C., or from the Constructing Quartermaster, Chillicothe, Ohio. One set of plans and specifications will be on exhibition at each of the following stations: Constructing Quartermaster, 39 Whitehall Street, New York City, Constructing Quartermaster, Scott Field, Belleville, Illinois; Quartermaster Supply Officer, Chicago General Intermediate Depot, 1819 West Pershing Road, Chicago, Illinois.

U. S. ENGINEER OFFICE, PITTSBURGH, PA. Sealed proposals will be received here until 12 noon (Eastern time), November 25, 1922, and then opened, for furnishing and delivering three steel deck barges. Further information on application.

U. S. ENGINEER OFFICE, MILWAUKEE, WIS., Oct. 25, 1922. Sealed proposals will be received here until 2 p.m., Nov. 27, 1922, and then opened, for the construction of one dipper dredge hull and house. Further information on application.

PROPOSALS FOR BOILERS.—Office, Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Dec. 2, 1922, and then opened, for furnishing boilers for hydraulic grader No. H.G. 2-1-1-2-23. Further information on application.

PROPOSALS FOR STEEL BARGES.—Office, Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Dec. 2, 1922, and then opened, for furnishing six steel barges. Further information on application.

PROPOSALS FOR MACHINERY FOR HYDRAULIC GRADER.—Office, Mississippi iver Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn.—Sealed proposals will be received here until 11 a.m., Dec. 2, 1922, and then opened, for furnishing turbines, pumps, feed-water heater, boiler-feed pumps, and electric-light plant. Further information on application.

PROPOSALS FOR LEVEE WORK. — Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., Nov. 23, 1922, for constructing about 170,000 cubic yards of earthwork by the hydraulic method in Sub-District No. 1 of Drainage Union District No. 1, Ill. Further information on application.

U. S. ENGINEER OFFICE, JACKSONVILLE, FLA.—Sealed proposals will be received here until 12 m., Nov. 27, 1922, and then opened, for dredging in Key West Harbor, Fla. Further information on application.

U. S. ENGINEER OFFICE, PITTSBURGH, PA. Sealed proposals will be received here until 12 noon (Eastern time) November 20, 1922, and then opened, for furnishing and delivering one steel derrick boat hull. Further information on application.

SEARCHLIGHT SECTION

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Positions Wanted, 4 cents a word, minimum charge 75 cents an insertion.
Positions Vacant and all other classifications, 8 cents a word, minimum $2.

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E. N. R.

POSITIONS VACANT

ASSISTANT general manager for New York building construction company. Salary $4,000 to $6,000, knowledge of estimating, purchasing and experience on high class New York work essential. P-187, Eng. News-Record, 10th Ave. at 36th St., New York.

BOSS Carpenter, and also capable foreman with coffer dam experience for hydro-electric work in South America; both must speak Spanish. P-193, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

CHIEF of Survey Party wanted, experienced on highway location in mountainous country. Technical training preferred, but not required if of long experience. Initial salary $175.00 per month, and field expenses, with excellent opportunities for advancement. In reply state education, experience, and earliest date reporting for duty. State, Box 518, Keyser, W. Va.

COST engineer—The construction department of a large public utility in eastern Pennsylvania has an opening for an experienced cost engineer who is thoroughly experienced in transmission line and power plant construction costs, and who is capable of taking charge of cost keeping and analysis work on large operations. Send record of experience, education, age, salary required, references and small photo with first letter. P-229, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

Structural Detailers and Checkers

with experience
on shop drawings
for
Steel Fabrication

Bethlehem Steel Co.
Bridge and Fabrication Dept.
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Construction Men

Learn "Line" and "Grade" by Actual Practice.

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39 West 17th St., New York City

POSITIONS VACANT

DRAFTSMEN, civil, structural, mechanical and electrical for cement plant design and detailing. Location Eastern Pennsylvania. State fully nationality, education, experience, salary expected and when available. P-164, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

DRAFTSMAN, experienced, wanted for structural steel buildings; apply by mail only, giving age, nationality, education, experience and salary expected. Post & McCord, 101 Park Ave., New York.

DRAFTSMEN, detailers and checkers on shop detailing for structural steel. Morava Construction Co., 85th and Stewart Ave., Chicago, Ill.

DRAFTSMEN wanted at once. Several structural steel detailers. Men experienced in shop detail drawings for office and apartment house work only need apply. Hedden Iron Construction Co., Hillside, N. J.

EXPERIENCED estimator wanted for structural steel fabricating shop located in the Middle West. P-235, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

POSITIONS VACANT

ENGINEERING graduate wanted, experienced in design of reinforced concrete buildings, with good knowledge of general building construction, for office work with manufacturer. State age, experience, references and lowest salary in application. Position requires permanent residence Youngstown. Address General Fireproofing Co., Youngstown, Ohio.

ESTIMATOR for building construction general contractors. Experience on high class New York work essential. Salary $3,000 to $4,000. P-188, Eng. News-Record, 10th Ave. at 36th St., New York.

EXPERIENCE bridge foremen wanted for erecting steel highway bridges. State age, experience and give references. P-180, Old Colony Bldg, Chicago, Ill.

EXPERIENCED reinforced concrete carpenter foreman wanted for a hydro-electric power station job, 104 miles from New York. Good accommodations, etc. None but experienced men need apply. P-218, Eng. News-Record, 10th Ave. at 36th St., New York.

WANTED

Designers and Draftsmen

Steel and Reinforced Concrete Draftsmen, experienced in the design of steam power stations, are offered steady employment and exceptional opportunity for advancement.

State age, education, experience, date available and salary expected in first letter and address: "Engineering Department."

STONE & WEBSTER, Inc., 147 Milk St., Boston, Mass.

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(BY MAIL)

Intensive Training for Young Engineers

Reinforced Concrete Engineering
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Wilson Courses provide the practice that every young engineer so badly needs after he leaves college. They duplicate actual designing just as it is done in first-class structural designing offices. They are **actual experience** work, meant to round out your education. Only high-grade men are enrolled for this work.

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10 Broadway, Hanover, Mass.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Nov. 20	Springfield, Mass.	Nov. 2
Nov. 20	Phillipsburg, Kan.	Nov. 9
Nov. 23	Auburn, Ind.	Nov. 9
Nov. 24	Memphis, Tenn.	Oct. 26
Nov. 24	Akron, O.	Nov. 16
Nov. 27	Norfolk, Va. Adv. Nov. 9 and 16.	Nov. 9
Nov. 27	Kings Mountain, N. C Adv. Nov. 16.	Nov. 16
Nov. 29	San Juan, Porto Rico Adv. Oct. 12 to Nov. 16.	Oct. 19
Nov. 29	Bay St. Louis, Miss.	Nov. 2
Nov. 29	Phila., Pa.	Nov. 16
Dec. 1	San Juan, Porto Rico Adv. Oct. 19 to Nov. 16.	Oct. 19
Dec. 1	Cleveland, O.	Nov. 16
Dec. 1	Dillon, S. C.	Nov. 16
Dec. 12	Wheeling, W. Va Adv. Nov. 16.	Nov. 16
Feb. 1	Spokane, Wash.	Nov. 16

SEWERS

Nov. 20	Phila., Pa.	Nov. 16
Nov. 22	Baltimore, Md.	Nov. 16
Nov. 22	Syracuse, Kan.	Nov. 16
Nov. 24	Akron, O.	Nov. 16
Dec. 7	Athol, Mass. Adv. Nov. 16.	Nov. 16
Dec. 11	New Orleans, La. Adv. Oct. 12 to Nov. 16.	Oct. 12

WASTE DISPOSAL

Dec. 15	Allentown, Pa.	Nov. 16

BRIDGES

Nov. 20	Los Angeles, Calif.	Nov. 9
Nov. 20	Pittsburgh, Pa.	Nov. 2
Nov. 22	Ashland, Md.	Nov. 16
Nov. 23	Virginia	Nov. 9
Nov. 28	Little Rock, Ark.	Nov. 9
Nov. 28	Minnesota	Nov. 16
Nov. 28	Cambridge, Mass.	Nov. 16
Nov. 29	Phila., Pa. Adv. Nov. 2 to 16.	Nov. 2
Nov. 29	Georgia	Nov. 16
Dec. 5	Cape May, N. J. Adv. Nov. 16.	Nov. 16
Dec. 5	Alabama	Nov. 16
Dec. 6	Freehold, N. J. Adv. Nov. 16.	Nov. 16
Dec. 8	Seattle, Wash. Adv. Nov. 16.	Nov. 16
Dec. 9	Yankton, S. D.	Nov. 9
Dec. 12	Brunswick, Ga.	Nov. 9
Dec. 12	Alabama	Nov. 16
Jan. 23	Spokane, Wash.	Sept. 21
Sept. 1, 1923	Sydney, New South Wales, Australia	Aug. 3

DAMS

Nov. 25	Bluefield, W. Va. Adv. Nov. 16.	Nov. 16

EXCAVATION, DRAINAGE, IRRIGATION

Nov. 27	Maricopa, Ariz.	Nov. 16

STREETS AND ROADS

Bids Close		See Eng. News-Record
Nov. 20	Goderich, Ont.	Oct. 19
Nov. 20	Utah	Nov. 16
Nov. 20	Winnsboro, S. C.	Nov. 16
Nov. 21	Pascagoula, Miss.	Oct. 26
Nov. 21	Newton, N. J. Adv. Nov. 2 to 16.	Nov. 2
Nov. 21	New York Adv. Nov. 9 and 16.	Nov. 9
Nov. 21	Edinburg, Tex.	Nov. 9
Nov. 21	Ft. Lauderdale, Fla.	Nov. 16
Nov. 22	Oklahoma	Nov. 16
Nov. 22	La Grange, Tex.	Nov. 16
Nov. 22	St. George, N. Y.	Nov. 16
Nov. 22	New York, N. Y.	Nov. 16
Nov. 23	Wilmington, N. C.	Nov. 2
Nov. 23	Sherman, Tex.	Nov. 16
Nov. 23	Sinton, Tex.	Nov. 16
Nov. 25	Richmond, Tex.	Nov. 16
Nov. 27	Washington, N. C.	Nov. 2
Nov. 27	Arma, Kan.	Nov. 16
Nov. 27	Girard, Kan.	Nov. 16
Nov. 28	Vermont Adv. Nov. 16.	Nov. 16
Nov. 28	Anamosa, Ia.	Nov. 16
Nov. 28	Louisiana	Nov. 16
Nov. 28	Minnesota	Nov. 16
Nov. 28	Union, S. C.	Nov. 16
Nov. 29	Oklahoma	Nov. 16
Nov. 29	Georgia	Nov. 16
Dec. 1	Newberry, S. C.	Nov. 16
Dec. 5	Albert Lea, Minn.	Nov. 9
Dec. 5	Alabama	Nov. 16
Dec. 12	Alabama	Nov. 16
Dec. 22	Spokane, Wash.	Nov. 2
Dec. 30	Quebec	Nov. 2
Dec. 30	Quebec	Nov. 9
Dec. 30	Quebec	Nov. 16
Jan. 7	Duluth, Minn.	Sept. 28

BUILDINGS

Nov. 17	Mineola, N. Y.	Nov. 16
Nov. 20	Birmingham, Ala.	Nov. 2
Nov. 20	Cleveland, O.	Nov. 2
Nov. 21	Owen Sound, Ont.	Nov. 2
Nov. 21	Detroit, Mich.	Nov. 2
Nov. 21	Williamsport, Pa.	Nov. 16
Nov. 22	Wash., D. C.	Nov. 2
Nov. 22	San Antonio, Tex.	Nov. 2
Nov. 22	San Antonio, Tex.	Nov. 16
Nov. 24	Yonkers, N. Y. Adv. Nov. 9 and 16.	Nov. 9
Nov. 25	Bowling Green, O.	Nov. 2
Nov. 30	Smiths Falls, Ont.	Nov. 16
Dec. 1	Oil City, Pa.	Oct. 26
Dec. 1	Abilene, Tex.	Nov. 9
Dec. 9	Port Washington, N. Y. Adv. Nov. 16.	Nov. 16
Dec. 14	Allentown, Pa.	Nov. 16
Dec. 18	Bakersfield, Calif.	Nov. 16
Jan. 2	Olean, N. Y.	Nov. 9
Mar. 23	Shreveport, La.	Nov. 9

INDUSTRIAL WORK

Dec. 9	Pittsburgh, Pa.	Nov. 16

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Nov. 20	Horses and Props—Huntington, W. Va. Adv. Oct. 26 to Nov. 16.	Oct. 26
Nov. 20	Steel Hull—Pittsburgh, Pa. Adv. Oct. 26 to Nov. 16.	Oct. 26
Nov. 20	Roof—Toledo, O.	Oct. 26
Nov. 21	Roadway, Norfolk, Va.	Nov. 2
Nov. 22	Covering Railroad Tracks—San Diego, Calif.	Nov. 2
Nov. 23	Earthwork—St. Louis, Mo. Adv. Oct. 26 to Nov. 16.	Oct. 26
Nov. 23	Earthwork—St. Louis, Mo. Adv. Nov. 2 to 16.	Nov. 2
Nov. 24	Post Office—Chandler, Okla.	Oct. 26
Nov. 24	Roads—California	Nov. 16
Nov. 25	Dredging—Charleston, S. C. Adv. Oct. 26 to Nov. 16.	Oct. 26
Nov. 25	Barges—Pittsburgh, Pa. Adv. Nov. 2 to 16.	Nov. 2
Nov. 25	Lock and Dam—Jacksonville, Fla.	Nov. 2
Nov. 25	Hangar—Ft. Sam Houston, Tex.	Nov. 16
Nov. 27	Dredge Hull, etc.—Milwaukee, Wis. Adv. Nov. 2 to 16.	Nov. 2
Nov. 27	Dredging — Jacksonville, Fla. Adv. Nov. 2 to 16.	Nov. 2
Nov. 27	Remodeling—St. Louis, Mo.	Nov. 9
Nov. 28	Roads—California	Nov. 16
Dec. 1	Steel Hull—Pittsburgh, Pa. Adv. Nov. 9 and 16.	Nov. 9
Dec. 1	Barge—Montgomery, Ala. Adv. Oct. 26 to Nov. 16.	Oct. 26
Dec. 1	Dredging—Honolulu, H. T.	Nov. 2
Dec. 2	Boilers—Memphis, Tenn. Adv. Nov. 2 to 16.	Nov. 2
Dec. 2	Barges—Memphis, Tenn. Adv. Nov. 2 to 16.	Nov. 2
Dec. 2	Machinery — Memphis, Tenn. Adv. Nov. 2 to 16.	Nov. 2
Dec. 4	Extension, etc. — Altoona, Pa. Adv. Nov. 16.	Nov. 16
Dec. 4	Power Houses—Cape Henry, Va.	Nov. 9
Dec. 6	Repairs—Phila., Pa.	Nov. 16
Dec. 6	Pumping Units — Boise, Idaho	Oct. 19
Dec. 7	Dwellings—Huntington, W. Va.	Nov. 16
Dec. 11	Barges—Rock Island, Ill. Adv. Nov. 16.	Nov. 16
Dec. 12	Hospital—Knoxville, Ia. Adv. Nov. 16.	Nov. 16
Dec. 14	Garage, etc.—San Diego, Calif.	Nov. 16
Dec. 14	Barges—Vicksburg, Miss. Adv. Nov. 16.	Nov. 16
Dec. 15	Dredging—Detroit, Mich. Adv. Nov. 16.	Nov. 16
Jan. 3	Piers—Pearl Harbor, H. T.	Nov. 16

MISCELLANEOUS

Nov. 21	High School Equipment—Wash., D. C.	Oct. 12
Nov. 21	Lumber—Ocean City, N. Y.	Nov. 2
Nov. 21	Underpasses, etc. — North Carolina	Nov. 9
Nov. 21	Flume—New Smyrna, Fla. Adv. No. 9 and 16.	Nov. 16
Nov. 23	Lumber—New Orleans, La.	Nov. 16
Nov. 24	Shaft—Brooklyn, N. Y.	Nov. 2
Nov. 27	Electrical Work, Plumbing, Heating, etc. — Johnstown, Pa.	Nov. 2
Nov. 27	Dock—Newark, N. J. Adv. Nov. 16.	Nov. 16
Nov. 28	Railings and Stairs—Phila., Pa.	Nov. 16
Nov. 28	Retaining Walls—Phila., Pa.	Nov. 16
Dec. 5	Gate Valves, etc.—New York, N. Y. Adv. Nov. 16.	Nov. 16
Dec. 6	—Traveling Crane—San Francisco, Calif.	Nov. 16
Dec. 18	Coal Handling Plant — Melbourne, Victoria, Australia	Sept. 21
Jan. 1	Transmission Line—Spokane, Wash.	Nov. 9

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Mass., Warren—Plans water supply system, incl. piping, reservoir, pumping plant and wells. I. W. Moore, member of com.

N. J., Burlington—Plans extending mains $7,000, additional pumping units $7,000, and repairing wharf $6,000. G. A. Allison, Burlington, engr.

N. J., Maple Shade—Maple Shade Water Co. plans installing double action Duplex pumps, 60,000,000 gal., and 3 mi. 6 in. pipe. $50,000. Engineer not selected.

N. C., Elizabeth City—City voted $550,000 bond issue for waterworks, electric light and power plant. W. B. Goodwin, mayor.

O., Martins Ferry—Voted $400,000 bonds reconstructing waterworks and electric light plant. Noted Sept. 7.

O., St. Clairsville—Defeated $60,000 bonds Nov. 7, for reservoir. Noted Oct. 12.

Ill., Aurora—Drilling artesian well, 2,300 ft. deep, 12 in. at bottom, to S. B. Geiger, Old Colony Bldg., Chicago, $29,960.

Wis, Prairie du Chien—See "Excavation, Drainage, Irrigation."

Ia., Brooklyn—Making plans iron removal plant for waterworks. $10,000. H. A. Brown, Ottumwa, engr.

Ia., Oskaloosa — Making plans for dam across Skunk River. $30,000. H. A. Brown, Ottumwa, engr. Noted June 15.

Minn., Westbrook—Making plans 10,000 lin.ft. 4 in. c.i. pipe, 450 ft. well, pumping machinery. $15,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, Ia., engr.

Kan., Republic—Voted $30,000 bonds to install waterworks system. W. B. Rollins & Co., 521 Railway Exch. Bldg., Kansas City, Mo., engrs.

Kan., Rexford — Making preliminary survey for new plant and distribution system Bond election soon. C. A. Haskins, 517 Finance Bldg., Kansas City, Mo., engrs.

Mo., St. Louis—Plans to purchase coated c.i. pipe, special castings, valves, fire hydrants, valve boxes, and other materials. $100,000. E. E. Wall, City Hall, water comr.

Mo., Valley Park—R. P. Sargent, mayor, takes bids about Dec. 1, for equipment and distribution pipes, incl. 1,100 cu.yd. earth

Waterworks (Continued)

excav., 21,120 ft. 4-8 in. c.i. pipe, etc. $52,500. L. A. Day, 34 East Grand St., St. Louis, engr.

Tex., Elgin—Nov. 28, to vote on $40,000 bond issue for waterworks improvements. Address Mayor.

Okla., Cement—Nov. 21, to vote on $33,300 bonds for water and light extensions. W. H. White, clk. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, consult. engrs. Noted Nov. 2.

Okla., Wetumka—Having plans prepared waterworks, light and sewerage systems. $150,000. C. N. Hamilton, clk. V. V. Long & Co., 1300 Colcord Bldg, Oklahoma City, consult. engrs.

Idaho—Lewiston—Making plans filtration plant to purify water from Clearwater River, 6,000,000 gal. per day, new reservoir, pumps and mains to be enlarged. $350,000. E. G. Wagner, supt. waterworks. Noted Oct. 19.

Wash., Bellingham—Election in December to vote on $1,000,000 bonds to change city's water supply from Lake Whatcom to Skookum Creek, 17 mi. from Lake Padden, the proposed reservoir.

Wash., Tacoma — W. A. Kunigk, supt. Water Dept., 402 City Hall, rejected bids opened Nov. 3, furnishing and delivering nineteen 6 in. standard pressure-hub-end gate valves and six 20 in. standard pressure hub-end gate valves with by-pass. Will readvertise. I. S. Davisson, comr. light and water.

Wash., Tacoma—Plans 75,000 hp. development, reservoir to store 190,000 acre-ft., power plant, dam, transmission line, etc. $7,768,000.

Calif., San Francisco—City and San Francisco Co., had plans prepared constructing pipe section of Hetch Hetchy Aqueduct between Irvington and Crystal Springs, 19 mi. long, 60 in. in dia., riveted or welded steel, and 2,050 ft. submerged pipe at Dumbarton Crossing, pumping plant to pump water to Crystal Springs Reservoir. $5,000,000. N. A. Eckart, asst. engr. M. M. O'Shaughnessy, city engr.

N. S., Sydney—Voted $25,000 bonds for waterworks. J. J. Curry, city treas.

Ont. Hanover—Voted $135,000 bonds for extension to waterworks system, incl. reservoir, 3 mi. pipe line to Rhul Lake, etc. F. W. Thorold, 54 Admiral Rd., Toronto, engr. Noted Oct. 12.

Ont., Rodney—Plans standpipe, pump and watermains. Prices wanted. Bylaw for $25,000 will probably be voted on in January. J. A. McRae, clk.

BIDS DESIRED

Pa., Phila.—Nov. 29, by F. H. Caven, dir. pub. wks. Water piping, air piping and air lifts in Northeast sewer treatment plant, incl. 696 ft. 12 in. 6,180 ft. 6 in., 23,000 ft. 3 in. c.i. pipe, 18,000 ft. 3 in. w.i. pipe, $50,000. C. A. Allen, City Hall, engr.

W. Va., Wheeling—Dec. 12 for pumping engines and boilers. J. N. Chester Engineers, Pittsburgh, Pa.; adv. this issue.

N. C., Kings Mountain—Nov. 27 improving water works and sewerage system incl. reservoir, small pumping station, 2 mi. mains, sewage sedimentation tank, 2 mi. sewers, etc. The Ludlow Engineers, Winston-Salem; adv. this issue.

S. C., Dillon—Dec. 1, by Town Council, 250,000 gal. rein.-con. reservoir, extending water and sewer lines, installing pumping machinery, which will be furnished by city. $50,000. Ryan Eng. Co., Arcade Bldg., Columbia, engrs.

O., Akron—Nov. 24, by S. Porter, clk. Summit Co., 3 mi. 6, 8 and 12 in. c.i. mains with 80 service connections. $35,000. E. D. Barstow, 226 Ohio Bldg., engr. Noted Nov. 2.

O., Cleveland—Dec. 1, at office of Commissioner of Purchases and Supplies, City Hall, furnishing and laying about 2,700 ton 36 and 48 in. c.i. pipe, and other miscellaneous work for Div. of Water, Contr. 17. A. V. Ruggles, comr. of Water.

Kan., Herrington—Nov. 17, to vote on $270,000 bond issue for waterworks improvements incl. 570,000,000 gal. earth dam. Black & Veach, 701 Mutual Bank Bldg., Kansas City, Mo., engrs.

Mo., La Plata—Nov. 21 to vote on $190,000 bonds for new water and sewerage systems and sewage disposal plant. Black & Veatch, 701 Mutual Bank Bldg., Kansas City, engrs.

Wash., .Spokane—Feb. 1, by North Spokane Irrigation Dist. and O. Weile, engr., 314 Peyton Bldg., 100,000 gal. standpipe and steel tank, 60 ft. tower and 5-6 mi. 4-12 in. c.i. pipe. $75,000 bonds voted. Noted Sept. 21.

BIDS RECEIVED

Mich., Detroit—Furnishing and installing 289,000 bronze strainer caps for strainer system of filtration plant at pumping station, from Michigan Valve & Fdry. Co., 3631 Parkinson St., $30,400, Detroit Lubricator Co., 5958 Trumbull Ave., $31,357, Simplex Valve & Meter Co., 5722 Race St., Phila., Pa. $31,700.

CONTRACTS AWARDED

N. J., Jersey City—Bd. City Comrs. about 5,000 lin.ft. 36 in. c.i. mains in various streets, to J. L. Sigretto, Bernardsville, $141,636. Engrs. est $132,000. Noted Oct. 26.

N. C., High Point—See "Sewers."

Fla., Auburndale—Installing waterworks, 50,000 gal. tank, tower 75 ft. high, 6,000 ft. 6 in. and 2,500 ft. 8 in. mains, to J. B. McCrary Eng. Co., 3rd Natl. Bank Bldg., Atlanta, Ga., $21,629. Noted May 18.

O., Warren—Director Pub. Serv. 6 in. c.i. mains in Peerless, Choctaw, Pawnee, Viola, Quinby and Front Sts., to H. J. Poff, Warren; Watson, Atkins and Frances Aves., South Main and Kinsman Sts., to Smith Eng. Co., Warren; Idylwid, West and Delaware Aves., Arlington, Griswold and West Oak Sts., to Garner Bros., Warren; South Park and South Homewood Aves., to F. R. Cavanaugh, Warren; Edgewood Ave., River, East Atlantic, Albert and McKinley Sts., to Turner Contg. Co., Park Theatre Bldg., Youngstown. Total cost $33,884. Noted Oct. 19.

Mich., Ecorse—M. L. Brown & Son, engrs., 407 Capitol Bldg., Detroit, 2,200 ft. 6 in. c.i. water mains, etc., to G. R. Cooke, 1260 Penobscot Bldg., Detroit, $16,000.

Mo., Valley Park—For 1 concrete pump pit 14 x 12 x 21 ft. deep and 3 reservoirs each 8 x 22 x 50 ft. deep, to Fraser-Davis Constr. Co., Arcade Bldg., St. Louis, $7,500.

Tex., Dallas—For 1,000,000 gal. reservoir Sunset Heights, steel tank, concrete foundation, to Chicago Bridge & Iron Wks., Praetorian Bldg., $22,700 plus $2,690 for foundation. Engrs. est. $30,000.

Tex., Lubbock—See "Sewers."

Okla., Tulsa — Water Comn., valves for Spavinaw project, to Chapman Valve and Mfg. Co., 2-20 North Cheyenne St., $7,574. Noted Oct. 12.

Wash., Tacoma—W. A. Kunigk, supt. Water Dept., 402 City Hall, furnishing and delivering 9,744 lin.ft. 20 in. and 1,560 lin.ft. 6 in. Class B. c.i. pipe and 53 miscellaneous standard specials, to R. C. Polk, 433 Perkins Bldg., $46,119.

Sewers

PROPOSED WORK

Mass., Springfield—Having plans prepared reconstructing sewers in Washburn, Lowell and Newland Sts. $40,000. Metcalf & Eddy, 14 Beacon St., Boston, engrs.

N. J., Trenton—Making plans sewage disposal plant. $1,250,000. G. A Johnson Co., 150 Nassau St., New York City, engrs.

N. C., Elizabeth City—City voted $250,000 bond issue for sewerage system. W. B. Goodwin, mayor.

O., Westerville—Voted $50,000 bonds for laterals and sewage disposal plant. Jennings-Lawrence Co., Hartman Bldg., and E. G. Bradbury, 416½ South High St., both of Columbus, engrs.

Ill., Amboy—Bd. Local Impvts. soon receives bids for treatment plant and outlet for sewage system. F. W. Leake, city engr.

Ia., Grinnell—Making plans sewage disposal plant. $25,000. L. Higgins, Security Bldg., Des Moines, engr.

Kan., Oakley—Having plans prepared new sewerage system and disposal plant. $50,000. C. A. Haskins, 517 Finance Bldg., Kansas City, Mo., engr.

Kan., Pittsburg — Nov. 17, to vote on $125,000 bond issue, sewage disposal plant. Black & Veatch, 701 Mutual Bank Bldg., Kansas City, Mo., engrs.

Kan., Topeka—Having preliminary plans prepared storm and sanitary sewers. C. A. Haskins, 517 Finance Bldg., Kansas City, Mo., engr.

Mo., La Plata—See "Waterworks."

Okla., Stroud—Nov. 21, to vote on $140,000 bonds for sewers and disposal plant. Benham Eng. Co., 512 Gumble Bldg., Kansas City, Mo., engrs.

Okla., Wetumka—See "Waterworks."

Que. Montreal—Plans 158 ft. 12 in. tile sewer in Nelson St. $745, 3,563 ft. 2 x 3 brick sewer in Eadie St. $27,670. E. Fusie, supt. sewer dept.

Ont., Hamilton—Preparing plans intercepting sewerage system. E. R. Gray, city engr. $25,000.

Ont., London—Preparing plans sanitary sewers. $250,000. H. A. Brazier, city engr. Prices wanted on materials.

Ont., Oldcastle—Sandwich South Twp. plans 60,000 ft. tile drains, 4 in. up $75,000. J. McAuliffe, clk.

N. S., Sydney—Voted $25,000 bonds for sewers. J. J. Curry, city treas.

Sask., Saskatoon—Dec. 11, to vote on $77,650 bonds for sewers.

BIDS DESIRED

Mass., Athol—Dec. 7, by Sewer Comrs. at office of Selectmen, sewerage extensions. B. T. Hale, clk.; adv. this issue.

Pa., Phila.—Nov. 20, by F. H. Caven, dir. pub. wks., 17,672 ft. 2 ft. 3 in. x 1 ft. 6 in. brick sewer in Walker St. from Benner to Devereaux Sts. Watts St. from Mifflin St. to dead end, York Rd. from 18th St. to Godfrey Ave., $35,000; 8,672 ft. 2 x 3 ft. brick sewer in 65th Ave. from Limekiln Pike to Ognotz Ave., 67th Ave. from Broad to 15th Sts., Torresdale Ave. from Warrell to Salem Sts., $30,000; 17,526 ft. 3 ft. brick sewer in 54th St. from Warrington to Springfield Aves., Haines St. from Ognotz Ave. to Limekiln Pike, Haines St. from Chew to Ardleigh Sts., Haines from Anderson to Ardleigh Sts., $32,000; 2 ft. 3 in. x 1 ft. 6 in. brick sewer in Jackson St. from Knoor to Longshore Sts., Kingston St. from F to G Sts., Lippincott St. from 16th to Chadwick Sts., $25,000; 17,002 ft. 2 ft. 3 in. x 1 ft. 6 in. brick sewer in London St. from A to Ella Sts., Marshall St. from Bristol to Cayuga Sts., McCallum St. from Hortter St. to Lincoln Ave., $35,000; 12,000 ft. 2 ft. 6 in. x 1 ft. 8 in. brick sewer in McKean St. from Swanson St. to Delaware Ave., Ognotz Ave. from Haines St. to Pittsville Ave., Sansom St. from 49th to 50th Sts., $25,000; 12,182 ft. 3 ft. 3 in. x 2 ft. 2 in. brick sewers in Erie Ave. from B to Front Sts., Farson St. from Viola St. to Leidy Ave., 54th St. from Lebanon Ave. to Berks St.; vitr. pipe and brick sewers in Arnold St. from Midvale Ave. to dead end, Atlantic St., from Kensington Ave. to K St., Ellett St. from McCallum to Green Sts., $25,000; 19,000 ft. 10 in. vitr. pipe sewer in Abbottsford Ave. from Wissahickon Ave. to McKean St., America St. from Luzerne St. to Rising Sun Ave., $30,000; 500 ft. 4 ft. 6 in. x 6 in. twin sect., 400 ft. 4 ft. 6 in. x 6 in. single sect., 200 ft. 6 ft. 6 in. x 7 ft. 6 in. single sect., rein.-con., intercepting sewer through lowlands of 40th Ward, $100,000. J. A. Vogelson, City Hall, engr.

Md., Baltimore—Nov. 22, by W. F. Broening, pres. Bd. Awards, City Hall, hauling and placing 5,100 ft. 24-54 in rein.-con. pipe, 1,340 ft. 15-24 in. vitr. clay pipe, 8,700 ft. 5-15 in. sewer and house connections, 1,480 ft. 46 in. circular and 51 x 90 in. rectangular concrete section drain, 60 manholes, etc., Sewer Dist. G 14. A. E. Christhilf, City Hall, engr.

N. C., Kings Mountain—See "Waterworks."

S. C., Dillon—See "Waterworks."

O., Akron—Nov. 24, by S. Porter, clk. Summit Co. 2 mi. 8 and 10 in. vitr. sewers with branches for house connections, etc. in County Sanitary Dist. 13, Tallmadge Twp. $30,000. E. D. Barstow, 226 Ohio Bldg., engr. Noted Nov. 2.

Kan., Syracuse—Nov. 22, 40,000 ft. 8, 10 and 12 in. tile sanitary sewer. E. T. Archer & Co., 612 New England Bldg., Kansas City, Mo., engrs. Noted Nov. 9.

BIDS RECEIVED

O., Cleveland—Opened bids Nov. 2, sewer in (1) Cedar Ave. from East 22nd to East 30th Sts. (2) Cedar Ave. from East 30th to East 40th Sts. (3) Fairmount Rd., from Manson Co., 343 The Arcade, (1) $20,594 (2) $39,056; Amato Constr. Co., 343 The Arcade, (1) $20,813 (2) $37,536; A. Marra, Ulmer Bldg., (3) $21,459; Gallagher-Burke Constr. Co., 1339 Irene Ave., Lakewood, (3) $28,151. Work involves 5,780 ft., brick and 2,170 ft. 15-24 in. vitr. clay pipe.

Calif., Madera—Constructing sewage disposal plant, from L. R. Adell, Madera, $32,292; A. A. Tieslau, 2819 Grove St., Berkeley, $35,240; Fisher & Gendrum, Madera, $35,600. Noted Oct. 19.

Calif., Santa Ana—Cities of Santa Ana, Orange, Anaheim and Fullerton, constructing outfall sewer line to ocean, 22,000 lin. ft. 42 in pipe and 18 manholes, from J. Chuttuck, Bullard Blk., Los Angeles, segmental vitr. $138,852; Shepard & Webber, Santa Monica, concrete pipe, $130,565. Noted April 27, under "Anaheim."

CONTRACTS AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Depot Rd., 88th and Barclay Sts., to Kennedy & Smith, 93 Amity St., Flushing.

Sewers (Continued)

$2,515, $16,987 and $2,885 respectively; Orontes Ave., to G. Ingressia, Corona, $2,476; 106th St., to Spinellas & Muccini, 6102 18th Ave., Brooklyn, $2,452. Noted Nov. 9.

N. C., High Point—Laying 35,000 ft. sewer lines and 20,000 ft. water mains, to H. D. Perry, Bessemer, $34,000.

O., Cleveland—Cuyahoga Co. sewers in Short, Crossview and Chestnut Rds., to Ohio Contg. Co., Elyria, $95,913; Brookpark Rd. 4, to Enterprise Paving & Constr. Co., 8444 Bway., $58,441. Noted Nov. 9.

Mo., Maplewood—For 28,318 ft. 8-36 in. vitr. clay and 1,800 ft. 42 in. segmental block sewers, etc., to A. Lewald, 5909 Ethel Ave., St. Louis, $169,689. Noted Nov. 2.

Tex., Lubbeck—For 1,500,000 gal. (daily) Imhoff sprinkling filter, disposal plant, 20 mi. 6-10 in. vitr. sewer and 10 mi. 6-8 in. c.i. watermains, to James Constr. Co., Southwestern Life Bldg., Dallas, $230,000. Noted Oct. 26.

Tex., Iowa Park—Will build sanitary sewerage system and disposal plant, by day labor. $50,000. Montgomery & Ward, Wichita Falls, engrs.

Okla., Tulsa—Bd. Comrs., sewer tunnel, 5,700 ft. long, 14½ x 15½, rein.-con., to Tibbets & Pleasant, 229 North Nogales St., $637,300. Noted Oct. 12.

Utah, Salt Lake City—Sewers in Farmers Ward, 30,000 ft. 8-36 in. sanitary sewers, 18 flush tanks, to Griffith & Burnside, Kearns Bldg., $126,674. Noted Nov. 9.

Que., Montreal—To Frascarelli & Co., 654 Berri St., 1,560 yd. 12 in. tile and 324 yd. 2 x 3 brick sewer in Sherbrooke St. $21,805; to Rondou, Corlier & Co., 3506 Christoph Colomb St., 98 yd. 2 x 3 brick in Bellechasse St. $1,371; and 242 yd. 2 x 3 brick sewer in Cote des Neiges Rd. $4,377; will also build 580 ft. 2 x 3 brick sewer in Hall St. $2,823, and 434 ft. 12 in. tile sewer in Park Marguerite Bourgeois St., $1,165, by day labor.

Waste Disposal

BIDS DESIRED

Pa., Allentown—Dec. 15 for complete garbage incinerator plant. $100,000. Engineer not announced.

Bridges

PROPOSED WORK

Mass., Springfield—Plans iron bridge over Boston & Albany R.R. tracks, Berkshire Ave. $130,000.

Mass., Woronco—Town of Russell receiving sketches concrete bridge across Westfield River, here. $75,000.

New Jersey—State voted $10,000,000 bonds for bridges.

O., Cleveland—City and New York Central R.R., West 3rd St. and St. Clair Ave., plans new bridge over East 152nd St. $100,000. J. Cook, City Hall, engr.

Wisconsin—State Hy. Comn. has ordered construction of bridges in Div. 1, incl. Sauk, Dane and Columbia Counties, $23,150, A. L. Hambrecht, Madison, div. engr.; Div. 3, Shawano, Winnebago, Outagamie, Oconto, Marinette, Manitowoc, Kewaunee, Door and Calumet Counties, $31,300, O. C. Rollman, Nicolet Bldg., Green Bay, div. engr.; Div. 4, Wood and Waupaca Counties, $3,600, F. F. Mengel, Wisconsin Rapids, div. engr.; Div. 5, Jackson and Vernon Counties, $21,200, T. M. Reynolds, La Crosse div. engr.; Div. 6, Clark, Pepin, Taylor, St. Croix and Pierce Counties, $19,200, H. W. Vroman, Eau Claire, div. engr.; Div. 7, Oneida, Price and Iron Counties, $21,555, F. M. Sergeant, Rhinelander, div. engr.; Div. 8, Washburn, Bayfield and Polk Counties, $3,450, J. R. McLean, Superior, div. engr.

Ia., Des Moines—Making plans widening 6th Ave. bridge, 500 ft. long, over Des Moines River, by taking up sidewalks on both sides of roadway and building cantilevered beams to carry new sidewalks outside of present arch ring. $50,000. K. C. Kastberg, city engr.

Kan., Columbus—Cherokee Co. making plans 2 bridges on Spring Valley Rd., Federal Aid Project 142, one to have 18 ft. rein.-con. slab span and 130 ft. rein.-con. arch span, other 80 ft. rein.-con. arch span, both 20 ft. roadway. L. Noftzger, Columbus, engr.

Missouri—B. H. Piepmeier, state highway engr., Jefferson City, will receive bids Dec. 4, 3,200 ft. steel bridge, 20 ft. roadway, in city of Lexington, Lafayette and Ray Counties, owners. $900,000. Waddell & Son, 800 Graphic Arts Bldg., Kansas City, engrs. Noted Oct. 26.

Missouri—State Hy. Dept., Jefferson City, plans one 80 ft. steel truss span, two 20 ft. rein.-con. slab approach spans, etc., 60 ft. steel truss span, one 20 ft. rein.-con. slab approach span, etc., and one 50 ft. steel trus span, one 20 ft. road rein.-con slab approach span, all 20 ft. roadway, on road north of Chillicothe, State Project Route 3, sect. 16, Livingston Co.; one 25 ft. rein.-con. deck girder and three 50 ft. steel truss spans, 20 ft. roadways, etc., on road from St. Louis to Kansas City, State Project Route 2, Sect. 6, Jackson Co.; one 25 ft. rein.-con. deck girder span, 20 ft. roadway, over Meeks Branch, on Sta. 736 plus 40 on road from Neosho to Arkansas State Line, State Project Route 1, Sect. 106, Newton Co. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans three 30 ft. concrete deck girder and one 60 ft. steel truss spans, all 18 ft. roadways, on road north and south through Stoddard Co., Federal Aid Project 197 A; one 60 ft., one 50 ft. and two 70 ft. steel truss spans with rein.-con. slab approach spans at each end, over branch of Bee Creek, on road from Fancette to New Market, State Project Route 1, Sect. 34, Buchanan Co.; one 100 ft., two 50 ft. and one 60 ft. steel truss and thirteen 20 ft. rein.-con. slab spans, 20 ft. roadways, etc., on road from Stanberry to Albany, State Project Route 4, Sect. 18, Gentry Co.; one 35 ft., one 45 ft. and one 40 ft. I Beam spans over D. D. 44, 42 and 41 respectively, also one 55 ft. and one 140 ft. steel truss spans latter having one 20 ft. I-Beam approach span each end, 2 rein.-con. piers, etc., on road from Malden to Risco, State Project Route 82, Sect. 3, New Madrid Co. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans two 50 ft. I-beam, four 60 ft. and two 70 ft. steel truss spans with rein.-con. pile bents, on road from Charleston to Wolf Island, Federal Aid Project 198 B, Mississippi Co.; one 80 ft. steel truss and two 20 ft. rein.-con. slab spans, 20 ft. roadway, 2 rein.-con. piers, 2 rein.-con. bents, over Dry Fork of Merramec River on Sta. 350 plus 00, road from Salem to Licking, State Project Route 32, Sect. 4, Dent Co.; one 40 ft. steel I-Beam, two 150 ft. and one 80 ft. steel truss spans, 18 ft. roadway 3 rein.-con. piers and 2 rein.-con. bents, over Big. north fork of White River, on Sta. 1544 plus 00, road from West Plains to Arkansas, Federal Aid Project 111 C, Ozark Co.; two 160 ft. and two 80 ft. steel truss spans, 20 ft. roadway, 3 rein.-con. piers, 2 rein.-con. bents over Gasconade River, on Sta. 840 plus 00 also five 20 ft. rein.-con. slab spans, 20 ft. roadway, 6 rein.-con. pile bents, over overflow Gasconade River, on Sta. 843 plus 00 on road from Springfield to St. Louis, near Lebanon, State Project Route 14, Sect. 38, Laclede Co.; four 40 ft. reinforced deck girder, two 160 ft. and one 80 ft. steel truss spans, 20 ft. roadway, 3 rein.-con piers, 5 rein.-con. bents, over Big Piney River near Waynesville on Sta. 426 plus 00, road from Springfield to St. Louis, State Project Route 14, Sect. 45, Pulaski Co.; one 80 ft. and two 50 ft. steel truss spans, 20 ft. roadway, 2 rein.-con. piers, 2 rein.-con. bents, over Dardenne Creek, on Sta. 973 plus 26, road from St. Louis to Kansas City, State Project Route 2, Sect. 71, St. Charles Co.; one 14 ft. rein-con. slab span, 2 rein.-con. abutments, 20 ft. roadway, on Sta. 944 plus 64, road from St. Louis to Kansas City, State Project Route 2, Sect. 71, St. Charles Co.; one 60 ft. steel truss span, 18 ft. roadway, 1 concrete pier, 1 rein.-con. abutment, over Wild Cat Creek, on Sta. 22 plus 01.3, road from Princeton to Trenton, State Project Route 3, Sect. 6, Mercer Co. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans 70 ft. concrete arch span, 20 ft. roadway, over Linn Creek on Sta. 399 plus 95 on road from Kansas City to Parksville, State Project Route 59, Sect. 6, Platte Co.; ten 20 ft. I-Beam spans, 20 ft. roadway, etc., over overflow channel of Crooked River, on Sta. 364 plus 95 on road from Richmond to Carrollton, State Project Route 10, Sect. 13, Ray Co.; 120 ft. steel truss span, 2 rein.-con. piers, etc., 20 ft. roadway, over Big Creek, on Sta. 25 plus 00 on road from Bethany to Albany, State Project Route 4, Sect. 24, Harrison Co.; 40 ft. I-Beam span, 20 ft. roadway, over Maple Slough D. D., on Sta. 647 plus 80 on road from Charleston to New Madrid, State Project Route 55 A, Sect. 2, Mississippi Co.; 12 ft. rein.-con. slab span, 30 ft. roadway, on Sta 191 plus 24, on road from Milan to Green City, State Project Route 6, Sect. 33, Sullivan Co. B. H. Piepmeier, state highway engr.

Tex., Queen City—Bowie Co. (Boston) and Cass Co. (Linden) making plans 1.5 mi. steel span and timber pile trestle over Sulphur River at Paces Crossing, between here and Texarkana, one 150 ft. steel span, gravel surfaced approaches. $100,000. Hess & Skinner, Southwestern Life Bldg., Dallas, engrs. A. P. Noyes, Maud, resident engr.

Ore., Portland—Multnomah Co. voted $3,000,000 bonds for Burnside St. bridge and $1,600,000 for Beacon St. bridge, both crossing Willamette River. W. A. Eatchel, Court House, engr. in charge. Additional engineering service to be employed.

Calif., Sacramento—Bd. Supervs. Sacramento Co. rejected bids opened Oct. 16, constructing Paintersville Slough Bridge and Steamboat Slough Bridge. Plans will be revised and new bids asked. C. W. Deterding, co. surv. Noted Oct. 26.

BIDS DESIRED

Mass., Cambridge—Nov. 28, by L. M. Hastings, city engr., Cambridge, 51½ ft.

BRIDGE—TRENTON, N. J.

Following are Engineer's Estimate and lowest three bids opened Oct. 31, by Comrs. Mercer Co., for constructing viaduct over Delaware and Raritan Canal, (A) Engineer's Estimate; (B) L. J. Sieling, Broad St., Phila., (awarded contract); (B) Carl R. Camp; (C) Brann & Stuart. The unit bids were as follows:

	A	B	C	D
Removal of superstructure and draw protection (lump sum)	$5,000.00	$6,000.00	$4,350.00	$4,576.00
450 cu.yd. masonry and concrete removed	5.00	10.00	4.00	4.58
Maintenance of bridge traffic (lump sum)	4,000.00	2,000.00	4,650.00	5,610.00
1,000 cu.yd. excavation for piers and pedestals	7.00	12.00	7.00	8.57
1,000 cu.yd. excavation for retaining wall	2.00	6.00	4.50	3.00
500 cu.yd. class "A" concrete in bases	15.00	20.00	13.30	9.42
600 cu.yd. class "B" concrete in pier shafts	20.00	22.00	18.00	14.60
300 cu.yd. class "B" concrete in retaining wall	20.00	25.00	17.00	14.53
1,100 lin.ft. timber piles below retaining wall	1.00	1.00	1.17	1.10
300 lin.ft. pile cut offs	.30	.25	.27	.58
1,200,000 lb. structural metal	.05¾	.055	.067	.06¾
170 cu.yd. class "B" concrete in counterweight	25.00	25.00	20.00	19.30
36,000 lb. tower-sheaves, shafts and bearings	.18	.15	.19	.24
12,000 lb. wire ropes and sockets	.25	.25	.295	.292
28,000 lb. equalizers and machinery	.30	.25	.31	.3775
Operators house (lump sum)	2,000.00	1,000.00	1,450.00	2,165.00
300 lin.ft. sewer line	1.00	3.00	1.36	2.30
Electrical equipment, lift span (lump sum)	7,000.00	6,100.00	6,700.00	7,870.00
12 lamp posts	60.00	40.00	61.50	73.50
Roadway lighting system (lump sum)	800.00	650.00	715.00	945.00
4 concrete pylons	50.00	25.00	36.00	69.00
Patent plate and name plates (lump sum)	200.00	100.00	287.00	150.00
1,100 lin.ft. concrete handrails	4.00	3.00	3.65	4.50
500 cu.yd. class "B" concrete in slab, etc.	25.00	20.00	21.20	18.40
110,000 lb. reinforcing steel	.05	.06	.0584	.05
1,400 sq.yd. asphalt block paving	3.50	3.00	4.25	3.00
1,500 sq.yd. granite block paving	6.00	4.00	5.25	6.00
14,500 sq.ft. waterproofing	.18	.12	.188	.18
5,000 lb. inlet drops and manhole covers	.07	.15	.114	.07
120 lin.ft. cast iron drain pipe	1.00	8.00	.98	1.00
6 concrete gutter under drain pipes	15.00	8.00	18.30	12.00
21,000 sq.ft. gunite encasement	.55	.40	.515	.50
500 cu.yd. embankment on approaches	2.00	1.50	1.57	1.32
250 cu.yd. paving base on approaches	12.00	9.00	12.35	12.40
800 lin.ft. curbs on approaches	1.00	1.00	1.00	1.36
8,000 sq.ft. sidewalk slabs on approaches	.30	.25	.235	.17
1,000 sq.ft. raising old sidewalk	.10	.05	.13	.06
1,300 cu.yd. embankment for canal bank	2.00	2.00	1.34	.58
200 cu.yd. rip-rap on South Bank of Canal	7.00	3.00	6.10	.21
Removal of debris (lump sum)	300.00	500.00	300.00	2,105.00
Extended totals	$211,910	$208,903	$218,667	$218,874

Bridges (Continued)

single leaf movable draw span. 54 ft. wide, with 2 main plate girders, overhead counterweight, etc., for 1st St. Bridge over Broad Canal.

N. J., Cape May—Dec. 5, by Bd. Freeholders Cape May Co., bridge across Grassey Sound Channel, incl. Strauss bascule draw span, etc. on line of North Wildwood to Burleigh Rd. in Middle Twp. R. F. Smith, Marmora, co. engr.; adv. this issue.

N. J., Freehold—Dec. 6, by Bd. Freeholders Monmouth Co., Court House, reconstructing Grand Ave. bridge N-14, over Sunset Lake, consisting of three 40 ft. spans, 30 ft. roadway. G. K. Allen, 60 Broad St., Red Bank, co. engr.; adv. this issue.

Md., Ashland—Nov. 22. by W. F. Broening, pres. Bd. of Awards, City Hall, Baltimore, steel truss bridge, 90 ft. span, concrete abutments and approaches, 6,700 cu. yd. excav., here. W. A. Megraw, City Hall, engr.

Georgia—Nov. 29, by State Hy. Dept., Atlanta, 104 ft. concrete bridge on Washington-Lexington Rd., Federal Aid Project 293, Wilkes Co., two 288 ft. rein.-con. bridges on Hawkinsville Abbeville Rd., Federal Aid Project 299, Pulaski Co.; 156 ft. concrete bridge on Washington-Lincolnton Rd., Federal Aid Project 315, Wilkes Co.; 156 ft. concrete bridge on Washington Elberton Rd., Federal Contract 314, Wilkes Co. W. R. Neel, Atlanta, highway engr.

Fla., Ft. Lauderdale—See "Streets and Roads."

Alabama—Dec. 5, by W. S. Keller, state highway engr., Montgomery, constructing 1,017 ft. concrete bridges, girder type, on Birmingham-Montgomery Highway, 18 ft. surface, Shelby Co., 2,980 cu.yd. concrete, 389,767 lb. reinforcing, 1,190 cu.yd. dry, 483 cu.yd. wet and 271 cu.yd. solid rock excav., etc. Noted Oct. 5.

Alabama—Dec. 12, by W. S. Keller, state highway engr., Montgomery, 566 ft. bridges on Opelika-Dadeville Rd., 18 ft. roadway, Lee Co., one 80 ft. steel span, remainder concrete girders, 959 cu.yd. concrete, 149,470 lb. reinforcing, 480 lin.ft. concrete piles, 168 cu.yd. dry, 296 cu.yd. wet and 100 cu.yd. rock excav., 178 sq.yd. 4 in. concrete surfacing, etc.

Utah—See "Streets and Roads."

Wash., Seattle—Dec. 8, by Bd. Pub. Wks., superstructure, etc. of steel bascule bridge and two sidespans over West Waterway on West Spokane St. C. B. Bagley, secy.; adv. this issue. Noted Sept. 7.

BIDS RECEIVED

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, opened bids Oct. 31 for following bridges, (1) four 40 ft. concrete spans on Route 2, Sect. 52-B, De Witt Co., (2) superstructure 100 ft. steel span, Route 2, Sect. 52-C, De Witt Co. (3) four 40 ft. concrete spans and one 100 ft. steel span, Route 2, Combination O, De Witt Co. (4) 6 concrete bridges, eight 30 ft. spans, Route 3, Sect. 9-B, Rock Island Co. (5) 1 rein.-con., six 50 ft. concrete spans and 1 combination bridge, thirteen 50 ft. concrete spans and one 100 ft. steel (substructure only) Route 12, Sect. 24-B, Clinton Co. (6) one 100 ft. steel superstructure Route 12, Sect. 24-C, Clinton Co. (7) 1 rein.-con. six 50 ft. concrete spans, 1 combination, thirteen 50 ft. concrete spans, one 100 ft. steel span Route 12, Combination P, Clinton Co. (8) 2 concrete, six 40 ft. spans Route 16, Sect. 13-B, Shelby Co. (9) 1 steel bridge, one 160 ft. span, substructure, Project 25, Sect. 6-B, Grundy Co. (10) 1 steel, one 160 ft. span, superstructure Project 25, Sect. 6-C, Grundy Co. (11) 1 steel, one 160 ft. span, Project 25, Combination R, Grundy Co., from F. Zimmerly, Paris, (1) $18,138 (2) $6,432. Love-Richards Co., Hoopeston, (1) $18,138 (3) $24,038 (7) $91,658 (8) $12,956. M. & P. Contg. Co., Rockport, Ind., (3) $24,900. W. H. Shons, 109 Spring St., Freeport, (1) $17,936 (3) $24,300 (5) $84,508 (7) $89,900 (8) $12,692 (9) $7,630 (11) $19,350. Powers-Thompson Constr. Co., Joliet, (9) $10,932 (11) $23,733. J. R. Stevens, Kirkwood, (4) $14,704. Continental Bridge Co., Monadnock Blk., Chicago, (2) $6,531 (10) $11,767. Vincennes Bridge Co., Vincennes, Ind., (6) $5,828. Illinois Steel Bridge Co., Jacksonville, (10) $12,084, Rochester Bridge Co., Rochester, Ind., (2) $6,365 (6) $5,773 (10) $11,703. H. A. Reschke Co. (address not available), (4) $13,617. Layton Constr. Co., Muscatine, Ia., (4) $16,221. L. C. Kessler, Edwardsville, (5) $85,241 (8) $13,128. J. E. Parkham Constr. Co. (address not available), (5) $84,685 (7) $92,000. W. C. Johnson, 512 South High St., Belleville (6) $5,664. Joliet Bridge & Constr. Co., Joliet, (9) $7,929. Noted Oct. 19 and 26.

CONTRACTS AWARDED

Mass., Bridgewater—Towns of Bridgewater and Middleboro, and State of Massachusetts, 150 ft. rein.-con. beam bridge between here and Middleboro, to B. L. Thomas Constr. Co., Cherry St., Middleboro, $30,310. Noted Oct. 26.

S. C., Chesterfield — Comrs. Chesterfield and Lancaster Counties, rein.-con. bridge over Lynchs River, to P. R. Moore, Lancaster, $26,000. Noted Sept. 21.

Tennessee—State Hy. Dept., Nashville, 202 ft. rein.-con. and steel bridge on Federal Aid Project 62, sta. 68-77, located at Lawrenceburg, to Vincennes Bridge Co., Vincennes, Ind., $19,537. Noted Oct. 26.

Mont., Belt—State Hy. Comn., Helena, one 90 ft. steel truss span, concrete floor and abutments, wooden piling, here, on Federal Aid Project 72, Cascade Co., engrs. est. $25,000, two 105 ft. and one 37 ft. steel pony trusses, concrete abutments, on Belt-Receville Rd., Federal Aid Project 73, Proposal B, Cascade Co., engrs. est. $35,000, to McGuire & Blakeslee, Great Falls, $23,933 and $27,452 respectively. Noted Oct. 19.

Mich., Lansing—J. A. Parsons, city clk., 565 ft. rein.-con. bridge with 3 arch spans over Grand River, 65 ft., 71 ft. and 85 ft., to Koss Constr. Co., 2818-5th St., Des Moines, Ia., $139,000. City to furnish cement. Noted Oct. 19.

Wis., Stanley—Rein.-con. and steel bridge over Wolff River, rein.-con. and steel dam, concrete substructure, 13,060 lb. steel, to W. A. Brown, Stanley. Engrs. est. $25,000.

Minn., Grand Marais—See "Streets and Roads."

Kan., Iola—See "Streets and Roads."

Tex., Laredo—Laredo Bridge Co.; bridge approaches on Mexican side Rio Grande River, to Jambers & Tillman, Laredo, $42,000, plus cement and steel. Noted Oct. 5.

Dams

PROPOSED WORK

Ind., Ft. Wayne—Bd. Pub. Wks., plans collapsible dam, 300 ft. long, 12 ft. high, across Maumee River.

Wash., Tacoma—See "Waterworks."

Calif., Pescadero—C. F. Humphrey, 1212 Merchants Natl. Bank Bldg., San Francisco, represents Ano Nuevo Water Dist., which is to be organized, and plans construction 2 dams, one 53 ft. high, 387 ft. long on top, 32 ft. long on bottom, 20 ft. wide, earth fill; another 30 ft. high, 200 ft. long on top, 30 ft. long on bottom, 15 ft. wide, earth fill; 3,700 lin.ft. earth ditch, concrete lined; 500 lin.ft. 8 in. pipe line; 6 in. centrifugal pumping plant with 30 hp. gas engine.

BIDS DESIRED

W. Va., Bluefield—Nov. 25, by Bluefield Water Works & Impvt. Co., constructing clay or earthen dam. W. McCarthy, supt.; adv. this issue.

CONTRACTS AWARD

Wis., Stanley—See "Bridges."

Railways

PROPOSED WORK

Florida—Florida Citrus Highlands Ry., (recently incorporated), Tampa, plans grading right of way and building 10 mi. railroad from Avon Park to Sebring, 4 or 5 wood trestles, total length 200 ft. $50,000. Engineers of Seaboard Airline Ry., Norfolk, Va., will supervise construction.

Washington — Bloedel-Donovon Mills, Bellingham, plans 25 mi. standard gage logging road from fir tracks, Olympic Mountains, to Port Angeles. $750,000. Engineer not selected.

Ontario—Niagara St. Catherines Electric Ry., St. Catherines, plans to extend line 18 mi. to Bridgeburg. E. W. Oliver, genl. mgr.

CONTRACTS AWARDED

California—Swayne Lumber Co., Oroville, purchased 167,000,000 ft. timber from government and will construct 21 mi. narrow gauge logging railroad, in Plumas National Forest. Work will probably be done by day labor. Construction to proceed as demand requires.

Excavation, Drainage, Irrigation

PROPOSED WORK

Fla., West Palm Beach—Palm City D. D. constructing 75 mi. canals and laterals, 365,000 cu.yd. excav., to F. McKenzie, Miami, $75,000.

Wis., Prairie du Chien—Crawford Co. having plans prepared 20 mi. levee work, interior ditch and various channels to be constructed; two 36 in. centrifugal pumps, 1 story pumping station, brick and rein.-con., costing $100,000. Total $600,000. J. H. Mack, Capitol Bldg., Madison, engr.

Mont., Red Lodge—Carbon Co. making plans 20 mi. main canal in Red Lodge-Rosebud Irrigation Dist. $400,000. H. P. Sandels, co. clk. State Irrigation Comn., Helena, engrs.

Minn., Jackson—Jackson Co. plans reconstructing and extending County Ditch 3, Jobs 3 and 4. $33,000. P. D. McKellar, co. aud.

S. D., Rapid City—Pennington Co. plans North Divide Irrigation Project, 35,000 acres between Box Elder and Rapid Creeks, east of here. $105,000. M. K. Steele, aud.

Idaho, Bonners Ferry — Nash-Chaffin, engrs., Bonners Ferry, and others, interested in forming district commission, for deepening and straightening Kootenai river at Narrows between here and British Columbia.

Wash., Tieton—Tieton Water Users Assn. had preliminary plans prepared and will probably take bids early in spring for high line irrigation system to irrigate an additional 3,000 acres land. $1,250,000. J. L. Lytell, project mgr. J. D. Goff, Seattle (street address not available), civil engr.

Ore., Tillamook—Plans 1,130 acre drainage district on Dougherty Slough, at south end Tillamook Bay. $50,000 bonds voted. Engineer not announced.

BIDS DESIRED

Ariz., Maricopa—Nov. 27 (change of date) by D. H. Smith, secy., Maricopa Irrigation Dist., furnishing labor, material and construction of necessary machinery and equipment, and installation of general irrigation system. H. S. Reed and S. K. Baker, 419 Fleming Bldg., Phoenix, engrs. Noted Nov. 2.

BIDS RECEIVED

Calif., Tracy — Naglee-Burk Irrigation Dist., (1) 6,476 lin.ft. concrete lining canals (2) 9.2 mi. drainage laterals (3) 2,660 lin. ft. main drainage canal (4) 1,800 ft. 18 in. rein.-con. pipe (5) lump sum per yd. for constructing rein.-con., superstructure to house pumping machinery equipment, from A. A. Tieslau, 2819 Grove St., Berkeley, (1) $0.23 (2) $1,450; D. MacDonald, Sacramento, (street address not available) (2) $1,100 (3) $0.18 (5) $40; H. W. Rohl, Sacramento, (street address not available) (2) $1,150 (4) $2 (5) $40; R. A. Carson, Ramont Bldg., Modesto, (3) $0.149; Hass & Doughty, San Francisco, (street address not available) (3) $0.1675; Valley Constr. Co., 5th and Harriet Sts., Sacramento, (4) $1.50; Ross Constr. Co., Forum Bldg., Sacramento, (4) $2. Noted Oct. 19.

CONTRACTS AWARDED

Miss., Tunica—McKinney Lake D.D. of Tunica Co., excavation of open ditch system to reclaim 32,000 acres, Contrs. 1 and 2 incl. 1,091,000 cu.yd. floating dredgework to Winston Dredging Co., Louisville, $110,000; Contrs. 3, 4 and 5, incl. 578,250 cu.yd. dry earth excav., to A. M. Alexander, Rosedale, $80,000. Noted Oct. 19.

Ia., Audubon—Audubon Co. Sects. 1 and 2, East Nishnabotna D.D. 3, 120,000 cu.yd. excav., to G. W. Condon, Farnam Bldg., Omaha, Neb., $25,000.

Calif., Tracy — Naglee-Burk Irrigation Dist., furnishing and installing one 12 in. double suction vertical centrifugal pump and one 30 hp. 60 cycle motor, etc., for pumping plant using Byron-Jackson pump, to Tracy Electric Co., Tracy, $2,485. Noted Oct. 19.

Streets and Roads

PROPOSED WORK

Massachusetts—State Bd. of Public Wks., State House, Boston, plans paving 2 mi. Westfield Rd., 20 ft., in Southampton, 70,400 sq.yd. bituminous macadam. $150,000.

N. Y., Binghamton—Plans widening, (30 ft.), removing buildings, grading, curbing and paving Hawley St. $30,000. W. E. Weller, city engr.

N. Y., Elmira -- Plans paving Railroad Ave. from 2nd to Clinton Sts., West 2nd St. from Main to Walnut Sts., College Ave. from Water to Church Sts., East Miller St. from Maple Ave. to Erie St., West 3rd St. from Main St. to Railroad Ave., resurfacing South Main St., brick or other materials. $50,000. Bd. Pub. Wks., engrs.

N. Y., Niagara Falls—Plans widening 6,664 ft. Main St. from Pierce to Chasm Sts., 24 ft. $548,000. City's share of cost is $75,000. W. B. Bennett, Convention Hall, city engr.

New Jersey—State voted $30,000,000 bonds for roads.

N. J., Flemington—Hunterdon Co. plans paving 5 mi. road between Darts Mills and

Streets and Roads (Continued)

Copperhill, concrete. $200,000. Federal Government appropriates toward cost. G. Davis, Whitehouse Sta., engr.

N. J., Newark—Essex Co. voted $400,000 bonds for parkway to connect Branch Brook Park with Belleville Park.

N. J., Woodbury—Gloucester Co. plans building and improving 8 mi. roads from Woodbury to Good Intent, Woodbury to Natl. Park and Cross Keys to Williamstown. W. C. Cattell, Wenonah, engr.

Pa., Williamsport — Defeated $650,000 bond issue Nov. 7, for street improvements.

Maryland—State Rds. Comn., Baltimore, rejected bids Contr. G-24, Garrett Co., Contr. A-22, Allegheny Co., Contrs. M-37, M-38, M-39, and M-40, Montgomery Co. Noted Oct. 19.

W. Va., Buckhannon—Upshur Co. voted $284,000 bonds for road in Warren, Meade and Banks Dists.

W. Va., Morgantown—Bd. Comrs. Monongalia Co. plan paving with 7 in. concrete slab 1½ mi. roads in Grant Dist., 16 ft., $50,000; 1 mi. road in Union Dist., 16 ft. $30,000. T. Baritell, co. engr.

W. Va., Welch — McDowell Co. voted $400,000 bonds for roads in Adkins Dist.

W. Va., Weston—Lewis Co. voted $800,000 bonds improving roads in Freemans Creek Dist. Noted Oct. 19.

S. C., Winnsboro — Fairfield Co. voted $500,000 bonds for road work.

O., Youngstown—Plans grading, paving, etc., 3,800 ft. Milton Blvd., 50 ft. I. Turner, city engr.

Fla., Inverness—Citrus Co. having plans prepared 75 mi. paved roads. Election soon to vote on roads. E. V. Camp and associates, Moreland and De Kalb Aves., Atlanta, Ga., engrs.

Fla., Sarasota—Plans clearing and paving 20½ mi. Rd. 1, from Fruitville to Miakka; 4½ mi. Rd. 2 from Miakka to Vern; 4½ mi. Rds. 3 and 6 from Fruitville to Lockwood Ridge and Talum Ridge; 6¾ mi. Rd. 4 from Bee Ridge to Fruitville; 7¼ mi. Rd. 5 from Miakka Bridge to Charlotte Co. line; 10 mi. Stump Pass Rd. All above $6,500 per mi. McElroy Eng. Co., 32-34 Giddens Bldg., Tampa, engrs.

Michigan — State Hy. Dept., Lansing, soon takes bids grading and gravel surfacing 7¼ mi. Federal Aid Project 64, Crawford and Otsego Counties. F. F. Rogers, state highway comr.

Ia., Wapello—Making plans concrete paving 30 blocks, $200,000. A. E. Archer & Co., 612 New England Bldg., Kansas City, Mo., engrs.

Ia., Des Moines—See "Bridges."

Kan., Columbus—Cherokee Co. soon takes bids concrete paving 4.585 mi. Spring Valley Rd., Federal Aid Project 142, Sects. A and B, 18 ft. L. Noftzer, Columbus, engr.

Kan., Girard—Crawford Co. soon takes bids paving with brick or concrete 1 mi. Federal Aid Project 120 through Arma, 18 ft., brick or concrete; 0.942 mi. Federal Aid Project 3, Sects. A, 18 ft. C. M. Cooper, Girard, engr.

Kan., Hiawatha — Had plans prepared 25,000 yd. resurfacing and 20,000 yd. new paving, vitr. brick, vertical fibre brick, asphaltic concrete, concrete or bituminous concrete on concrete, concrete curb and gutter. $75,000. Black & Veatch, 701 Mutual Bldg., Kansas City, Mo., engrs.

Kan., Independence—Montgomery Co. had plans prepared and soon takes bids paving with bituminous macadam 4½ mi. Independence-Caney Rd., Federal Aid Project 121 Sect. A, 18 ft.; 4¾ mi. Independence-Caney Rd., Federal Aid Project 121, Sect. D, 18 ft. H. K. Hibbard, Independence, engr.

Kan., Meade—Meade Co. plans improving 5.755 mi. Kansas-California Highway, Federal Aid Project 114, 24 ft., 25,000 cu.yd. earth excav., 10,110 yd. borrow, 157 yd. concrete, 10,000 lb. reinforcing, etc. C. G. Payne, Meade, engr.

Kan., Oberlin—Making plans paving 25,000 yd. various streets, possibly brick on concrete, concrete curb and gutter. E. T. Archer & Co., 612 New England Bldg., Kansas City, Mo., engrs.

Missouri—State Hy. Dept., Jefferson City, plans grading and paving 12 mi. road from Charleston to Wolf Island, Federal Aid Project 198 B, Mississippi Co., 30 ft. crown, 9 ft. concrete and 7 ft. gravel. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept. Jefferson City, plans grading and graveling 3 mi. road east and west through Webster Co., 16 ft., State Project Route 16, Sect. 35; 5 mi. road from Plattsburg to Kansas City, State Project Route 33, Clinton Co. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans grading and asphaltic concrete paving 4 mi. road west of Bethany, State Project Route 4, Sect. 24, Harrison Co.; grading and concrete paving 3 mi. road from Kansas City to St. Louis, State Project Route 2, Sect. 15, Jackson Co., 3 mi. road from Kansas City to St. Louis, State Project Route 2, Sect. 6, Jackson Co., 2.75 mi. road from Kansas City to St. Louis, State Project Route 2, Sect. 4, Jackson Co., 3.5 mi. road from Kansas City to St. Louis, State Project Route 2, Sect. 3, Jackson Co., 5 mi. road from St. Louis to Springfield, State Project Route 14-77, St. Louis Co., 5 mi. road from St. Louis to Springfield, State Project Route 14, Sect. 76, St. Louis Co., 4 mi. road from Kansas City to St. Louis, State Project Route 2, Sect. 71, St. Charles Co., 4 mi. road from Kansas City to St Louis, State Project Route 2, Sect. 68, St. Charles Co., 4 mi. road from Kansas City to St. Louis, State Project Route 2, Sect. 69, St. Charles Co., 3 mi. road from St. Louis to Kansas City, State Project Route 2, Sect. 59, Montgomery Co., all foregoing 18 ft. wide; grading and graveling 4 mi. road from Jefferson City to Eldon, State Project Route 15, Sect. 52, 12 ft., Cole Co., 4 mi. road from St. Lauis to St. Genevieve, State Project Route 25, Sect. 3, Jefferson Co., 4 mi. road from Malden to Risco, State Project Route 82, Sect. 3, New Madrid Co., 5 mi. road from Lebanon to Linn Creek, State Project Route 5, Sect. 72, Laclede Co., road from Memphis to Edina, State Project Route 16, Sect. 4, Scotland Co., 2 mi. road from Unionville to Milan, State Project Route 5, Sect. 2, Putnam Co., 2 mi. road from Unionville to Milan, State Project Route 5, Sect. 3, Putnam Co., all foregoing 16 ft. wide; grading, etc., 5 mi. road from Fairfax to Torkis, State Project Route 1, Sect. 7, Atchison Co., 4 mi. road from Kansas City to Parkville, State Project Route 59, Sect. 6, Platte Co., 2½ mi. road from Stanberry to Albany, State Project Route 4, Sect. 17, Gentry Co., 2½ mi. road from Stanberry to Albany, State Project Route 4, Sect. 18, Gentry Co., 2 mi. road from Fairfax to Torkis, State Project Route 61, Sect. 14, Atchison Co., 1.5 mi. road south of Macon, State Project Route 7, Sect. 21, Macon Co., 3 mi. road from Wayland to Canton, State Project Route 9, Sect. 7, Clark Co., 5 mi. road from Milan to Kirksville, State Project Route 6, Sect. 34, Sullivan Co., 5 mi. road from Milan to Kirksville, State Project Route 6, Sect. 33, Sullivan Co., 5 mi. road from Milan to Kirksville, State Project Route 6, Sect. 35, Sullivan Co., 3 mi. road from south of Warrensburg, State Project Route 13, Sect. 26, Johnson Co., 3 mi. road south of Warrensburg, State Project Route 13, Sect. 30, Johnson Co., 3 mi. road south of Warrensburg, State Project Route 13, Sect. 27, Johnson Co., 3 mi. road south of Warrensburg, State Project Route 13, Sect. 29, Johnson Co., 3 mi. road south of Warrensburg, State Project Route 13, Sect. 28, Johnson Co., 5 mi. road southwest of West Plains, State Project Route 80, Sect. 8, Howell Co., 5 mi. road southwest of West Plains, State Project Route 80, Sect. 7, Howell Co., 5 mi. road from Neosho to Arkansas, State Project Route 1, Sect. 106, Newton Co. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, rejected bids opened Sept. 28, 4.636 mi. road on Kings Highway, 24 ft., State Project Route 25, Sect. 12, Perry Co.; 3.22 mi. road east and west on Milan-Kirksville Rd., 24 ft., State Project Route 6, Sect. 38, Adair Co.; 2.764 mi. road east and west of Audrain, 24 ft., State Project Route 22, Sect. 9, Audrain Co. Noted Oct. 12.

Mo., St. Louis—Bd. Pub. Serv. soon takes bids paving 5,140 ft. West Florissant Ave. from Kingshighway to Union Blvd., 50 ft., 9,700 lin.ft. granite curb, 17,255 cu.yd. earth excav., 29,105 sq.yd. asphalt on concrete, $152,500; 1,350 ft. San Francisco Ave. from Geraldine Ave. to Kingshighway, 30 ft., 1,800 lin.ft. granite curb, 5,055 cu.yd. earth excav., 4,395 sq.yd. vitr. brick and 3,525 sq.yd. concrete base, $35,600; 1,250 ft. Slevin Ave. from Kingshighway to Geraldine Ave., 30 ft., 2,565 lin.ft. concrete curb, 2,245 cu.yd, earth excav., 3,740 sq.yd. vitr. brick on concrete, $25,300. W. W. Horner, 300 City Hall, engr.

Tex., Hemphill—Attorney General, Austin, approved $40,000 bond issue Highway Dist. 1, $27,000 Dist. 2, $57,000 Dist. 3, $70,000 Dist. 4, $60,000 Dist. 5, $30,000 Dist. 6, all in Sabine Co. W. C. Arnold, co. judge.

Tex., Lufkin—Attorney Generals Dept., Austin, approved $500,000 bond issue for roads in Angelina Co. G. R. Abney, co. engr.

Okla., Chanler—Having preliminary plans prepared paving various streets. $102,000. D. D. Landsaw, clk. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, consult. engrs.

Okla., Duncan—Stephens Co. voted $800,000 bonds constructing roads.

Wash., Mt. Vernon—Skagit Co. opens bids early in December paving 3 mi. Edison-Bow Rd. and 7.5 mi. road in Impvt. Dist. 10, 16 ft., concrete. F. Gilkey, Mt. Vernon, engr.

Calif., Porterville—Had plans prepared improving 3rd St. between Oak and Thurman Sts., 47,856 sq.yd. grading, 47,856 sq ft. 1½ in. warrenite bituminous paving on 5 in. concrete base, 1,342 lin.ft. concrete curbing, 320 lin.ft. corrugated metal culverts. F. W. Pease, city engr.

Calif., Tulare — Having plans prepared improving Solida tract, 1½ in. asphaltic cement on 2½ in. asphaltic cement, concrete curbs, gutters and walks. $30,000. R. M. Berryhill, city engr.

N. S. Sydney—Voted $30,000 bonds for sidewalks. J. J. Curry, city treas.

Que., Montreal—Plans concrete sidewalks no 363 ft. Bordeau St. $2,825, 954 ft. St. Peter St. $6,257, 3,378 ft. Letourneaux St. $11,490, 645 ft. Frontenac St. $4,254, 1,650 ft. St. Urbain St. $6,326, 210 ft. Beaubien St. $200, cement slab sidewalks on 2,778 ft. Frechette St. $2,172, 7,555 ft. O'Shaughnessy St. $6,006, 12,935 ft. Bickerdike St. $10,318, 508 ft. lane north of Stadacona Ave. $3,133, 1,260 ft. lane west of McKay St. $8,510. H. A. Tetreault, chn. pub. wks.

Ont., St. Eugene—East Hawkesbury Twp. having plans prepared 1½ mi. bituminous macadam road, 20 ft. wide. $30,000. N. LaBrosse, twp. clk.

Ont., Toronto—Plans 5 mi. of 6 or 8 ft. concrete sidewalks on Yonge St. $82,800. R. C. Harris, city engr. and comr. wks.

BIDS DESIRED

Vermont—Nov. 28, at the office of T. W. Dix, comr. of highways, Montpelier, constructing 1.16 mi. bituminous macadam road in Highgate and 4.78 mi. gravel road in Danville; adv. this issue.

N. Y., New York—Nov. 22, by J. Miller, pres. Manhattan Boro, Municipal Bldg., repaving East 31st St. from 1st Ave. to East River, granite block on concrete, roadway of 74th St. from Amsterdam Ave. to Bway., sheet asphalt on concrete; restoring roadway foundation, curb and sidewalk of West 141st St., between 5th Ave. and point 200 ft. westerly thereof; widening and repaving the widened portion roadway of Canal St. from Bowery to Mulberry St., granite block on concrete.

N. Y., St. George—Nov. 22, by J. A. Lynch, pres. Richmond Boro, Boro Hall, paving from end of Richmond Turnpike at linoleum factory gate to Carteret Ferry, concrete.

S. C., Newberry—Dec. 1, by Newberry Co., constructing 12.6 mi. State Route 22 between point near Newberry and Broad River, 81,914 cu.yd. common and 828 cu. yd. rock excav., 39,634 cu.yd. topsoil surfacing, 2,491 lin.ft. rein.-con. pipe, 643 cu.yd. concrete, 45,870 lb. reinforcing. $47,500. M. C. Boulware, Newberry, engr.

S. C., Union—Nov. 28, by Union Co. constructing 2 mi. State Route 9, beginning at Survey Sta. 100-50 to Spartanburg-Union Co. line, 12,220 cu.yd. common excav., 6,903 cu.yd. topsoil surfacing, 450 lin.ft. rein.-con. pipe, 45 cu.yd. concrete. W. B. Deneen, Court House, engr.

S. C., Winnsboro—Nov. 20, at office H. E. Ketchin, Winnsboro, constructing 25,000 yd. sheet asphalt, asphaltic concrete or cement concrete pavement, 8,500 lin.ft. combined curb and gutter, 3,300 lin.ft. concrete gutter, 15,000 yd. grading. Lockwood, Greene & Co., Healey Bldg., Atlanta, Ga., engrs.

Georgia—Nov. 29, by State Hy. Dept., Atlanta, surfacing, etc., 7.2 mi. Washington-Thomson Rd., Federal Aid Project 295, Wilkes Co., 94.01 cu.yd. concrete, 19,759 lb. reinforcing, 38,416 cu.yd. earth and 200 cu.yd. rock excav., 19,069 cu.yd. sand clay surfacing, etc.; 6.66 mi. Washington-Elberton Rd., Federal Aid Project 314, Wilkes Co., 149.7 cu.yd. concrete, 6,937 lb. reinforcing, 47,787 cu.yd. earth and 200 cu.yd. rock excav., 17,495 cu.yd. sand clay surfacing; 10.58 mi. Washington-Lincolnton Rd., Federal Aid Project 315, Wilkes Co., 806.63 cu.yd. concrete, 69,933 lb. reinforcing, 86,371 cu.yd. earth and 2,300 cu.yd. rock excav., 27,820 cu.yd. sand clay surfacing, etc.; 6.848 mi. Adel-Valdosta Rd., Federal Aid Project 279, Sect. A and B, Cook Co., 141.63 cu.yd. concrete, 7,201 lb. reinforcing, 32,838 cu.yd. earth excav., 12,055 cu.yd. compacted clay gravel, 11.44 acres clearing, etc.; 10 mi. Washington-Lexington Rd., Federal Aid Project 293, Wilkes Co., 212.07 cu.yd. concrete, 9,452 lb. reinforcing, 50,025 cu.yd. earth and 200 cu.yd. rock excav., 26,685 cu.yd. sand clay surfacing, etc.; (State to furnish all cement F.O.B. nearest railroad station, on above) furnishing 23,000 ton clay-gravel for surfacing Project 279, Sects. A and B, Cook Co. W. R. Neel, Atltnaa, highway engr.

Fla., Ft. Lauderdale—Nov. 21, by Comrs. Broward Co., constructing Hallandale Rd., 24,000 sq.yd. macadam base and penetration surface, 22,000 cu.yd. excav., also 40 ft. concrete girder bridge across Cypress Creek. H. C. Davis, engr.

Streets and Roads (Continued)

Alabama—Dec. 5, by W. S. Keller, state highway engr., Montgomery, grading and surfacing with one of following, one course plain cement concrete, warrenite bitulithic on concrete or 8 in. waterbound macadam base, bituminous concrete on concrete or 8 in. waterbound macadam base, sheet asphalt on concrete base and vitr. brick on concrete base, 11.324 mi. Birmingham-Montgomery Highway, from Sta. 605 to Sta. 1202 plus 95, near Jefferson Co. line at end of Federal Aid Project 110, Shelby Co., 54 acres clearing, 122,404 cu.yd. common and 48,991 cu.yd. solid rock excav., 58,935 sta.yd. overhaul on excav., 800 lin. ft. 4 in. drain tile, 1,701 lin.ft. 18 to 24 in. c.i. pipe to be relaid, 813 cu.yd. concrete, 58,483 lb. reinforcing, etc.; 11.439 mi. Birmingham-Montgomery Highway, from Chilton Co. line to Sta. 605 near Saginaw, Shelby Co., 49 acres clearing, 73,296 cu.yd. common and 23,944 cu.yd. solid rock excav., 153,680 sta.yd. overhaul on excav., 800 lin. ft. 4 in. drain tile, 1,061 lin.ft. 16 to 30 in. c.i. pipe to be relaid, 537 lin.ft. 16 to 24 in. c.i. pipe, 579 cu.yd. concrete, 39,128 lb. reinforcing, etc. Noted Oct. 5.

Alabama—Dec. 12, by W. S. Keller, state highway engr., Montgomery, grading and gravel surfacing 13.897 mi. Opelika-Dadeville Rd., Lee Co., 22 acres clearing, 117,551 cu.yd. common and 14,510 cu.yd. solid rock excav., 30,913 sta. yd. overhaul on excav., 36,688 cu.yd. imported gravel surfacing within 1 mi. haul, 69,000 cu.yd. gravel surfacing hauled additional ½ mi., 2,865 lin.ft. 15 to 24 in. pipe, 570 cu.yd. concrete, 25,692 lb. reinforcing, etc.; 8.83 mi. Federal Aid Project 1, and 10.04 mi. Federal Aid Project 68, from Montgomery Co. line to Union Springs, Bullock Co., Project 1 includes 17,398 cu.yd. common excav., 21,000 cu.yd. imported gravel surfacing, Project 68, 37 acres clearing, 99,702 cu.yd. common excav., 43,478 sta. yd. overhaul on excav., 23,600 cu.yd. imported gravel surfacing, 1,933 lin.ft. 15 to 24 in. pipe, 647 cu.yd. concrete, 53,064 lb. reinforcing, 127,290 ft. treated timber bridges, 6,224 lin.ft. treated timber pile bridges, 1,248 sq.yd. 1½ in. bituminous surfacing, cold mix, etc.

Louisiana — Nov. 28, by State Hy. Comn., Redmond Bldg., Baton Rouge, grading and gravel surfacing 7.8 mi. Project 105, Melville-Port, Allen Highway, Sect. A. Ravenwood to Rd. Dist. 2, Point Coupee Parish, also 11.48 mi. Sect. B, through Rd. Dist. 2 to Iberville Parish line, 9.8 mi. Project 352, Winnsboro-Rayville Highway, Franklin Parish; grading and surfacing with clamshells 4.97 mi. Project 354, Morgan City-Thibodaux Highway, Chacahoula to Brule Settlement, Terrebonne and Lafourche Parishes. W. T. Peterman, chn.

Ia., Anamosa—Nov. 28, by Auditor Jones Co., grading 7.61 mi. road east of here, Federal Aid Project 163, Sect. A, 105,936 cu.yd. earth and 246 cu.yd. rock excav., 39,320 ft. 6 in. tile, etc. $35,000. F. S. Yetter, co. engr.

Minnesota—Nov. 28, by State Hy. Dept., St. Paul, grading, gravel surfacing, bridging, etc., 2.4 mi. State Projest 12-22, Federal Aid Project 310, Carver Co., 109,000 cu.yd. excav., portable and monolithic culverts, incl. Bridge 3697 one hundred forty-seven ft. long, Bridge 3698 thirty ft. long and Bridge 3699 thirty ft. long, concrete, $35,000; 14 mi. State Project 22-21, Sibley and Nicolet Counties, 22,000 cu.yd. gravel surfacing, $25,000; 15 mi. State Project 30-21, Federal Aid Project 222, Otter Tail Co., 24,000 cu.yd. gravel surfacing, $26,000; 14 mi State Project 23-21, Federal Aid Project 234, Benton Co., 22,000 cu.yd. gravel surfacing, $25,000; 13 mi. State Project 65-21, Federal Aid Project 248, Clearwater Co., 20,000 cu.yd. gravel surfacing, $25,000. State Highway Dept., St. Paul, engrs.

Kan., Arma—Nov. 27, by Comrs. Crawford Co. and City Council concrete or brick paving 0.945 mi. Commercial Highway, 18 ft. City will also receive bids for additional 6 ft. on each side of above road. C. M. Cooper, Girard, co. engr. Noted Oct. 19.

Kan., Girard—Nov. 27, by Comrs. Crawford Co., concrete or brick paving 1 mi. Sect. A, Arcadia Branch Rd., 18 ft., 2,100 yd. excav., 10,322 yd. paving, etc. C. M. Cooper, co. engr.

Tex., La Grange—Nov. 22, by J. P. Ehlinger, judge Fayette Co., grading and gravel surfacing 12.87 mi. State Highway 3-B, Federal Aid Project 286, 16 ft., 54,464 cu.yd. roadway, 63,222 cu.yd. borrow, 1,098 cu.yd. loose and 749 cu.yd. solid rock excav., 2,077 cu.yd. concrete, 228,640 lb. reinforcing steel, 33,749 cu.yd. gravel surfacing. $162,565. A. Schlafli co. engr.

Tex., Richmond—Nov. 25, by C. D. Myers, judge Ft. Bend Co., grading, surfacing and topping 10.41 mi. State Highway 19, Federal Aid Project 318, 16 ft., 59,366 cu.yd. roadway, 79,189 cu.yd. borrow, 82,708 gal. asphaltic oil, 529.6 cu.yd. concrete, 15,490 cu. yd. shell base and binder, 8,614 cu.yd. gravel base, 11,027 cu.yd. crushed stone, 3,446 cu. yd. crushed limestone cover material, 20,958 lb. reinforcing. $167,600. C. H. Kendall, Sugarland, co. engr.

ROAD WORK—ST. LOUIS, MO.

Bids were opened by Bd. Pub. Serv., City Hall, for improving Watson Rd. from Southwest to Pernod Aves., (A) Webb-Kunze Constr. Co., 5927 Fyler Ave. (awarded contract); (B) Fruin-Colnon Constr. Co., Merchants-LaClede Bldg. The unit bids were as follows:

	A	B
53,000 cu.yd. grading	$0.7	$0.90
160 hrs. rolling subgrade	4.00	3.50
135 sq.yd. removing old brick and bedding course	.50	.50
50 sq.yd. removing old concrete	.50	.90
10 sq.yd. removing old sidewalk paving	.50	.35
40 lin.ft. removing existing curb	.50	.35
20 lin.ft. reset curb taken up	.20	.85
135 sq.yd. vitrified brick and sand cement bedding course	.50	4.00
25,550 sq.yd. concrete pavement	3.25	4.25
1,125 lin. ft. oak headers	.50	.50
100 sq.ft. restoring granitoid sidewalk	.25	.40
20 cu.yd. concrete	8.00	12.00
10,210 lin.ft. concrete header	.65	.50
36,600 cu.ft. macadam and limestone	.08	.20
100 cu.ft. gravel and sand	.10	.15
100 cu.ft. cinders	.10	.10
2M ft. b.m. 2 in. plank	20.00	50.00
120 tons hydrated lime	25.00	35.00
4,800 lin. ft. metal joints	.20	.25
1,500 lin. ft. joint filler	.20	.25
Extended totals	$137,745	$180,342

ROAD WORK—TENNESSEE

Following are lowest three bids opened Oct. 27, by State Highway Dept., Nashville, for surfacing 10.7 mi. road from Carthage to Smith Co. line, Project 68, Smith Co., (A) Phillips, Simpson & McGugin, Stahlman Bldg., Nashville, (awarded contract); (B) E. Williams, Murfreesboro; (C) Cox & Anderson Bros., Cookeville. The unit bids were as follows:

	A	B	C
41,260 cu.yd. excavation common	$0.40	$0.44	$0.50
23,733 cu.yd. excavation solid rock	1.40	1.35	1.50
53,920 cu.yd. borrow	.35	.39	.40
258 cu.yd. excavation dry	.50	1.00	.75
48 cu.yd. excavation rock (Str.)	5.00	2.50	2.50
100 cu.yd. overhaul	.03	.03	.03
5,425 sq.yd. scarifying	.05	.04	.05
2,100 standard shoulder drains	.50	.60	.50
100 cu.yd. sub-base	2.00	2.50	3.00
104,008 sq.yd. H.P. coarse stone base "C" 8-in.	.64	.70	.79
443.47 cu.yd. class "A" concrete	20.00	22.00	22.50
320.58 cu.yd. class "B" concrete	19.00	18.50	20.00
52,569 lb. deformed steel bars	.06	.05¾	.05
125 cu.yd. dry masonry	3.50	7.50	10.00
140 lin.ft. 18-in. c.m. pipe	2.25	2.50	2.25
44 lin.ft. 8-in. v.c. pipe	1.50	.30	1.00
7,475 lin.ft. wooden railing	.50	.80	.75
21,100 sq.yd. grassing slopes	.10	.05	.05
Extended totals	$161,841	$173,182	$189,190

Tex., Sherman—Nov. 23, by D. B. Stead, judge Grayson Co., grading and gravel surfacing 3.69 mi. State Highway 5, Federal Aid Project 292, 18 ft., 217 cu.yd. concrete, 14,759 cu.yd. roadway, 15,698 cu.yd. borrow, 18,781 lb. reinforcing, 8,669 cu.yd. gravel surfacing. $36,850. H. M. Scott, co. engr.

Tex., Sinton—Nov. 23, by J. C. Houts, judge San Patricio Co., reshaping road and surfacing with 1 in. cold limestone rock asphalt 15.06 mi. State Highway 9, 16 ft., 141,332 sq.yd. bituminous macadam, 1,955.8 cu.yd. limestone screenings, 600 lb. rolling. $107,600. A. C. Pancoast, co. engr.

Oklahoma—Nov. 22, by M. L. Cunningham, state highway engr., Oklahoma City, constructing gravel road, 7.4356 mi. Federal Aid Project 75, Okfuskee Co., 16,790 cu.yd. earth, 67 cu.yd. loose rock, 2,700 cu.yd. solid rock excav. 5,680 cu.yd. overhaul, 30,102 cu.yd. borrow, 37.5 cu. yd. 1:1½:3 mix concrete, 1,037 cu.yd. concrete, 55,802 lb. reinforcing, 62,050 lb. fabricated structural steel, 23,755 cu.yd. 9 in. compacted gravel, 173,298 cu.yd. gravel overhaul, alternate No. 1, 78,352 sq.yd. 7 in. concrete pavement; constructing paved road, 10.026 mi. from Lincoln Co. line through Paden and Boley, Federal Aid Project 76, Okfuskee Co., 47,647 cu.yd. earth, 10,367 cu.yd. borrow, 700 cu. yd. loose rock and 800 cu.yd. solid rock excav., 12,461 sta. cu.yd. excav. overhaul, 1,222 cu.yd. concrete, 59,974 lb. steel bar reinforcement, 11,037 lb. structural, for one I beam bridge, 42,364 cu.yd. gravel surfacing compacted in place 9 in. thick, bituminous carpet coat treatment or 105,884 sq.yd. 7 in. concrete pavement, 18 ft. wide; 12.204 mi. road from Okemah east to Okmulgee Co. line, Federal Aid Project 64, Okfuskee Co., 26,127 cu.yd. earth, 5,335 sta. cu.yd. earth overhaul, 36,199 cu.yd. borrow, 2,412 cu.yd. solid rock and 842 cu.yd. loose rock excav., 39,384 cu.yd. gravel or 228,000 sq.yd. concrete pavement, 1,166 cu.yd. concrete, 49,831 lb. reinforcement, 29,870 lb. I beam structural steel, above quantities include one 40 ft. I beam bridge at Sta. 443; hardsurfacing 11.4 mi. Federal Aid Project 100, Okfuskee Co., 49,996 cu.yd. earth, 300 cu.yd. loose rock and 450 cu.yd. solid rock excav., 25,744 cu.yd. overhaul, 23,542 cu.yd. borrow, 1,096 cu.yd. concrete, 58,020 lb. reinforcing, 28,208 lb. fabricated steel, 40 cu.yd. rubble masonry, 37,009 cu. yd. 9 in. compacted gravel, 102,874 cu.yd. gravel overhaul, 121,486 sq.yd. concrete paving; hardsurfacing 3.839 mi. Federal Aid Project 81, Pittsburgh Co., to consist of No. 1, 2 in. bituminous macadam on 8 in. burnt shale base, or No. 2, 2 in. bituminous macadam on 6 in. waterbound macadam, or No. 3, 3 in. vitr. blocks on 8 in. burnt shale or No. 4, one course plain cement concrete pavement, 7 in. centers and edges, involving 17,131 cu.yd. earth excav., 493 cu.yd. borrow, 5,500 cu.yd. overhaul, 451 cu.yd. concrete, 21,916 lb. reinforcing, No. 1, 13,513 cu.yd. shale base and 40,540 sq.yd. 2 in. bituminous macadam, No. 2, 6,756 cu.yd. broken stone base, 40,540 sq. yd. 2 in. bituminous macadam, No. 3, 42,726 sq.yd. 3 in. vitr. blocks, 40,540 lin.ft. curb, 13,413 cu.yd. burnt shale, No. 4, 49,540 sq.yd. one course plain cement concrete pavement; constructing concrete road with 2 in. topeka top, 6.04 mi. Federal Aid Project 70, Garfield Co., Sect. A-B, 2,121 cu.yd. earth excav., 20 cu.yd. concrete, 2,632 lb. reinforcing, 10,518 sq.yd. combination cement concrete header curbing and base course, 9,933 sq.yd. 2 in. Topeka top, Sect. C-D, 4,819 cu.yd. earth excav., 20 cu.yd. concrete, 2,632 lb. reinforcing, 30,638 sq.yd. combination cement concrete header curbing and base course, 28,935 sq. yd. 2 in. Topeka top, Sect. E-F, 1,283 sq. yd. earth excav., 10 cu.yd. concrete, 1,316 lb. reinforcing, 6,400 sq.yd. combination cement concrete header curbing and base course, 6,044 sq.yd. 2 in. Topeka top, Sect. F-G, 12,809 cu.yd. earth excav., 71 cu.yd. concrete, 10,138 lb. reinforcing, 16,135 sq. yd. combination cement concrete header curbing and base course, 15,238 sq.yd. 2 in. Topeka top; 1 mi. Federal Aid Project 71, Garfield Co., 1,091 cu.yd. earth excav., 30 cu.yd. concrete, 3,948 lb. reinforcing, 10,558 sq.yd. combination cement concrete header curbing and base course, 9,971 sq. yd. 2 in. Topeka top; constructing crushed rock road with gravel surface, 9,684 mi. Federal Aid Project 74, Murray Co., 36,032 cu.yd. earth, 2,395 cu.yd. loose rock and 13,354 cu.yd. solid rock excav., 14,607 cu.yd. overhaul, 5,951 cu.yd. borrow, 532 cu.yd. concrete, 227 ft. 18 in. vitr. pipe, 29,197 lb. reinforcing, 11,379 cu.yd. gravel surfacing, 10,893 cu.yd. crushed rock overhaul. 4 311

Streets and Roads (Continued)

cu.yd. gravel overhaul, 19,895 cu.yd. crushed rock.

Oklahoma—Nov. 29, by M. L. Cunningham, state highway engr., Oklahoma City, constructing 31.0729 mi. gravel roads, 8 in. thick, with asphaltic oil carpet coat, 18 ft. wide, from Ft. Smith, Ark., to Poteau, Okla., Federal Aid Project 84, Le Flore Co., Sects. A, B, C, and D, 93,311 cu.yd. earth excav., 120,257 cu.yd. borrow, 2,813 cu.yd. concrete, 764 ft. 12-36 in. vitr. clay tile, 2,371 ft., concrete pipe, 86,920 cu.yd. gravel surface, 153,473 yd. gravel per half mi. yd. overhaul, 12,685 sta.yd. earth overhaul, 327,666 sy.yd. asphalt oil surface, 93,538 lb. reinforcing, 125,000 lb. fabricated steel.

Utah—Nov. 20, by State Rd. Comn., Salt Lake City, grading and gravel surfacing 7.459 mi. Federal Aid Project 42 A, from Heber City to Hailstone, 18 ft., Wasatch Co.; furnishing and fabricating 61,500 lb. structural steel, (separate bids for erection) 63 ft. span bridge over Provo River, Wasatch Co. H. C. Means, state highway engr.

Calif., San Francisco—City and San Francisco Co. receiving bids improving Buchanan St. between Herman and Duboce Aves., 22,091 cu.yd. excav., 623 lin.ft. concrete curb, 370 lin.ft. 8 in. sewer, 4,364 sq.ft. brick pavement, 7,715 sq.ft. asphaltic concrete pavement. $34,000. M. M. O'Shaughnessy, city engr. No bids received Nov. 8.

Quebec—Dec. 30, by J. L. Boulanger, deputy minister of highways, Quebec, waterbound macadam on 5.75 mi. Laprairie-Valleyfield Highway, in St. Timothee and Lac St. Louis Parishes, M. Nectkar, ch. engr.

Quebec—Dec. 30, by J. L. Boulanger, deputy minister Dept. Rds., Quebec, building 14.2 mi. Grande Baie-St. Bruno Highway, gravel on 6.5 mi. in St. Bruno, waterbound macadam on 1.8 mi. in Jonquiere, 4 mi. in Chicoutimi, and 1.9 mi. in Bagotville; also graveling 17.1 mi. Beauceville-Sherbrooke Highway. M. Nectkar, ch. engr.

BIDS RECEIVED

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., opened bids Nov. 10, repaving (1) 27th St. (2) 30th St., both sheet asphalt, (3) Mulberry St. (4) Mott St., both granite block, grading (5) Chittenden Ave., grading, curbing and flagging (6) Pinehurst Ave., from M. Del Balso, 660 East 221st St., (1) $31,740 (2) $21,021; H. E. Fox Contg. Co., 81 East 125th St., (1) $33,643 (2) $22,695; Burnside Contg. Co., 270 Burnside Ave. (1) $33,763 (2) $23,643; P. Cramer, 114 East 52nd St., (3) $2,966 (4) $9,381; D. J. McCarthy, 88 Audubon Ave., (3) $3,131 (4) $10,399; P. J. Kearns, 2306 Creston Ave., (3) $3,565 (4) $10,994, Sicilian Asphalt Paving Co., 41 Park Row, (5) $17,416 (6) $20,915; Asphalt Constr. Co., 208 Bway., (5) $19,433 (6) $24,139; Brusstar Constr. Co., Harlem River and 150th St., (5) $19,963; Interboro Asphalt Co., 2306 Custom Ave., (6) $23,689. Noted Nov. 2.

Louisiana—State Hy. Comn., Redmond Bldg., Baton Rouge, opened bids Nov. 7, grading and gravel surfacing (1) 3.98 mi. Sect. A, Project 8, Ruston-Arcadia Highway (2) 10.48 mi. Sect. A, Project 110, Ruston-Arcadia Highway, from C. W. George & Co., Shreveport, (1) $15,142 (2) $65,624; Meyer-Greenwall Contg. Co., Monroe, (1) $15,231; A. M. Wilkes, (2) $66,000 Noted Oct. 26.

Kentucky—State Hy. Dept., Frankfort, grading and surfacing with rock asphalt 0.415 mi. Pineville-Middlesboro Rd., State Project 6, Sect. C, Bell Co., from Davis & Graham, Pineville, using vitr. pipe $17,441, concrete pipe $17,507, c.i. pipe $17,654; grading 6.363 mi. Virginia State Line—Lynch Rd., State Project 56, Sect. A, Harlan Co., from R. G. Hill, Knoxville, Tenn., (street address not available), 39 acres clearing at $50 per acre, 46,830 cu.yd. earth excav. $0.32, 46,835 cu.yd. loose rock excav. $0.38 182,771 cu.yd. solid rock excav. $0.68, 4,760 cu.yd. borrow $0.38, 80,538 sta. yd. overhaul $0.02, 617 cu.yd. cement rubble masonry $10, 42,890 lb. reinforcing $0.07, 2,080 lin.ft. 18 in. rein-con. pipe $3.04, 720 lin.ft. 24 in. rein.-con. pipe $4.07, etc., total $192,476, Sutton Constr. Co., Ashland, $193,350, Dempster Constr. Co 721 North Central St. Knoxville, Tenn., $206,361. Noted Nov. 2.

Mich., Detroit—Grading, shaping and paving with one course rein.-con., (1) Alley 1611 (2) Alley 1612 (3) Alley 1613 (4) Alley 1614 (5) Alley 1615 (6) Alley 1616 (7) Alley 1617 (8) Alley 1618 (9) Alley 1619 (10) Alley 1620 (11) Alley 1621 (12) Alley 1622 (13) Alley 1623 (14) Alley 1624 (15) Alley 1625 (16) Alley 1626 (17) Alley 1627, from T. E. Currie, 20 McGraw Bldg. (1) $9,694 (9) $4.307; Otis Cement Constr. Co., 806 Hammond Bldg., (1) $10,099 (3) $1,630 (4) $1,490 (6) $4.809 (7) $2,610 (8) $5,577 (9) $4,412 (10) $1,309 (12) $1,273 (13) $2,161 (14) $1,296 (15) $4,718 (16) $7,142 (17) $1,782; R. J. Powelson Co., 6415 Iroquois Ave., (1) $10,099 (2) $2,326 (3) $1,618 (4) $1,513 (5) $4,925 (6) $4,904 (7) $2,692 (8) $5,515 (9) $4,412 (10) $1,334 (12) $1,297 (13) $2,204 (14) $1,319 (15) $4,693 (16) $7,333 (17) $1,826; G. Nunn, 6409 3rd Ave., (2) $2,247 (3) $1,563 (5) $5,135 (11) $1,488; Smith Trucking Co., 3325 West Euclid Ave., (2) $2 264 (5) $4,923 (11) $1,495.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, portland cement concrete paving (1) 4.88 mi. Route 2, Sect. 52, De Witt Co. (2) 4.88 mi. Route 2, Combination A, De Witt Co., incl. 1 steel bridge (3) 5.04 mi. Route 3, Sect. 8, Rock Island Co. (4) 3.75 mi. Route 3, Sect. 9, Rock Island Co. (5) 2.37 mi. Route 3, Sect. 10, Rock Island Co. (6) 11.16 mi. Route 3, Combination B, Rock Island Co. (7) 3.75 mi. Route 3, Combination C, Rock Island Co., incl. 1 bridge (8) 11.16 mi. Route 3, Combination D, Rock Island Co. incl. 1 bridge, (9) 5.2 mi. Route 3, Sect. 18, Rock Island Co. (10) 6.82 mi. Route 4, Sect. 5, Grundy-Will Co. (11) 13.11 mi. Route 4 and Project 25, Combination Q, Grundy-Will Co. (12) 1.66 mi. Route 6, Sect. 29, Whiteside Co. (13) 6.2 mi. Route 9, Sect. 6, Tazewell Co. (14) 3.71 mi. Route 14, Sect. 1, Perry Co. (15) 5.24 mi. Route 14, Sect. 3, Perry-Franklin Co. (16) 8.95 mi. Route 14, Combination E, Perry-Franklin Co. (17) 3.22 mi. Route 15, Sect. 19, Wayne Co. (18) 3.35 mi. Route 15, Sect. 20, Wayne Co. (19) 6.57 mi. Route 15, Combination F, Wayne Co., (20) 6.57 mi. Route 15, Combination G, Wayne Co. incl. 2 grading sections, (21) 7.99 mi. Route 17, Sect. 3, Marshall Co. (22) 5.85 mi. Route 17, Sect. 4, Marshall Co. (23) 13.84 mi. Route 17, Combination H, Marshall Co. (24) 4.12 mi. Route 18, Sect. 13 C. Kendall Co. (25) 2.29 mi. Route 18, Sect. 14-C, Kendall Co. (26) 6.41 mi. Route 18, Combination K, Kendall Co. (27) 4.26 mi. Route 20, Sect. 15, McHenry Co. (28) 5.82 mi. Route 25 Sect. 33, Iroquois-Ford Co. (29) 5.98 mi. Route 25, Sect. 34, Iroquois Co. (30) 6.5 mi. Route 25, Sect. 35, Iroquois Co. (31) 18.3 mi. Route 25, Combination I, Iroquois-Ford Co. (32) 3.32 mi. Route 25, Sect. 38, Kankakee-Iroquois Co. (33) 3.2 mi. Route 25, Sect. 39, Kankakee Co. (33a) 8.66 mi. Route 25, Combination J, Kankakee Co. (34) 2.92 mi. Route 28, Sect. 3, Knox Co. (35) 6.82 mi. Route 37, Sect. 4, Franklin Co. (36) 6.29 mi. Project 25, Sect. 6, Grundy Co. (37) 3.64 mi. Project 38, Sect. 46, Schuyler Co. (38) 3.64 mi. Project 38, Combination L, Schuyler Co. incl. 1 grading section, (39) 2.5 mi. Project 38, Sect. 47, Schuyler Co. (40) 6.14 mi. Project 38, Combination S, Schuyler Co. (41) 6.14 mi. Project 38, Combination T, Schuyler Co. incl. 1 grading section; grading (42) 93,316 cu.yd. excav. Route 3, Sect. 23-A, Mercer Co. (43) 263,700 cu.yd. Route 12, Sect. 24-A, Clinton Co. (44) 20,375 cu.yd. Route 15, Sect. 19-A, Wayne Co. (45) 28,285 cu.yd. Route 15, Sect. 20-A, Wayne Co. (46) 48,660 cu.yd. Route 15, Combination M, Wayne Co. (47) 46,700 cu.yd. Route 16, Sect. 13-A, Shelby Co. (48) 23,610 cu.yd. Route 25, Sect. 12-A, Effingham Co. (49) 39,630 cu.yd. Route 25, Sect. 13-A, Effingham-Shelby Co. (50) 13,460 cu.yd. Route 25, Sect. 14-A, Shelby-Cumberland Co. (51) 76,700 cu.yd. Route 25, Combination N, Effingham-Shelby-Cumberland Co. (52) 15,267 cu.yd. Project 25, Sect. 6-A, Grundy Co. (53) 33,815 cu.yd. Project 38, Sect. 46-A, Schuyler Co., from

Verhey Constr. Co., Champaign, (1) $119,257 (21) $134,153 (28) $120,447 (29) $130,406 (30) $156,019.

L. S. Kuhn, Bloomington, (1) $110,550 (23) $57,021 (42) $46,647.

R. F. Conway, 133 West Washington St., Chicago, (1) $112,446 (3) $122,726 (4) $93,905 (5) $62,093 (6) $255,300 (10) $141,881 (11) $211,146 (24) $86,211 (25) $48,499 (26) $130,340 (32) $70,979 (33) $114,400 (33a) $169,000 (36) $89,660.

H. W. Horst, Horst Bldg., Rock Island, (4) $94,437 (5) $62,600 (9) $118,927.

Wright Constr. Co., 211 Flynn Blk., Des Moines, Ia., (6) $254,615 (9) $139,519.

F. C. Nelson, Racine, Wis., (8) $329,900.

Cass Constr. Co., Des Moines, Ia. (street address not available), (3) $126,085.

N. B. Ridge, Sterling, (12) $41,280.

W. O'Neill Sons Co., Faribault, Minn., (3) $116,979 (4) $87,771 (5) $58,466 (6) $242,595.

Layton Constr. Co, Muscatine, Ia., (8) $342,000 (34) $75,773.

Capitol Constr. Co., 1207 Cherry St., Des Moines, Ia., (9) $144,584.

Chicago Heights Coal Co., Chicago Heights, (11) $214,000.

Powers & Thompson, Joliet, (10) $158,356 (11) $206,348 (52) $8,797.

Stressenreuter Bros., 3020 South Halsted St., Chicago, (10) $145,615 (22) $119,057 (30) $155,252 (36) $90,846.

Booth & Gilcrist, Gardner, (36) $94,770 (52) $9,861.

Hoffman & Small, Lincoln, (13) $153,790.

Jansen & Schaffer, Pekin, (13) $163,104 (23) $254,458.

J. Awe, Lincoln, (13) $171,161.

Illinois State Constr. Co., Chicago, (street address not available), (12) $37,234 (27) $96,075.

E. Berns & Co., Indianapolis, Ind., (street address not available), (14) $93,151 (15) $129,170 (16) $202,109 (50) $12,227 (51) $56,629

Wabash Constr. Co., Vincennes, Ind., (14) $84,717 (15) $117,418 (16) $192,029.

H. H. Hall Constr. Co., Murphy Bldg., East St. Louis, (14) $75,272 (15) $115,740 (16) $185,000.

A. J. Parrish, Paris, (19) $124,747.

Nelson Bros. & Co., Jerseyville, (18) $65,788.

Foulkes Constr. Co., 705 Ohio St., Terre Haute, Ind., (19) $120,000 (17) $64,953 (20) $156,000 (35) $128,333.

O. Arnold, Casey, (17) $53,493 (18) $57,723 (20) $139,400 (35) $119,471 (44) $15,172.

Indiana Road Paving Co., Indianapolis, Ind., (street address not available), (22) $115,982.

Alzina Constr. Co., Springfield, (street address not available), (21) $153,868 (23) $251,956 (29) $131,863 (31) $359,800 (47) $16,503.

W. D. Lownergan Co., (address not available), (21) $142,251 (22) $109,571 (23) $243,032.

H. Zauper, Mendota, (24) $84,590 (25) $49,204 (26) $131,500.

Trompeter & Sons, Peru, (26) $127,500.

Dunn Constr. Co., Chicago, (street address not available), (24) $87,086 (25) $45,912 (27) $102,920.

C. E. Giertz & Son, (address not available), (27) $101,166.

W. C. McNeely Co., (address not available), (28) $123,616 (31) $369,000.

C. W. Clark Co., Clinton, Ind. (street address not available), (28) $111,076 (29) $119,587 (30) $146,405 (31) $357,500.

French Constr. Co., Fairfield, (17) $53,956 (18) $56,798 (20) $142,000 (44) $14,778 (45) $18,143.

Warner Constr. Co., 106 North La Salle St., Chicago, (32) $74,602 (33) $114,499.

Skangs & Gannon, Watseka, (32) $72,113 (33) $110,200 (33a) $159,000.

C. E. Hamilton, Carbondale, (35) $129,110.

Russel-Condon Constr. Co., Rushville, (37) $106,684 (39) $67,935 (41) $168,320.

F. B. Rees, 1710 Lind St., Quincy, (37) $85,852 (39) $61.549 (41) $172,000 (53) $24,913.

Lamereaux Bros., 805 Brandeis Theatre Bldg., Omaha, Neb., (42) $43,904.

Coopers Constr. Service Co., St. Louis, Mo., (street address not available), (46) $35,600 (51) $62,000 (53) $23,398.

Tennell-Foothacker, Patoka, (47) $16,734.

Buis & Olsen, St. Joseph, Mo., (street address not available), (42) $48,102.

M. B. Gates, Lincoln, (43) $55,328.

Rood Constr. Co. (address not available), (43) $63,354.

D. C. Jordan, (address not available), (44) $11,444 (45) $14,404.

W. B. Kelley, St. Joseph, Mo. (street address not available), (45) $19,645 (46) $31,810.

C. D. Mautz, Benton, (47) $17,521 (49) $25,916 (50) $11,834.

W. Frazier, Louisville, (48) $18,210.

C. J. Moritz, Effingham, (48) $17,978 (50) $12,099 (51) $57,480.

Mautz & Oren, Effingham, (48) $17,284 (49) $27,758.

Ozee & Hayes, Mattoon, (49) $28,808.

W. Shank, Wilmington, (52) $10,811.

A. O. McCoy, Mt. Sterling, (53) $19,545. Noted Oct. 19 and 26.

Ia., Des Moines—Paving 7,626 sq.yd. Dean Ave. from 30th to 34th Sts., incl. necessary grading, from Bemis & Schlick, Brown Hotel, $2.34 per sq.yd. for concrete; J. Horrabin Co., 1422 Walnut St., $2.34 per sq.yd. concrete; Wright Constr. Co., Flynn Bldg., $2.95 per sq.yd. sheet asphalt. Engrs. est. $25,000.

Missouri—State Hy. Dept. at div. office Greenfield, opened bids Oct. 20, 4.029 mi. road from Lamar to Springfield, 12 ft., Federal Aid Project 159 A, Dade Co., (1) 15,229 cu.yd. earth excav. (2) 297 cu.yd. rock excav. (3) $3,050 cu.yd. borrow (4) 28,481 sq.yd. specification C gravel pavement, etc., from R. H. Sharp, Reeds Spring, (1) $0.42 per cu.yd. (2) $2 (3) $0.42 (4) $0.50 total $25,360; Carterville Constr. Co., Carterville, (1) $0.46 (2) $2 (3) $0.45 (4) $0.47, $26,098; Johnson & Ridge, Warrensburg, (1) $0.50 (2) $2 (3) $0.30 (4) $0.50, $26,722. Noted Oct. 26.

Missouri—State Hy. Dept. at div. office Ironton, opened bids Oct. 20, 11.26 mi. road from Ironton to Potosi, 12 and 16 ft., Federal Aid Project 107 A, Iron Co., (1) 7,650 lin.ft. grading (2) 13,724 sq.yd. broken stone base course (3) 13,724 sq.yd. bituminous macadam surface course (4) 750 cu.yd. additional rock for shoulders (5)

Streets and Roads (Continued)

70,180 sq.yd. gravel surfacing, from W. M. Campbell Equipment Co., Minneapolis, Minn., (street address not available) (1) $0.12 and $0.12 per cu.yd. (2) $0.90 and $1.10 (3) $0.88 and $0.88 (4) $2.80 and $3.20 (5) $0.35 and $0.35, total $57,136 and $60,173; W. J. Knorpp & J. Richardson, De Soto, (1) $0.183 (2) $0.40 (3) $0.99 (4) $1.60 (5) $0.50, $62,983. Noted Oct. 12.

Missouri—State Hy. Dept., at div. office Platte City, opened bids Oct. 20, 13.687 mi. road on Jefferson Highway, 24 ft., Federal Aid Project 96, Platte Co., (1) 90,773 cu.yd. earth excav. (2) 4,300 cu.yd. rock excav. (3) 13,649 cu.yd. borrow, etc., from Diemer Williamson Constr. Co., Brookfield, (1) $0.30 per cu.yd. (2) $1.80 (3) $0.26, total $54,785; Land Constr. Co., Ballinger Bldg., St. Joseph, (1) $0.298 (2) $1.45 (3) $0.298, $54,979; H. C. Botsford, Tonganoxie, Kan., (1) $0.30 (2) $2 (3) $0.30, $57,447. Noted Oct. 12.

Tex., Ballinger—Runnels Co. grading, scarifying old base and surfacing various main streets, (a) crushed stone base with vitr. brick surface, (b) concrete base with 2 in. hot mix Uvalde rock asphalt (c) concrete base and 2 in. bitulithic concrete (d) concrete base with 2 in. Warrenite bitulithic (e) 7 in. cement concrete pavement, from J. B. Toomey, Ft. Worth, (street address not available) (a) $110,017; Jordan Constr. Co., Plainview, (a) $111,745; Smith Bros., Central State Bank Bldg., Dallas, (a) $116,091, (c) $94,791; Kaw Paving Co., 616 New England Bldg., Topeka, Kan., (a) $118,345, (b) $110,020, (c) $102,369, (d) $108,812. Noted Oct. 5.

Tex., Georgetown—Williamstown Co. surfacing 11.5 mi. State Highway 2-C, between here and Travis Co. line, 16 ft., (a) cold rolled ¾ in. natural rock asphalt, (b) cold rolled 1 in. natural rock asphalt, from W. E. Dozier, 230 Austin Natl. Bank Bldg., Austin, (a) $56,325 (b) $62,282; C. E. Hoff, 220 Linares St., San Antonio, (a) $55,242 (b) $67,157; Smith Bros., 308 Sumpter Bldg., Dallas, (a) $58, 953 (b) $67,658; inverted penetration method (1a) 1 in. limestone filler (1b) 1½ in. limestone filler (2a) 1 in. limestone and trap rock filler (2b) 1½ in. limestone and trap rock filler (3a) 1 in. all trap rock filler (3b) 1½ in. all trap rock filler, from Haden & Austin, Box 1223, Houston (1a) $35,745 (1b) $50,909 (2a) $40,077 (2b) $56,324 (3a) $46,576 (3b) $69,323; Rice & Bates, Austin, (1a) $38,994 (1b) $51,992 (2a) $44,410 (b) $57,408 (3a) $48,743 (3b) $68,240; S. E. Finley & Hannah Constr. Co., Waco, (1a) $34,282 (1b) $51,689 (2a) $40,456 (2b) $57,105 (3a) $47,660 (3b) $68,727.

Tex., Lufkin—Angelina Co., clearing, grading and gravel surfacing 13.54 mi. State Highway 7, between Huntington and Zavalla, 16 ft., 1,292.4 cu.yd. concrete, 49,145 cu.yd. roadway, 51,453 cu.yd. borrow, 107,341 lb. reinforcing, 28,332 cu.yd. gravel surfacing, from J. S. Moore & Sons, Lufkin, $160,356; J. Thompson, San Augustine, $176,108; F. P. McElwrath, Corsicana; $178,924. Engrs. est. $181,540.

Calif., Bakersfield—Improving Oak St., (1) 172,800 sq.ft. grading (2) 129,600 sq.ft. 1½ in. warrenite bitulithic on 4 in. asphaltic concrete (3) 14,400 lin.ft. headers, from Federal Constr. Co., Call Bldg., San Francisco, (1) $0.058 (2) $0.237 (3) $0.16; Thompson Bros., G and Divisadero Sts., Fresno, (1) $0.065 (2) $0.24 (3) $0.15. Noted Oct. 5.

Calif., Fresno—Improving Weldon Ave., (1) 75,830 sq.ft. grading (2) 58,165 ft. asphalt (3) 5,260 ft. concrete gutter, (4) 6,630 ft. cement walks, (5) 1,340 ft. concrete curb, from Thompson Bros., G and Divisadero Sts., (1) $0.57 (2) $0.219 (3) $0.35 (4) $0.225 (5) $0.65; Federal Constr. Co., Call Bldg., San Francisco, (1) $0.059 (2) $0.227 (3) $0.33 (4) $0.23 (5) $0.62; California Road & Street Impvt. Co., Bank of Italy Bldg., (1) $0.066 (2) $0.219 (3) $0.33 (4) $0.23 (5) $0.62.

Calif., Gustine—Opened bids 1210 cu.yd. 5 in. concrete pavement, from Frederickson & Shannon, Cory Bldg., Fresno, $28,190; F. A. Mero, Richmond Roofing Co., 401 16th St., Richmond, $28,890; N. M. Ball, Masonic Bldg., Porterville, $29,701.

Que., Montreal—J R. Bauset, city clk., opened bids asphalt pavements on (1) Marguerite Bourgeois St. (2) Decastelneau St. (3) Hanatoux St., concrete sidewalks, (4) Hadley St. (5) Hochelaga St. (6) DeRazilly St. (7) Clarke St., from Duranceau & Duranceau, 152 Hamilton St., (1) $11,124 (5) $5,235 (6) $2,456 (7) $2,228; Quinlan, Robertson & Janin, Ltd., 52 Duluth Bldg., (1) $11,738; Sicily Asphaltum Paving Co., 60 St. Viateur St., (2) $7,184 (3) $10,891; B. Brault Ltd., 2855 Rosemound Blvd., (2) $7,576 (3) $11,190; F. Lapan, 601 Lacordaire St., (4) $4,773; Boyd, Rossi & Devito, 409 St. James St., (6) $4,557; A. Kelly, 2310 St. Denis St., (7) $2,493. Noted Oct. 19.

CONTRACTS AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading and laying sidewalks on Fresh Pond Rd. and Woodside Ave., to E. Block, Woodhaven, $12,440 and $7,620 respectively. Noted Nov. 2.

N. Y., Rochester—Laying sidewalks and grading Devonshire Court, to J. Passero, Rochester (street address not available) $11,465; paving Clinton Ave. N. bitulithic, to J. Friedrich Co., Inc., Rochester (street address not available) $24,889; Cummings St., asphalt block, to J. Petrossi Co., Rochester (street address not available) $32,167. Noted Aug. 10.

Pa., Phila.—Asphalt pavements on (1) 67th Ave., Luray and 17th St. (2) Annsburry, Delphine, Chew, Gale and Lindley Sts. (3) Landsdowne Ave. (4) Bridge, Bouvier and Clarkson Sts., to Eastern Paving Co., Colonial Trust Bldg., (1) $26,836 (2) $27,912 (3) $40,732; to D. DeLisle, 4842 Lithgow St., (4) $27,062. Noted Nov. 9.

Maryland—State Rds. Comn., Baltimore, grading, draining and surfacing roads, Contr. HO-26, Howard Co., to Thomas, Bennett & Hunter, Westminster, $70,913; Contr. AA-26, Anne Arundel Co., to Taylor & Truman, Sollers, $14,545. Noted Oct. 19.

N. C., Thomasville—Paving various streets, 1½ in. asphalt on 4 in. concrete, also cement concrete sidewalks, to R. G. Lassiter & Co., Citizens Natl. Bank Bldg., Raleigh, $84,000.

S. C., Charleston—Sanitary & Drainage Comn., 39 Broad St., constructing 9.55 mi. road between Tide Water Creek and Atlantic coast line crossing, near Meggets, to Simons & Mayrant, Charleston, (street address not available). $283,000. Noted Sept. 28.

Ga., Atlanta—To McDougald Constr. Co.. 419 Healey Bldg., paving Hopkins St. from Lucile Ave. to Louisville & Nashville R.R., Washita St. from Highland to Sinclair Aves., vibrolithic concrete with stone, $2.29 per sq.yd., Boulevard Pl. from Boulevard to Arnold Sts., vibro-stone $2.19 per sq.yd., 4th St. from Peachtree to West Peachtree Sts. Asphalt on present base $1.50, Prado St. from Westminster Dr. to Peachtree Circle, asphalt on present base $1.70; to Jamison & Hallowell, Chandler Bldg., Hill St. from Woodward to Georgia Ave., North Ave. from Goldsboro to Mayson Aves., South Ponce de Leon Ave. from Moreland Ave. to Fairview Rd., vibro-slag $2.12 per sq.yd.

Fla., Homestead—Improving town streets, 44,500 sq.yd. one course broken stone, 17,600 sq.yd. two course broken stone, 20,000 sq.yd. first course for penetration, 1,500 cu.yd. grading, to T. B. McGahey, Miami, $45,068. Noted Nov. 2.

O., Columbus—Grading, curbing and paving 1,174 ft. Chestnut St., asphalt-granite circles, to Cleveland Trinidad Paving Co., The Arcade, Cleveland, $25,478. Noted Nov. 2.

Ia., Ft. Madison—Lee Co. grading 23.55 mi. Primary Rd. Project 149, from Keokuk northwest, 26 ft., to Cameron, Joyce & Co., Keokuk, 236,447 cu.yd. clay excav. $0.249 per cu.yd. Noted Oct. 26.

Ia., Toledo—Tama Co. to J. C. Parquette, 2347 Capitol Ave., Des Moines, grading 15.95 mi. Primary Rd. Project 6, east and west of Tama, 311,344 cu.yd. excav. $0.25 per cu.yd., 6.78 mi. primary road from Gladbrook east, 80,203 cu.yd. loam and clay excav. $0.25 per cu.yd. Noted Oct. 19.

Minn., Grand Marais—Cook Co. grading and bridging 14 mi. State Project 1-05, Federal Aid Project 298, 24 ft., incl. bridges 3900 and 3902 each 30 ft. deck girder, to Campbell Ames Co., 402 Manhattan Bldg., Duluth, $162,000. Noted Oct. 10.

Kan., Garden City—Finney Co., concrete paving 1.356 mi. various roads to M. R. Ammerman, Wichita, 2,595 cu.yd. earth excav. $0.40, 8,350 cu.yd. borrow $0.35, 11,746 sq.yd. 2 course concrete $2.57; etc., total $61,361.

Kan., Hutchinson—Asphalt paving Sherman and Popular Sts., to J. H. Shears & Son, Hutchinson, $48,068.

Kan., Iola—Allen Co. paving 4,046 mi. Fort Scott Wichita Highway, Federal Aid Project 125-A, 18 ft., to L. L. Beye, 1019 South Denver St., Eldorado, 16,000 cu.yd. earth $0.40, 455 cu.yd. borrow $0.50, 333.4 cu.yd. Class A concrete $18.50, 48,255 reinforcing $0.05, 45,360 sq.yd. one course 7 in. concrete $2.30, etc., total $119,739; 90 ft. rainbow concrete arch bridge sta. 52 plus 20, 20 ft. roadway, to Walters & Schermerhorn, 335 cu.yd. dry earth excav. $1.50, 214.9 cu.yd. Class A concrete $23, 19,746 lb. reinforcing steel, $0.05, 16,150 lb. structural steel $0.07, etc., total $9,322.

Kan., Topeka—Shawnee Co., to Ritchie & Ramsey, Topeka, concrete paving, 4.016 mi. road from Meriden Spur to Capitol Highway, Federal Aid Project 86, 6,024 cu.yd. earth excav. $0.75, 43,298 sq.yd. 1 course concrete $2.65, 1,100 lb. reinforcing $0.06, etc., total $121,342, 4.03 mi. Capitol Highway, Federal Aid Project 46, Sect. A, 6,045 cu.yd. earth excav. $0.75, 43,031 sq.yd. 1 course concrete $2.65, etc., total $126,013.

Montana — State Hy. Comn., Helena, grading, gravel surfacing and building structures on 10.64 mi. Belt-Riseville Rd., Federal Aid Project 73, Proposal A, Cascade Co., to White, Brown & Leahy, Ford Bldg., Great Falls, $109,729. Noted Oct. 19.

Missouri—State Hy. Dept., Jefferson City, 5 mi. road from Centreville southward, 24 ft., State Project Route 21, Sect. 24, Reynolds Co., to Coopers Constr. Service Co., St. Louis (street address not available), $33,622. Noted Oct. 12.

Tex., Daingerfield—Morris Co., clearing, grading and gravel surfacing 2.81 mi. State Highway 1, to Standifier & Wood, Royse City, $34,560. Noted Oct. 26.

Tex., Houston — Paving La Branch St. from Texas to Holman Aves., to Smith Bros., Sumpter Bldg., Dallas, 11,000 cu.yd. excav. $0.70, 32,750 sq.yd. 6 in. concrete base $1.40, 13,300 lin.ft. combined curb and gutter $1, 34,250 sq.yd. asphaltic concrete surface $1.60, 34,250 sq.yd. 2 in. bitulithic surface $1.60, 34,250 sq.yd. 2 in. rock asphalt surface $1.70, etc., total $126,943, (170 working days). Noted Oct. 5.

Tex., New Boston—Bowie Co. gravel surfacing 16.81 mi. State Highway 1, Job 19-H, Federal Aid Project 313, to Smith Brothers, Sumpter Bldg., Dallas. $173,525. Noted June 15.

Tex., San Angelo—Tom Green Co., grading, gravel surfacing and bituminous topping 15.41 mi. State Highway 4, 18 ft., 1,375 cu.yd. earth, 2,104 cu.yd. loose and 20,894 cu.yd. solid rock excav. 114,776 gal. asphalt, 5,246 cu.yd. cover material, 20,894 cu.yd. crushed rock, 12,958 cu.yd. gravel, to J. C. Field Co., Denison, $95,864. Engrs. est. $105,450.

Okla., Duncan—Paving Dists. 17, 19 and 20, 33,000 yd. asphaltic concrete, to Western Paving Co., 1 West Chickasaw St., Oklahoma City, $61,691.

Okla., Sayre—For 7,500 yd. concrete paving in Dist. 4, to Pearce Constr. Co., Edmonds, $34,445.

Idaho, Bonners Ferry—Boundary Co., grading and gravel surfacing 10.21 mi. North and South Highway, Federal Aid Project 62, 125,100 cu.yd. earth and 200 cu.yd. rock excav., 14,000 cu.yd. gravel, etc., to Morrison-Knudsen, Railroad and Reclamation Ave., Boise, $91,495 plus 10% for engineering and contingencies.

Utah—State Rd. Comn., Salt Lake City, grading and gravel surfacing 6.962 mi. Sardine Canyon, 18 ft., Federal Aid Project 33, Boxelder Co., to O. Nelson, Arimo Bldg., Logan, 16,935 cu.yd. common excav. at $0.20 per cu.yd., 68,875 cu.yd. unclassified excav. $0.85, 20,100 cu.yd. borrow $0.30, 13,530 cu.yd. surfacing loading, $1.30, 5.700 mi. surfacing hauling, 6.962 mi. surfacing placing, $500, etc., total $104,194; grading and hard surfacing 6.413 mi. road from canal north of Magna to Tooele Co. line, 18 ft., Federal Aid Project 39, Salt Lake Co., to Moran Paving Co., Felt Bldg., Salt Lake Co., 14,800 cu.yd. common excav. at $1 per cu.yd., 6,500 cu.yd. solid rock excav. $2, 13,385 cu.yd. borrow $0.40, 68,725 sq.yd. plain concrete pavement $1.09, etc., total $187,086. Noted Oct. 19.

Calif., Fresno — Improving Thorne Ave. between Belmont and Hedges Sts., to California Road & Street Impvt. Co., Bank of Italy Bldg., $43,521. Noted Nov. 9.

Calif., Fullerton — Surfacing various streets with 3 in. warrenite bitulithic, to Los Angeles Paving Co., 2900 Santa Fe Ave., Los Angeles, $110,000.

Calif., Tracy—Improving portions of East 6th, 6th, West 4th and 4th Sts., to J. E Johnston, Stockton Savings Bank Bldg., Stockton, $47,616. Noted Nov. 9.

Que., Montreal — To Sicily Asphaltum Paving Co., 60 St. Viateur St., asphalt pavements, 8,300 sq.yd. on Casgrain St. $38,242, 2,100 sq.yd. Lacasse St. $11,925; to B. Brault Ltd., 2855 Rosemount Blvd., 6,300 sq.yd. DeChateaubriand St. $35,855, 3,500 sq.yd. Des Erables St. $18,160, 2,066 sq.yd. Bordeaux St. $9,912; to Quinlan, Robertson & Janin, Ltd., 52 Duluth Bldg., 3,643 sq.yd. Regent St. $17,122, 2,600 sq.yd. Belmore St. $13,550; also concrete sidewalks on following on 480 sq.yd. Belmore St. $2,448, 1,172 sq.yd. Regent St. $6,871; to Duranceau & Duranceau, 152 Hamilton St., 1,550 sq.yd. Notre Dame de Grace Ave. $9,550; to Boyd, Rossi & Devito, 409 St. James St., 1,211 sq.yd. Old Orchard Ave. $6,543; to Leger & Lamoureux, 78 Bernard St., 1,250 sq.yd. Laverdure St. $6,688, 4,400 sq.yd. DeLa Roche St. $16,280, 130 sq.yd. Lacasse St. $750, 300 sq.yd. Jeanne Mance St. $1,410; to F. Lapan, 601 Lacordaire St., 1,200 sq. yd. Rosemount Blvd. $4.428 and 1,000 sq. yd. 9th Ave., $3,690; to P. Desantis, 3929 St. Hubert St., 2,000 sq.yd. Laverdure St. $10,975; to Rondou, Corlier & Co., 3506 Christophe Colomb St., 900 sq.yd. St.

Streets and Roads (Continued)

Zotique St. $3,195. 139 sq.yd. Florence St. $535; to A. and R. Billett, 6158 Peloquin St., 175 sq.yd. Perras St. $1,249; to A. Laviolette, 709 Notre Dame St., 1,200 sq.yd. Christophe Colomb St. $4,390; to A. Kelly, 2310 St. Denis St., 430 sq.yd. Bellechasse St. $2,604. Noted Oct. 26.

Ont., Toronto — York Twp., grading Kingston Rd., Contr. 778, 40,000 to 60,000 cu.yd. earth excav. (shovel work) to Dufferin Constr. Co., Brass Bldg., $30,000.

Industrial Works

PROPOSED WORK

Mass., Fitchburg—Lockwood, Greene & Co., engrs., 24 Federal St., Boston, preparing plans and soon take bids 5 story, brick and steel addition to plant, to have 40,000 sq.ft. floor space, here, for Star Worsted Co., Fitchburg.

Mass., Holyoke — Bd. Pub. Wks., City Hall, plans 1 story garage and service station, brick, $80,000.

R. I., East Providence (Providence P. O.) —United Electric Rys. Co., Providence, having plans prepared 1 and 2 story, 170 x 535 ft. car house, concrete, brick and steel, North Bway., here. Private plans.

R. I., Providence—J. T. Avila, 11½ Governor St., plans 1 story, 15 ft. high, garage and repair shop, brick and steel, Hope and East Sts. $40,000. Private plans.

R. I., Providence—Goldberger & Steiner, Olneyville Sq., having plans prepared by G. Wolf, archt., 88 Althea St., 1 story garage, brick, concrete and steel, Library Court. $40,000.

R. I., Providence—W. F. and F. Hussey, 226 Williams St., plan 2 story garage, brick and steel, plain foundation, containing 7,200 sq.ft. floor space, Williams St. $40,000. Private plans.

R. I., Woonsosket—Rhode Island Knitting Co., Jeffers St., plans 2 story mill addition, rein.-con. $50,000. Private plans.

Conn., Hartford — Hartford "Courant," 64 State St., plans 2 story addition to plant. $50,000. I. A. Allen, Jr., Inc., 100 Farmington Ave., archts.

New York—Iroquois Natural Gas Co., Iroquois Bldg., Buffalo, plans gas plants in Arkport, Hanover, Perrysburg and Gowanda.

N. Y., Auburn—Lockwood, Greene & Co., archts. and engrs., 101 Park Ave., New York, soon take bids for new weave shed, machine shop and extensions to dyehouse and power plant, here, for Firth Carpet Co., 62 South Division St. $140,000.

N. Y., Buffalo—Crane & Co., 81 Bway., plans large brick and steel warehouse, Church and 4th Sts. $96,000.

N. Y., Buffalo—Standard Milling Co., c/o A. E. Baxter, engr. Ellicott Sq., having plans prepared flour mill, 30,000 bbl. daily capacity, outer harbor.

N. Y., New York—Natl. Biscuit Co., 85 9th Ave., soon takes bids 3 story, brick, steel and concrete garage and repair shop, plain foundation, 407 West 16th St. $65,000. J. R. Terrance, 85 9th Ave., archt. and engr.

N. Y., Oswego—Oswego Netherland Co. having plans prepared by McCormick Co., Inc., archts., Century Bldg., Pittsburgh, Pa., 1 story, 100 x 365 ft. ice cream plant, brick and concrete. $180.000.

N. Y., Jamestown—Lockwood, Greene & Co., archts. and engrs., Hanna Bldg., Cleveland, O., soon take bids 4 story, 75 x 175 ft. combing and spinning mill, brick, steel and concrete, here, for Jamestown Worsted Mills 335 Harrison St. Noted Sept. 21.

N. J., South River—Plans 50 x 400 ft. and 50 x 100 ft. refrigerator plant, brick and steel. $60,000. Owner's name withheld. Address M. Hammerschlag, c/o Chamber of Commerce.

N. J., Trenton—Castanea Dairy Co., 234 North Broad St., having plans prepared by W. A. Klemann, archt., 1st Natl. Bank Bldg., 3 story, 80 x 80 ft., brick and steel plant, North Broad St. $100,000.

N. J., Trenton—Jointless Fire Brick Co., 1130 Clay St., Chicago, plans 1 story, 72 x 250 ft. plant, New York Ave., here. $75,000.

Pa., Catasqua—Bryden Horse Shoe Co., 1 story, 60 x 198 ft. concrete and steel plant, to Belmont Iron Wks., c/o owner.

Pa., Lickdale—Blue Mountain Electric Co., Bethel, plans electric generating plant at Yost Mill, here. $125,000.

Pa., Lewistown — Penn Central Light & Power Co., 1809 Union Ave., Altoona, plans substation at viscose plant, here.

Pa., Monessen—Monessen Fdry. & Machine Co., plans to rebuild portion of shop recently destroyed by fire. $150,000. Architect not announced.

Pa., Phila.—Ballinger Co., archts., 12th and Chestnut Sts., soon takes bids 2 story and basement, 74 x 194 ft. and 1 story, 141 x 193 ft. rein.-con., brick and steel plant, plain foundation, 56th and Chestnut Sts., for Chilton Publishing Co., 49th and Market Sts. $50,000.

Pa., Phila.—Cold Blast Feather Co., 169 West Berks St., soon takes bids 2 story and basement, 100 x 153 ft. rein.-con., brick and steel factory, plain foundation, Tioga and Jarmey Sts. $70,000. H. R. Stackhouse, 129 South 5th St., archt.

Pa., Pittsburgh—Dusenberry Baking Co. having plans prepared by Rubin & Veshancey, archts., Union Arcade, 3 story and basement, 50 x 100 ft. brick and tile bakery, 3201-15 Forbes St. $100,000.

Pa., Pittsburgh—Studebaker Sales Co., 4724 Baum Blvd., having plans prepared by G. H. Schwan, archt., Peoples Bank Blvd., 2 story, 80 x 100 ft. rein.-con. garage, Baum Blvd. $40,000.

Pa., Scranton—Scranton Lace Co., Glenn St. and Albright Ave., plans new power house. $60,000.

Pa., Washington — H. Robinson, plans 3 story and basement, 65 x 102 ft. garage, rein.-con., steel and stucco on tile, Chestnut St. $40,000. Architect not selected.

Pa., Waynesburg—T. Cochran, Dawson, having plans prepared by H. W. Altman, archt., Fayette Title & Trust Bldg., Uniontown, 2 story and basement, 70 x 90 ft. brick garage, here. $40,000.

W. Va., Huntington—Carbocite Co., c/o S. J. Hyman, Day and Night Bank Bldg., plans 1 story factory. $100,000. Architect not selected.

N. C., Elizabeth City—Crystal Ice Co., having plans prepared by Ophuls & Hill, engrs., 112 West 42nd St., New York City, for improvements and 1 story addition to plant. $100,000.

N. C., Elizabeth City—See "Waterworks."

N. C., Greensboro—See "Miscellaneous" under Statesville.

La., Sterlington—Imperial Oil & Gasoline Products Co., plans large addition to refinery. $150,000.

O., Cleveland—C. C. Deming, 2517 Edgehill Rd., Cleveland Heights, plans 2 story, 60 x 80 ft., brick and steel garage and commercial building, 8120 Carnegie Ave. $40,000. Private plans.

O., Cleveland — International Harvester Co., Harvester Bldg., Chicago, plans 10 story and basement, brick and concrete warehouse and service station, East 55th St. and Julia Ave., here. $300,000. A. Price, c/o owner, archt. and engr.

O., Cleveland Heights (Warrensville P. O.)—See "Buildings."

O., Conneaut—North Eastern Oil & Gas Co., plans artifiicial gas plant in several units, 2,000,000 cu.ft. daily capacity. F. B. Dunn, pres.

O., Lockwood—Lockwood, Greene & Co., archts. and engrs., 822 Book Bldg., Detroit, Mich., preparing plans and soon take bids 80 x 240 ft. cotton storehouse, 35 ft. high, rein.-con., here, for Stearns & Foster Co., Lockwood. $100,000.

O., Martins Ferry—See "Waterworks."

O., Ravenna—Phillips Body Co., c/o Fisher Body Corp., Cass St. and Boulevard, Detroit, Mich., had plans prepared by Carter-Richards Co., archts., 923 Illuminating Bldg., Cleveland, altering and building 1 story 40 x 100 ft. brick and steel factory addition, here. $40,000.

O., Toledo—Chrevolet Motor Co., General Motors Bldg., Detroit, Mich., had plans prepared by A. Kahn, archt., 1000 Marquette Bldg., Detroit, Mich., 1 story, 15 ft. high 91 x 450 ft. transmission manufacturing plant, 1 story, 100 x 120 ft. heat treating building and 60 x 90 ft. power house, rein.-con., brick and steel, plain foundations, here.

Ind., Hartford City—Ft. Wayne Corrugated Paper Co., Murray and Barr Sts., Ft. Wayne, plans 1 or 2 story, brick plant. $70,000. Mills, Rhines, Bellman & Nordhoff, Ohio Bldg., Toledo, O., engrs.

Mich., Detroit—Bohn Fdry. Co., Hart Ave., having plans prepared by C. W. Brandt, Archt., 1114 Kresge Bldg., following additions to foundry, 2 story, 37x100 ft., 1 story 170 x 220 ft., 48 x 210 ft. and 55 x 240 ft. rein.-con., brick and steel, plain foundations, also 30 x 400 ft. concrete sand bin, Hart Ave. Cost to exceed $500,000.

Wis., La Crosse—Weisse Mfg. Co., Caledonia and Gillett Sts., plans 2 story, 50 x 100 ft., brick, rein.-con. and steel factory, plain foundation, Gillett St. $50,000. Architect not selected.

Wis., Madison — J. Heilprin Fruit Co., West Mifflin St., plans 2 story, 75 x 150 ft. cold storage warehouse, brick, rein.-con. and steel, plain foundation, Bedford St., $90,000. J. Heilprin, pres. Architect not selected.

Wis., Menomonie—E. V. Johnson plans 1 story and basement, 58 x 176 ft., brick and concrete garage, plain foundation, Main St., recently destroyed by fire. $40,000. Architect not selected.

Ia., Davenport—Linwood Stone and Cement Co., 713 Kahl Bldg., plans cement plant, 2,000 bbl. daily capacity. $1,500,000. Architect not selected.

Kan., Winfield—Stuber Bros. having plans prepared by L. Schmidt & Co., archts., 121 North Market St., Wichita, 1 story, 100 x 140 ft. service and sales building, rein.-con. and brick, $50,000.

Missouri—See "Miscellaneous."

Mo., Kansas City—Kellogg & Mackay Co., 21st and Walnut Sts., having plans prepared by Sunderland & Besecke, archts., 406 Interstate Bldg., and takes bids in about 2 weeks, 5 story and basement, 40 x 100 ft., rein.-con. and brick warehouse, 20th and Walnut Sts. $150,000. W. W. Huff, 314 Interstate Bldg., engr.

Mo., St. Louis—Haynes-Langenberg Mfg. Co., 4045-47 Forest Park Blvd., soon takes bids 3 story, 150 x 200 ft., rein.-con. and steel factory and office building, plain foundation, Kingshighway. G. F. Langenberg, 4045 Forest Park Blvd., archt. C. M. Morton, 4045 Forest Park Blvd., engr.

Mo., St. Louis—Light Development Co. of St. Louis, Ry. Exch. Bldg., having plans prepared for 20,000 k.w. power plant, on Mississippi River. $2,000,000.

Okla., Cement—See "Waterworks."

Okla., Wetumka—See "Waterworks."

Wash., Chelan—Great Northern Ry. Co. Havermale Island, Spokane, having plans prepared by W. A. Wells, archt. and engr., 601 Hyde Bldg., Spokane, ice manufacturing and cold storage plant, here. $400,000-$500,000.

Wash., Tacoma—See "Waterworks."

Ore., Portland—See "Buildings."

Calif., Dinuba—Dinuba Planing Mill plans planing mill, West Tulare St. Cost incl. equipment, $60,000.

Calif., Fresno—Fresno Consumers Ice Co., Mono and P Sts., plans 3 story annex, 90 x 96 ft., Mono St.

Calif., North San Diego—Vitrified Products Co., Spreckels Bldg., San Diego, plans plant near Atchison, Topeka & Santa Fe tracks, here. Cost incl. equipment, $250,000. V. Kraemer, pres.

Calif., San Francisco—Banner Refining Co., Kohl Bldg., having plans prepared by F. G. White, engr. for State Bd. Harbor Comn., Ferry Bldg., refining plant, incl. 2 corrugated iron buildings, oil storage tanks, machinery, etc. $84,000.

Calif., San Francisco—Richard Hellman Inc., 602 Jackson Ave., Long Island City, N. Y., having plans prepared by A. Toriggino, archt., Mills Bldg., 5 story and basement factory, rein.-con., on 75 x 245 ft. site, 20th and Harrison Sts., here. Total, incl. site, $250,000.

Calif., San Francisco—General Mfg. Co., Pacific Bldg., had plans prepared by W. W. Hanscom, archt., 848 Clayton St., 1 story, factory, concrete and frame, San Bruno Ave. $40,000.

Calif., San Francisco—L. R. Lurie, Mills Bldg., having plans prepared by A. S. Bugbee, archt., 26 Montgomery St., 2½ story and basement, 62 x 137 ft. rein.-con. garage, Sacramento St. near Polk St. $54,000.

Ont., Aylmer—J. L. Thayer & Son having plans prepared garage and repair shop. $40,000.

Ont., Toronto — Toronto Motor Car Co. Ltd., 52 Jarvis St., having plans prepared by L. E. Dowling, archt., 167 Yonge St., 3 or 4 story and basement, concrete, brick and steel garage and service station, Jarvis St. $100,000.

B. C., Vancouver—False Creek Lumber Co., 6th Ave. W., having plans prepared lumber mill. $150,000. Private plans.

BIDS DESIRED

N. Y., Rochester—Powertown Tire Corp., 253 East Ave., taking bids 4 story, 40 x 60 ft. addition to service station. $50,000. Hutchinson & Strutz, Cutler Bldg., archts. Noted Aug. 10.

Pa., Phila.—Amer. Ice Co., 6th and Arch Sts., and C. L. Weir, engr., 41 East 42nd St., New York City, receiving bids 2 story, 61 x 80 ft. and 1 story, 21 x 80 ft. rein.-con., brick and steel, plain foundation, Duncannon and Mascher Sts.

Pa., Phila.—Ballinger Co., archts., 12th and Chestnut Sts., taking bids 8 story and basement, 60 x 85 ft. rein.-con., brick and steel plant, plain foundation, 4th and Arch Sts., for Ketterlinus Lithographic Co., 4th and Arch Sts. $250,000.

Pa., Phila.—F. Weber, archt., Norris Bldg., taking bids 8 story and basement,

Industrial Works (Continued)

95 x 180 ft. rein.-con., brick and steel plant, plain foundation, $250,000. Owner's name withheld.

Pa., Phila.—Duffy Bros., 3255 North Front St., receiving bids 1 and 2 story, 64 x 68 x 140 x 180 ft. packing plant, rein.-con., brick and steel, plain foundation, Front and Venango Sts. $75,000. P. Kuhn Eng. Co., 3058 North 8th St., engrs.

Pa., Phila.—Hoffman-Henon Co., archts., Finance Bldg., receiving bids 1 story, 100 x 120 ft. garage, 37th and Walnut Sts., for W. E. Blair, 5945 Chestnut St. $50,000.

Pa., Pittsburgh — Metal and Thermite Corp., 1201 Broadway, New York City, receiving bids 2 story, 40 x 100 ft. factory, brick and steel, Fayette St., here. Private plans.

Pa., Pittsburgh—Dec. 9 by Simmons Co., 824 East Reno Ave., 2 story and basement, 179 x 194 ft. warehouse and assembling plant, brick, concrete and steel, East River Ave. $150,000. Contractor to submit plans.

W. Va., Huntington — Motor Sales Co., 1611 6th Ave., receiving bids 2 story, 90 x 100 ft. garage, brick, tile and steel, 6th Ave. and 12th St. $40,000. Meanor & Handloser, Robson-Prichard Bldg., archts.

O., Cleveland—Brough Co., 3822 St. Clair Ave., taking bids 1 story, 52 x 80 ft. garage and 40 x 70 ft. store, brick and steel, East 72nd St. and St. Clair Ave. $50,000. J. Brugnone, 3505 Woodland Ave., archt. Noted Nov. 2.

O., Cleveland—Double Eagle Bottling Co., 6517 St. Clair Ave., taking bids and opens same about Nov. 17, 2 story and basement, 30 x 60 ft., brick and timber factory. $40,000. F. J. Coghlan, 1782 Alcoy Rd., archt.

Ill., Chicago—T. R. Bishop, archt., 35 South Dearborn St., receiving bids 1 story, 100 x 220 ft., rein.-con., brick and steel garage addition, 4728 Bway., for Reba Bros. $60,000.

Wis., Fond du Lac—B. E. Mehner, archt., Main St., receiving bids 3 story and basement, 42x180 ft., factory and warehouse, brick and timber, plain foundation, Military St., for Combination Door and Screen Co., 180 Ruggles St. $50,000.

Okla., Oklahoma City—New State Ice Co., 2 West 3rd St., will build ice plant, concrete, brick and steel, plain foundation, by separate contracts. $250,000. C. S. Glitsch, c/o owner, in charge. Ophuls & Hill, Inc., 112 West 42nd St., New York City, engrs. and archts.

BIDS RECEIVED

N. Y., Buffalo—Swan Garage Co., Inc., 48 East Swan St., 3 and 4 story, 90 x 115 ft., rein.-con., brick and steel garage, Swan St. from Peckham Constr. Co., Niagara Life Bldg., $84,700; Turner Constr. Co., 11 Goodell St., $86,200; Crooker & Carpenter, Niagara Life Bldg., $87,391. Noted June 22.

CONTRACTS AWARDED

Mass. Charlestown (Boston P. O.)—Stanley-Harlow-Hamlin, Inc., Main St., 1 story, 80 x 100 ft. garage and service station, rein.-con. and brick, plain foundation, Middlesex and Main Sts., to Mulcahy & Graves, 1 Exeter Pl., Cambridge. Archts. est. $40,000.

Mass., New Bedford—F. W. Greene, 888 Purchase St., 1 story, 80 x 110 ft. garage and service station, brick and concrete, plain foundation, Kempton St., to J. W. Bishop Co., 908 Purchase St. Archts. est. $40,000.

Mass., New Bedford — Hathaway Mfg. Co., 3 story, 25 x 40 ft. building, and 1 story 40 x 98 ft. addition to mill, brick and timber, plain foundation, to J. W. Bishop Co., 908 Purchase St. Archts. est. $40,000.

Conn., Bridgeport — Massachusetts Baking Co., Housatonic Ave. and Wells St., 1 and 2 story, 100 x 115 ft. bakery addition, brick, steel and wood, plain foundation, to Hewlett Co., 886 Main St. Archts. est. $75,000.

Conn., Hartford — Frisbie Pie Co., 363 Kossuth St., Bridgeport, 2 story, 90 x 100 ft., bakery and garage, brick and steel, plain foundation, Broad St., here, to Lawrence & Coe Constr. Co., 372 Trumbull St. Archts. est. $50,000-$60,000. Noted Oct. 26.

Conn., New Haven—A. Krah, 122 Mansfield St., 1½ story, 50 x 125 ft. garage and service station, brick and steel, plain foundation, Derby Ave., to Larkin-Carey Co., 166 Brewery St. Archts. est. $40,000.

Conn., Waterbury—Gulf Refining Co., 21 State St., New York City, will build 1 story, 40 x 100 ft. plant, 1 story, 50 x 78 ft. garage, both concrete, 6 oil tanks, etc., Riverside St., here, by day labor. $40,000. Private plans.

N. Y., Brooklyn—St. Marks Realty Co., c/o S. J. Kessler, archt. and engr., 529 Courtland Ave., New York, 2 story, 75 x 130 ft., brick, steel and concrete garage, plain foundation, Atlantic and Grand Aves., here, by day labor. $75,000.

N. Y., Buffalo—Chevrolet Motor Co., 3044 West Grand Blvd., Detroit, Mich., 1 and 2 story, 338 x 900 ft., rein.-con., brick and steel factory with loading platform, plain foundation, East Delavan Ave., here, to J. W. Ferguson, 152 Market St., Paterson, N. J. Noted Oct. 19.

N. Y., New York—Atwell Contg. Co., c/o G. G. Miller, archt. and engr., 1482 Bway., 1 story, 120 x 230 ft. brick, steel and concrete garage, plain foundation, Jerome Ave. and 192nd St., by day labor. $50,000.

N. Y., Rochester—Eastman Kodak Co., 37 x 85 x 119 ft., brick power house, Kodak Park, to Ridge Constr. Co., c/o owner. Archts. est. $85,000.

N. Y., Rochester — M. D. Knowlton, 29 Elizabeth St., brick and steel factory, 19 Elizabeth St., to M. Stallman & Sons, Arlington Bldg. Archts. est. $45,000.

N. J., Atlantic City—S. Abramson, archt., 2315 Walnut St., Phila., 2 story, 85 x 175 ft., rein.-con. and brick warehouse, plain foundation, Baltimore and Atlantic Aves., here, to N. Needleman, Atlantic City (street address not available), for Fleck Bros., 50 North 5th St., Phila. Noted Oct. 19.

N. J., Camden—Camden Pottery Co., Mt. Vernon and Orchard Sts., 2 story, 65 x 140 ft., brick and steel addition for casting shop containing 2 kilns, to E. R. Hall, 34 South 17th St., Phila., $55,000.

Pa., Clearfield—Gingery Hardware Co., 3 story and basement, 50x100 ft. warehouse and planing mill, brick, 4th and Pine Sts., to H. L. Connelly, Clearfield. Archts. est. $40,000.

Pa., Corry—Corry Radiator Corp., 1 story, 120 x 150 ft., steel foundry, to Austin Co., 16112 Euclid Ave., Cleveland, O.

Pa., Juniata—Pennsylvania R.R. Co., Broad St. Sta., Phila., will build 1 story, 340 x 685 ft. locomotive machine and erecting shop. Work will be done by separate contract. Steel contract to McClintic Marshall Co., Oliver Bldg., Pittsburgh. A. C. Shand, ch. engr.

Pa., Phila.—L. J. Kolb, 10th and Reed Sts., 1 story, 175 x 200 ft. rein.-con., brick and steel garage, plain foundation, 1433 Parrish St., to W. G. Uhlers, 1909 McKean St. $44,000.

D. C., Wash—Terminal Refrigerator and Warehouse Co. c/o Washington Market Co., 7th St. and Pennsylvania Ave., cold and dry storage warehouse, to Consolidated Eng. Co., 243 Calvert St., Baltimore, Md., $600,000.

W. Va., Logan—R. E. Matticks, 2 story, 52 x 120 ft., brick, steel and tile, garage to Ward & Ward, Logan. Engrs. est. $40,000. Noted Sept. 7.

O., Cleveland—Willard Storage Battery Co., 246 East 131st St., 1 story, 15 x 300 ft., brick and concrete factory addition, by day labor. $40,000. Private plans.

Mich., Flat Rock—Ford Motor Co., Highland Park (Detroit P. O.)—1 and 2 story, rein.-con., brick and steel plant, to Whitehead & Kales, South Dearborn St., River Rouge.

Ill., Chicago—Goldsmith Bros., 29 East Madison St., 1 story, 124 x 173 ft. factory, rein.-con., brick and steel, 5800-5814 Throop St., to Broline-Nolin Co., 5 North La Salle St. Archts est. $55,000. Noted Nov. 2.

Ill., Chicago—Huguelet Bros., 908 Gary St., 1 story, 68 x 100 ft. addition to garage, rein.-con., brick and steel, to Schmidt Bros., 22 East Huron St. Archts. est. $50,000. Noted Oct. 26.

Wis., Antigo-Langlade Creamery Co. will build 2 story, 50x95 ft. bottling plant, brick and steel, plain foundation, by day labor. $45,000. Private plans.

Wis., Chippewa Falls—Chippewa Valley Auto Co., 16 River St., 2 story, 124x130 ft., garage, rein.-con., brick and steel, to Tschopp, Durch-Camastral Co., Columbus and High Sts. Archts. est. $75,000. Noted Oct. 26.

Wis., Crandon—Vulcan Last Co., will build 2 story, 60x120 ft. shoe factory, rein.-con., brick and steel, by day labor. Private plans. Noted Oct. 5.

Wis., Green Bay—J. A. Piaskowski, 445 South Jackson St., 1 story, 62 x 165 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, West Main St., to H. J. Selmer Co., McCartney Natl. Bank Bldg. Archts. est. $40,000.

Wis., La Grosse—Bergh Auto Co., 207 South 4th St., 1 story and basement, 60 x 171 ft. garage, rein.-con., brick and steel, King St., to C. W. Noble, 206 State Bank Bldg. Archts. est. $40,000.

Wis., Marinette—C. Anderson & Sons Co., Cook and Merryman Sts., will build 2 story, 50x75 ft. factory and machine shop, rein.-con., brick and steel, plain foundation, Main St. by day labor. Private plans. Archts. est. $75,000. Noted Oct. 19.

Wis., Menomonie—E. V. Johnson will build 1 story, 56 x 176 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, Main St., by day labor, to replace one recently destroyed by fire. $40,000. Private plans.

Wis., Rhinelander—Northern Grain Co. will build 1 story, 50x120 ft. feed mill, rein.-con. and brick, by day labor. Private plans. Archts. est. $40,000.

Minn., Hopkins—Hennepin Co. Sanatorium Comn., general contract 1 story part basement, 12 and 32 ft. high, 45 x 108 ft. power house at Glen Lake near here, from Pehrson Bros., 555 Temple Court, Minneapolis, $229,500; J. Peterson, 3152 10th Ave., S., Minneapolis, $239,500; Pike & Cook 416 South 5th St., Minneapolis, $244,627.

Neb., Fremont—Fremont Mfg. Co., 60 x 84 ft., 112 x 140 ft., 56 x 140 ft. and 40 x 188 ft. refrigerators, incubators, factory and warehouse, all 1 story, steel, saw tooth construction, to Truscon Steel Co., 307 Baird Bldg., Omaha. Archts. est. $50,000.

Mo., St. Louis—Mid West Piping & Supply Co., 1452 South 2nd St., 1 and 2 story and basement, 120 x 138 ft., brick and steel warehouse addition, concrete pile foundation, 2nd and Miller Sts., to J. W. Bright Constr. Co., Arcade Bldg. Archts. est. $60,000-$70,000.

Ark., Stamps—Louisiana & Arkansas Ry. Co., Texarkana, 1 story 160x288 ft. locomotive repair shop, rein.-con., brick and steel, here, to Herman & McCain, Constr. Co., Reigler Bldg., Little Rock, $150,000.

Okla., Tulsa—Dodge Bros. Motor Co., 716 South Boston St., 2 story garage, rein.-con., plain foundation, to Morrow & Sons, Kenny Bldg., $50,000.

Calif., Fresno—W. M. Murphy Motors Co., 1919 Calaveras St., will build 30 x 75 ft. show room, 20 x 80 ft. stock room, 20 x 40 ft. machine shop, 42 x 88 ft. mechanical shop, brick and concrete, Van Ness Ave., by day labor.

Calif., San Francisco—C. C. Miller, 385 Taylor St., 5 story and basement, transfer and storage building, rein.-con., Turk St. near Hyde St., to R. J. H. Forbes, Monadnock Bldg., $75,716.

Calif., San Francisco—A. E. Perley, 240 Duboce Ave., 1 story, 25 ft. high, 60 x 75 ft., concrete garage, 14th St. near Mission St., to Mission Concrete Co., Call Bldg., $75,000.

Ont., Paris—Penmans Ltd., 3 story brick and steel addition to Plant 2 and 1 story addition to Plant 1, to P. H. Secord & Sons, 133 Nelson St., Brantford. Engrs. est. $100,000. Noted Oct. 5.

Ont., Welland—St. Thomas Packing Co., St. Thomas, cold storage plant, here, to W. J. Hickey, 119 Main St., Welland. Engrs. est. $100,000.

Buildings

PROPOSED WORK

Me., Portland—Parish House—State St. Congregational Church, State St., having plans prepared by Cram & Ferguson, archts., 248 Boylston St., Boston, 3 story, brick, stone and steel, State St. $200,000.

Mass., Boston—Apartment—Yarchin & Fluck, c/o Silverman, Brown & Heenan, Archts., 51 Cornhill, having revised plans prepared 5 story, 100 x 110 ft., Audubon Rd. $200,000. Noted Oct. 5.

Mass., Boston—Bank and Office—State Street Exchange, 33 State St., plans 5 story, brick, steel and concrete, State and Congress Sts. Architect not announced.

Mass., Greenfield—School—Holy Trinity Parish plans parochial school, Federal St. $300,000. P. J. Meehan, 133 Main St., pastor. Architect not selected.

Mass., Marion—Club House, etc.—Butlers Point Associates, Beverly Yacht Club, plan club house and golf course. $300,000. Little & Russell, 45 Bromfield St., Boston, archts.

Mass., Roxbury (Boston P. O.)—Hospital—New England Baptist Hospital, 111 Parker Hill, having plans prepared by E. S. Read, archt., 70 Kilby St., hospital on Parker Hill and Fisher Ave. $150,000.

Conn., Hartford — Bank and Office — Phoenix Natl. Bank, Main St., having plans prepared by Dennison & Hirons, archts., 288 Lexington Ave., New York City, 60 x 170 ft., City Hall Sq. $500,000. Noted Nov. 2.

Conn., New Britain—Schools—Bd. of Educ. plans addition to Monroe St. School. $115,000; addition to Osgood Hill School. $110,000. E. C. Goodwin, chn. Architect not selected.

Conn., Winsted — Hospital — Litchfield County Hospital, plans 3 story addition, Winchester Rd. $150,000. Architect not selected.

N. Y., Binghamton—Club—Y. M. C. A. plans addition, Water St. $300,000. M. J. Corbett, pres. Bd. Trustees.

N. Y., Buffalo—Athletic—Crystal Palace of Buffalo, Inc., c/o Garden Theatre, Pearl and Niagara Sts., plans 4 story, 150 x 350

Buildings (Continued)

ft. rein.-con., brick and steel, incl. 50 x 200 ft. swimming tank, Pearl St. To exceed $300,000.

N. Y., Hicksville—Bank—Bank of Long Island having preliminary plans prepared by W. L. Stoddart, archt. and engr., 9 East 40th St., New York, brick, steel and stone, plain foundation. $250,000.

N. Y. New Rochelle—Club, etc.—Winged Foot Golf Club, c/o C. C. Wendeback, archt., 101 Park Ave., New York, plans brick and stone club, plain foundation, also golf course, here. $500,000.

N. Y., New York—Theatre—Shubert Amusement Co., 225 West 44th St., soon lets contract brick, steel and stone, plain foundation, 46th St. between Bway. and 8th Ave. $200,000. H. J. Krapp, 116 East 15th St., archt. and engr.

N. Y., Rochester — Synagogue — Awihas Achim Anshi Austrian Congregation, 688 Joseph Ave., plans 40 x 100 ft., brick and steel. $150,000. A. Sigel, 1 Widman St., archt.

N. Y., Utica—Theatre, Store and Office—N. Robbins, c/o Avon Theatre, having preliminary plans prepared by E. C. Horn Sons, archts., 1476 Broadway, New York, 6 story, brick, steel and stone, Columbia and Washington Sts. $500,000.

N. J., Somerville—Hospital—Somerville Hospital plans new hospital. $200,000. C. C. Kenyon, 133 West End Ave., chn.

Pa., Beallsville — Clubhouse — Nemacolin Club soon takes bids brick, steel and stone, plain foundation. $150,000. W. L. Stoddart, 9 East 40th St., New York City, archt. and engr. Noted Oct. 19.

Pa., Braddock—Bank—First Natl. Bank had plans prepared by W. L. Stoddart, archt. and engr., 9 East 40th St., New York City, brick, steel and stone, plain foundation, $200,000.

Pa., Overbrook (Phila., P. O.)—Apartment-Hotel—Terry & Levy, c/o McKenzie & Wiley, archts., Victory Bldg., soon receive bids 4 story and basement, rein.-con., brick and steel, plain foundation, 69th St. $350,000.

Pa., Phila.—Bank and Office—Fifteenth St. Realty Co., 15th and Chestnut Sts., soon receives bids 24 story and basement, 106 x 207 ft., rein.-con., brick and steel, concrete pile and caisson foundation. $5,000,000. Ritter & Shay, North Amer. Bldg., archts.

Pa., Phila.—High School—Archdiocese of Phila., 19th and Race Sts., having plans prepared by Hoffman-Henon Co., archts., Finance Bldg., 3 story and basement, stone, 49th and Chestnut Sts. $500,000.

Pa., Phila.— Store and Office—Cunningham Piano Co., 1314 Chestnut St., soon takes bids 15 story and basement, rein.-con., brick, steel and stone, concrete pile foundation, 13th and Chestnut Sts. $1,000,000. A. J. Sauer & Co., Denckla Bldg., archts.

Pa., Phila.—Synagogue—Har-Zion Temple c/o L. B. Rothchild, archt., 224 South Broad St., soon receives bids 2 story and basement, rein.-con., brick and steel, plain foundation, 54th and Wynnefield Sts. $250,000.

Pa., Phila.—Theatre and Office—Stanley Co. of America, 1218 Market St., soon takes bids 20 story and basement, stone, Broad and Locust Sts. $2,000,000. Hoffman-Henon Co., Finance Bldg., archts.

Pa., Pittsburgh — Hotel — Apartment—Schenley Apartments Co., 3929 Forbes St., having plans prepared by Rutan, Russell & Wood, archts., Century Bldg., altering and building 10 story and basement addition, brick and tile. $500,000.

Pa., Ridley Park—School and Auditorium—St. Madeline Roman Catholic Church, soon takes bids 2 story and basement, 52 x 69 ft. school and 3 story, 36 x 40 ft. auditorium, rein.-con., brick and steel, plain foundation. $150,000. C. J. Mitcheli, 15 South 21st St., Phila., archt.

Pa., Williamsport — Clubhouse — B. P. O. E. 173, soon takes bids 5 story, 70 x 145 ft. brick and stone, East 4th and State Sts. $260,000. Architect not announced.

D. C., Wash. — Apartment — J. Randall, Woodward Bldg., having plans prepared by H. H. Warwick, archt., 1108 16th St., N. W., for apartment. $175,000.

D. C., Wash. — Club — National Womens Party c/o T. Hastings, acrht., 52 Vanderbilt Ave., New York City, plans club house, here. $300,000.

W. Va., Charleston—Apartment—Kanawha Apartments, c/o Wysong & Jones, archts., Charleston, plan 8 story, 110 x 132 ft., brick and steel, Kanawha St. $650,000.

W. Va., Huntington—Hospital—State Bd. Control, Charleston, takes bids in January, 3 story, rein.-con., brick and steel, Spring Hill. $150,000. J. S. Lakin, pres.

W. Va., Huntington—Hotel—Meanor & Handloser, archts., Robson-Prichard Bldg., takes bids in January, 8 story addition, steel, 4th Ave. and 9th St., for J. S. Farr, 2nd Ave. and 16th St. $340,000.

W. Va., Huntington — School — Voted $800,000 bonds for school.

W. Va., Institute — College — State Bd. Control, Charleston, takes bids about Jan. 1, 3 story, brick, stone, concrete and steel. $200,000. H. R. Warne, Masonic Temple, Charleston, archt.

SUBWAY—FLUSHING, N. Y.

Following are lowest three bids opened Oct. 26, by Transit Comn., 49 Lafayette St., New York City, for constructing Sect. 3 of Route 52, part of Rapid Transit R.R., Flushing Route, (A) Oakdale Contg. Co., Harris and East Aves., Long Island City, (awarded contract); (B) F. L. Cranford, 149 Remsen St., Brooklyn; (C) J. Schlesinger, Inc., 259 West 30th St., New York City. The unit bids were as follows:

	A	B	C
126,550 cu.yd. earth excavation above M.H.W.	$4.40	$5.17	$4.90
12,850 cu.yd. earth excavation below M.H.W.	5.40	5.17	6.50
300 cu.yd. earth excavation above and below M.H.W. for sewers	5.00	5.17	6.00
20,000 cu.yd. disposing of excavated material	.25	.15	.20
Maintaining, Protecting, Securing and Underpinning Buildings			
N. Y. & Queens Electric Light & Power Co. (lump sum)	3,450.00	4,125.00	10,000.00
No. 108, 108½ Amity St. (lump sum)	960.00	2,475.00	1,000.00
No. 104, 104½, 106 Amity St. (lump sum)	2,160.00	1,815.00	1,500.00
No. 100 Amity St. (lump sum)	2,000.00	2,475.00	1,500.00
N. E. corner of Amity and Main Sts. (lump sum)	4,180.00	4,250.00	3,800.00
N. W. corner of Amity and Main Sts. (lump sum)	3,240.00	4,500.00	4,000.00
Two buildings between building next above and No. 86 Amity St. (lump sum)	800.00	2,200.00	1,000.00
No. 86 Amity St. (lump sum)	500.00	1,100.00	500.00
Post Office South Side of Amity St. (lump sum)	1,288.00	1,540.00	1,000.00
Building next west thereof 37 ft. on Amity St. (lump sum)	1,554.00	2,090.00	1,500.00
S. E. corner of Amity and Main Sts. (lump sum)	4,104.00	4,750.00	2,500.00
Buildings which will be on S.W. corner Main and Amity Sts. (lump sum)	5,400.00	6,500.00	6,000.00
105 restoring trees	6.00	10.00	4.00
24,560 cu.yd. concrete masonry in place	14.75	14.44	17.00
75,800 sq.ft. rubbing concrete surface	.05	.10	.12
3,500 cu.yd. protective concrete	14.75	14.44	18.00
10 cu.yd. rubble stone masonry	12.00	9.00	15.00
10 cu.yd. dry rubble masonry	9.00	7.00	10.00
10 cu.yd. brick masonry	34.00	35.00	30.00
10 cu.yd. hollow tile masonry	24.00	32.00	30.00
110 lin.ft. 4½-in. x 13-in. flue lining	1.00	1.25	1.20
10 bbl. grout	6.00	6.00	6.00
15,000 lin.ft. timber piles	.55	1.00	.80
10 M.B.M. timber foundations	85.00	50.00	120.00
12 cu.yd. broken stone	4.50	5.00	5.00
13,740 sq.yd. waterproofing 1 ply	.80	1.00	.60
14,400 sq.yd. waterproofing 3 ply	1.55	1.50	1.50
1,150 sq.yd. waterproofing 6 ply	2.80	2.50	2.40
150 sq.yd. waterproofing dry ply	.50	.75	.60
900 sq.yd. waterproofing, coating of pitch	.35	.25	.30
150 sq.yd. treated felt	1.00	.50	.80
2,000 lb. sheet lead in expansion joints	.18	.40	.25
2,070 cu.yd. waterproofing, brick in asphalt mastic	38.50	40.00	38.00
200 lin.ft. 3-in. C. I. pipe and fittings, class A	.90	1.00	1.20
1,300 lin.ft. 6-in. C. I. pipe and fittings, class C	1.35	1.50	1.00
1,500 lin.ft. 8-in. C.I. pipe and fittings, class A	2.00	2.00	3.00
700 lin.ft. 10-in. C.I. pipe and fittings, class A	3.10	2.50	4.00
50 lin.ft. 3-in. galvanized W.S. pipe	1.50	2.00	1.00
50 lin.ft. 4-in. galvanized W.S. pipe	2.75	2.50	1.50
50 lin.ft. 6-in. galvanized W.S. pipe	3.50	3.00	2.50
28,040 duct ft. tunnel ducts	.20	.18	.20
100 duct ft. railroad ducts	.50	.25	.30
1,760 ton riveted steel	95.00	95.00	95.00
5 ton steel ladders and stairs, etc	190.00	200.00	130.00
950 ton steel beams and shapes	85.00	95.00	84.00
960 ton steel rods and bars	80.00	80.00	80.00
20 ton miscellaneous iron castings except for sewers	110.00	150.00	200.00
2 ton miscellaneous iron castings for sewers	125.00	200.00	220.00
100 lb. special wire forms	.25	.18	.15
2,500 sq.ft. gratings	2.10	3.00	2.40
660 sq.ft. vault lights	2.00	3.00	2.20
780 sq.yd. sidewalk restored	2.80	2.00	2.60
240 sq.yd. repavement asphalt	6.00	4.00	4.00
10 sq.yd. repavement granite block	4.00	4.00	2.50
1,475 sq.ft. sidewalk restored west of Main St.	3.20	3.00	2.70
30 lin.ft. new bluestone curb	2.00	1.50	1.50
50 lin.ft. 8-in. granite	3.00	5.00	3.00
5,000 sq.yd. macadam repavement	3.00	1.75	2.70
2,475 lin.ft. old curb restored	.55	.50	1.50
160 sq.yd. 3-in. concrete finish	1.50	2.25	2.50
7,700 lin.ft. ¾-in. W.S. electric conduit	.30	.40	.22
50 lin.ft. 1½-in. W.S. electric conduit	.50	.60	.50
1,900 lin.ft. 1-in. W.S. electric conduit	.38	.50	.40
710 c.i. outlet boxes	1.00	1.50	1.25
10 c.i. pull boxes	3.00	5.00	4.00
150 lin.ft. 6-in. c.i. pipe and fittings	1.60	2.50	2.50
175 lin.ft. 3-in. c.i. pipe and fittings	1.20	2.00	1.50
80 lin.ft. 4-in. c.i. pipe and fittings	1.40	2.25	1.80
1,600 lin.ft. 12-in. vitrified pipe sewers	2.40	4.00	2.50
100 lin.ft. 15-in. vitrified pipe sewers	3.80	4.50	3.50
100 lin.ft. 18-in. vitrified pipe sewers	4.00	5.00	4.50
350 lin.ft. 24-in. vitrified pipe sewers	6.00	8.00	5.50
40 tons c.i. sewers (straight)	72.00	90.00	100.00
3 ton c.i. sewers (special)	90.00	125.00	200.00
1,270 lin.ft. 3 ft. 6 in. x 2 ft. 4-in. concrete sewer	13.00	12.00	12.50
250 lin.ft. maintaining electric overhead trolley	9.00	5.00	5.00
500 lin.ft. 4-in. water pipe	1.20	1.00	1.20
260 lin.ft. 6-in. water pipe	1.40	1.50	1.50
800 lin.ft. 8-in. water pipe	2.20	1.50	2.50
130 lin.ft. 12-in. water pipe	3.00	2.00	5.00
10 service water pipe connections	35.00	25.00	30.00
120 lin.ft. 3-in. c.i. gas pipe	.90	1.00	1.40
1,000 lin.ft. 4-in. c.i. gas pipe	1.00	1.00	1.60
260 lin.ft. 6-in. c.i. gas pipe	1.20	1.25	2.00
800 lin.ft. 8-in. c.i. gas pipe	1.80	1.50	3.00
200 lin.ft. 6-in. by passing pipe	2.00	3.00	2.50
200 lin.ft. 8-in. by passing pipe	3.00	4.00	3.00
600 lin.ft. 4-in. by passing pipe	1.90	2.00	2.00
4,000 lin.ft. 3-in. by passing pipe	1.40	1.75	1.50
10 service connection for gas pipe	30.00	20.00	30.00
30 tons new c.i. Hub and Spigot (straight)	78.00	90.00	100.00
5 ton new c.i. Hub & Spigot (special)	120.00	125.00	200.00
2,500 duct ft. electric ducts and conduits	.35	.30	.46
5 service connection for electric ducts	30.00	40.00	30.00
1,000 duct ft. wooden electric ducts	.85	.50	.50
4,000 duct ft. fibre electric ducts	.70	.50	.60
Extended totals	$1,635,951	$1,753,338	$1,795,406

Buildings (Continued)

W. Va., Wheeling—Fraternal—Osiris Temple, A. A. O. N. M. S., plans about 6 story. $600,000. Architect not announced.

W. Va., Wheeling — Schools — Voted $300,000 bonds for addition to high school and new grade schools. Triadelphia Dist.

N. C., Asheville—Hotel—Citizen's Hotel Co., having plans prepared by W. L. Stoddart, archt., 9 East 40th St., New York City, for hotel. $1,000,000.

N. C., Asheville—Hotel—E. W. Grove is interested in company which plans demolishing Battery Park Hotel, leveling Battery Park Hill, and constructing large commercial hotel, etc., Haywood St. $1,000,000.

N. C., Asheville—Store—Letinskys Dept. Store, having plans prepared by W. L. Stoddart, archt. and engr., 9 East 40th St., New York City, 4 story, brick, steel and stone. $400,000.

N. C., Kinston—Schools—City plans to vote on $300,000 bonds in December, constructing and equipping new buildings, and enlarging old schools. M. M. Harper, mayor.

N. C., Winston-Salem — Church — First Baptist Church plans church, 50th and Poplar Sts. $450,000. B. F. Huntley, chn. building com. Architect not announced.

Ga., Atlanta — Hotel—J. McE. Bowman, Biltmore Hotel, 44th St. and Vanderbilt Ave., New York City, had plans prepared by Schultz & Weaver, archts., 17 East 49th St., New York City, for brick, steel and stone, plain foundation, here. $7,000,000.

La., New Orleans—Laboratory—Loyalla University, 6363 St. Charles St., takes bids about Dec. 8, for 4 story, 70 ft. high, 66 x 200 ft., concrete, steel brick and stone. $250,000. P. Torre, Jr., 405 Louisiana Bldg., archt. Noted Aug. 31.

O., Akron—Theatre-Arcade—Akron Enterprise Co., having plans prepared by C. W. and G. L. Rapp, archts., 190 North State St., Chicago, 2 story, South Main St. through to High St. $850,000. C. A. Barbian, pres.

O., Bellaire—High School—Voted $350,000 bonds for new high school, 35th and Guernesy Sts. H. Rodewig, pres. Bd. Educ. Noted Sept. 28.

O., Cleveland — Store and Office — Ever-Ready Brake Lining Co., 305 St. Clair Ave., had plans prepared by H. W. Grieme, archt., 110 Engineers Bldg., 10 story, 60 x 150 ft., brick, steel and concrete, 305 St. Clair Ave. N. E.

O., Cleveland Heights (Warrensville P. O.)—Apartment, etc.—M. Rubin, 604 Marshall Bldg., Cleveland, had plans prepared by A. F. Janowitz, archt., Permanent Bldg., Cleveland, 2 and 3 story and basement, 66 x 126 ft. apartment and 55 x 72 ft. garage, Hampshire Rd., here. $200,000.

O., Columbus—City Hall—City plans to have several architects submit sketches for new city hall on Scioto River site. $500,000-$850,000.

O., Dayton—Clubhouse—Dayton Lodge B. P. O. E., c/o C. L. G. Breene, chn., 301 Amer. Bldg., having plans prepared by Pretzinger & Musselman, archts., 1155 Reibold Bldg., 6 story and basement, 122 x 200 ft., rein.-con., brick and stone. $800,000. Noted April 27.

O., East Cleveland (Cleveland P. O.)—Stores and Apartment—M. Lees, 2099 Lamberton Rd., Cleveland Heights, having plans prepared by A. F. Janowitz, archt., Permanent Bldg., Cleveland, 4 story and basement, 250 x 250 ft., brick, steel and concrete, Euclid and Wymore Aves., here. $1,500,000.

O., Lakewood (Cleveland P. O.)—Apartment—S. Koslen, 1077 East 97th St., Cleveland, having plans prepared by M. Weis, archt., 617 Union Bldg., Cleveland, 3 story and basement, 96 x 124 ft., brick and timber, Lake Ave. near Hird Ave., here. $150,000.

O., Lakewood (Cleveland P. O.)—Store, Theatre and Apartment—W. C. Marshall, pres. Marshall Drug Co., Marshall Bldg., Cleveland, plans 1 and 3 story and basement, brick, steel and concrete, Detroit Ave. and Bunts Rd. $200,000. W. S. Lougee, Marshall Bldg., Cleveland, archt.

O., Martins Ferry—High School—Voted $250,000 bonds for high school annex. Noted July 13.

O., St. Clairsville—Sanitarium—Belmont Co. voted $175,000 bonds for anti-tuberculosis sanitarium.

O., Warren—Bank and Office—Trumbull Savings & Loan Co., 102 High St., having revised plans prepared by Watson Eng. Co., Cook Bldg., Cleveland, 10 story, 40 x 132 ft., brick, steel and concrete. $400,000. Noted June 8.

Mich., Detroit—Apartment—J. Casselman, 679 Peterboro Ave., had plans prepared by Atwood & Trysell, archts., 601 Temple Bldg., 4 story and basement, 50 ft. high, 46 x 176 ft., brcik and steel, plain foundation, Sylvester Ave. $250,000.

Mich., Detroit—Apartment—R. H. Marr, 2631 Woodward Ave., preparing plans 3 story and basement, 35 ft. high, 50 x 135 ft. brick and steel, plain foundation, Alfred St. $150,000. Owner's name withheld.

Mich., Detroit—Apartment—P. R. Rossello, archt., 406 Congress Bldg., preparing plans 6 story and basement, 87 x 90 ft. rein.-con., brick and stone, plain foundation, Pennsylvania Ave. $275,000. Owner's name withheld.

Mich., Detroit — Apartment — Widre & Rubin, c/o J. I. Weinberg, archt., 401 Congress Bldg., having plans prepared 4 story and basement, 60 x 140 ft. rein.-con., brick and steel, plain foundation, Selden Ave. $175,000.

Mich., Detroit — Theatre and Hotel — L. Smilanski and S. Levy, 1332 Book Bldg., plans 14 story, 166 x 342 ft. rein.-con., stone, brick and steel, Woodward and High Sts. $12,000,000. Architect name withheld.

Mich., Kalamazoo — Dormitory — Kalamazoo College, Lovell St., having plans prepared by A. Kahn, archt., Marquette Bldg., Detroit, 3 story and basement, 48 x 100 ft. brick and timber, concrete pile foundation, Academy Ave. $150,000.

Ill., Chicago—Apartment—R. F. France, archt., 155 North Clark St., soon receives bids 3 story, 100 x 125 ft., rein.-con., brick and steel, Adams St. near Cicero St., for F. A. Johnson, c/o architect. $200,000.

Ill., Chicago—Club—Rebori, Wentworth & Dewey, archts., 332 South Michigan Ave., soon receives bids 4 story and tower, 85 x 156 ft., rein.-con., brick and steel, Dearborn and Schiller Sts., for Racquet Club, c/o architects. $500,000.

Ill., Chicago—Club—Union League Club, Jackson and Federal Sts., plans 20 story, 100 x 150 ft., rein.-con., brick and steel, on site of present building. $3,000,000. Mundie & Jensen, 39 South La Salle St., archts.

Ill., Chicago—Hospital—H. Sierks, archt., 5036 Lincoln Ave., preparing plans and receives bids in spring, 10 story, 60 x 90 ft., rein.-con., brick and steel, Randolph and Market Sts., for Eye, Ear Nose & Throat Hospital, Franklin and Washington Sts. $400,000. W. F. Fisher, pres.

Ill., Chicago—Hotel and Clubhouse—J. R. Thompson, 350 North Clark St., plans 22 story, 70 x 160 ft., rein.-con., brick and steel, Madison and Dearborn Sts. $3,000,000. Architect not announced.

Ill., Chicago—Office—Continental Casualty Co., 910 South Michigan Ave., plans 12 story, 100 x 180 ft., rein.-con., brick and steel, 22nd St. and South Park Ave. $1,600,000. Architect not announced.

Ill., Chicago—Store and Apartment—Rissman & Hirschfield, archts., 155 North Clark St., soon recives bids 3 story, 200 x 200 ft., rein.-con., brick and steel, Central Park and Madison St., for A. Goldstein, c/o architects. $400,000.

Ill., Chicago—Store and Apartment—H. Schlachett, 5400 West Adams St., plans 3 story, 103 x 175 ft., rein.-con., brick and steel, Madison and Mayfield Sts. $150,000. Leichenko & Esser, 38 South Dearborn St., archts.

Wis., Appleton—School—Bd. Educ. plans 3 story and basement, rein.-con., brick and tile. $400,000. Architect not selected. This corrects report in Nov. 2 issue.

Wis., Madison — Chapel — University Methodist Church, Charter and University Aves., having plans prepared by Childs & Smith, archts., 64 Van Buren St., Chicago, 3 story, 60 x 135 ft., stone and steel, plain foundation at University. $150,000.

Wis., Menomonie—Church—Zion Church Assn. having plans prepared by C. Volkman, archt., Eau Claire, 2 story, 50 x 109 ft., brick, rein.-con. and stone plain foundation. $150,000.

Wis., Milwaukee—Business—H. L. Breithaupt, 2 Grand Ave., plans 3 story and basement, 60 x 100 ft., brick and concrete, Grand Ave. $150,000. Architect not selected.

Wis., Oshkosh—Temple—Oshkosh Masonic Lodges, 132 Main St., receiving competitive sketches 4 story and basement, 100 x 100 ft., rein.-con. and brick, plain foundation, Washington Blvd. $500,000.

Ia., Cedar Rapids—Court House and Jail —Linn Co. voted $750,000 bonds for court house and jail, 2nd Ave. and Court St. H. R. Churchill, aud. Noted Nov. 2.

Ia., Mt. Ayr—Court House—Ringgold Co. defeated $160,000 bond issue for court house. Noted Nov. 2.

Neb., Omaha—Club and Office—B. P. O. E., Elks Bldg., having plans prepared by J. and A. McDonald, archts., 204 Standard Oil Bldg., and probably take bids next spring, 10 story, 132 x 132 ft., 18th and Dodge Sts. $500,000.

S. D., Huron — Auditorium and Gymnasium—Huron College takes bids in spring 4 story and basement, rein.-con., brick, stone and tile, on campus. $400,000. C. R. Miller, secy. Architect not announced.

Mo., Columbia—Law Library—Missouri University, Jesse Bldg., plans 3 story, rein.-con. and brick, plain foundation, on campus. $150,000. Jamieson & Spearl, Arcade Bldg., St. Louis, will probably be selected as architects. Engineer not selected.

Mo., Kansas City—Business—North-Mehornay Furniture Co., 11th and McGee Sts., having plans prepared by McKecknie & Trask, archts., 719 Gloyd Bldg., 3 story and basement, 38 x 100 ft., rein.-con. and brick, 14th and Main Sts. W. W. Huff, 314 Interstate Bldg., structural engr.

Mo., St. Louis—Hotel—D. Israel. Washington Hotel, plans 12 story 140 x 165 ft. hotel for negroes, fireproof construction, caisson foundation, 20th and Chestnut Sts. $800,000.

Mo., St. Louis—Shrine—York Rite Temple Assn. soon takes bids 5 story and basement, 160 ft. high, 150 x 300 ft., rein.-con., brick and steel, caisson foundation, Lindell Blvd. $3,000,000. A. B. Groves, 420 North 4th St. and Eames & Young, Wainwright Bldg., associated archts. and engrs.

Tex., Austin — Biology — State having plans prepared by H. M. Green, archt., North Texas Bldg., Dallas, 1 story, biology building, brick and rein.-con., concrete pile foundation, here. $400,000.

Tex., Dallas—Hospital—Methodist Hospital having plans prepared and takes bids in spring 4 story and basement, rein.-con., and brick, plain foundation, Oak Cliff St. $500,000. R. O. Jameson, 342 South Rosemont St., engr. De Witt & Lemmon, Southwestern Life Bldg., archts. W. B. Ittner, 911 Locust St., St. Louis, Mo., archt.

Tex., Ft. Worth—Dormitory—Masonic Orphans Home takes bids in April 2 story and basement, 50 x 150 ft., rein.-con. and brick, plain foundation. $150,000. H. M. Green Co., North Texas Bldg., Dallas, archts. and engrs.

Tex., Ft. Worth—Office—R. O. Dulaney having plans prepared by R. A. Nicholas, archt., Ft. Worth Natl. Bank Bldg., 10 story and basement, 58 x 95 ft., rein.-con. and tile, plain foundation, Throckmorton and 6th Sts. $400,000.

Tex., Galveston—Office, etc.—State having plans prepared by H. M. Green, archt., North Texas Bldg., Dallas, 2 story office museum, library and heating plant, rein-con. and brick, concrete pile foundation. $600,000.

Tex., Galveston — Schools — School Bd. takes bids about Jan. 1, repairs and additions to 6 schools, $350,000; 2 story concrete, brick and tile, $200,000; 3 story and basement Junior High School, concrete, brick and tile, plain foundation, $450,000. De Witt & Lemmon, Southwestern Life Bldg., Dallas, archt. W. B. Ittner, 911 Locust St., St. Louis, Mo., archt. R. O. Jameson, 342 Rosemont St., Dallas, engr.

Tex., Port Arthur—High School—Bd. Educ. having plans prepared by W. B. Ittner, archt., 911 Locust St., St. Louis, Mo., three or four 1-2 story, concrete and brick buildings, concrete pile foundations. $675,000.

Tex., San Antonio—Y. M. C. A. plans 6 story, rein.-con. and brick, concrete pile foundation, Pecan and Marys Sts. $400,000. Architect not selected.

Okla., Okmulgee—Hotel—Creek Hotel Co. having plans prepared by Smith & Senter, archts., Okmulgee, 8 story and basement, 100 x 140 ft., rein.-con., brick and terra cotta, 3rd. and Morton Sts. $1,000,000.

Wash., Seattle—Apartment—J. A. Creutzer, archt., Leary Bldg., preparing plans and takes bids in about 5 weeks, 6 story and basement, 124 x 126 ft., brick and terra cotta, 5th and Cherry Sts., for J. Collins Estate, Smith Bldg. $290,000.

Wash., Seattle — Apartment — W. E. Humphrey, Wash., D. C., (street address not available) soon lets contract 5 story and basement, 78 x 108 ft., 2nd and Blanchard Sts., here. $165,000. E. Guenther, Ry. Exch. Bldg., archt. Noted Nov. 2.

Wash., Vancouver—Home—Joint Ownership of Grand Lodges of Washington and Oregon Knights of Pythias, having plans prepared by Knighton & Howell, archts., U. S. Bank Bldg., Portland, Ore., 2 story and basement, concrete, here. $150,000.

Ore., Portland—Office, etc.—Skyline Corp., J. A. Gibson, pres., 801 Pittock Bldg., plans 10 story and 2 story basement, 200 x 200 ft. rein.-con., office building, garage, etc. 5th, 6th, Taylor and Salmon Sts. $2,500,000. Work will start in spring. Architect not selected.

Calif., Alameda — Hospital — Alameda Sanitarium plans 3 story, rein-con., Clinton Ave. and Willow St. $250,000. K. Creedon, 2054 Clinton Ave., dir. Architect not selected.

Buildings **(Continued)**

Calif., Fresno—Office and Store—Holland & Holland, having preliminary plans prepared by R. F. Felchlin Co., engrs. and archts., Bank of Italy Bldg., 4 story, annex, L and Fresno Sts. $175,000.

Calif., Madera—Hotel—Company to be incorporated, headed by Madera Chamber of Commerce, plans 4 story and basement, 100 x 150 ft., Yosemite and B Sts. $150,000. K. MacDonald, archt., and M. Couchot, engr., both at 234 Pine St., San Francisco.

Calif., Modesto—College—Modesto Junior College Dist., having plans prepared by W. H. Weeks, archt., 369 Pine St., San Francisco, college, 10th St. First unit, $80,000, ultimate cost $500,000. W. E. Faught, city supt. of schools.

Calif., Norwalk—High School—Excelsior Union High School Dist. having plans prepared by T. C. Kistner, archt., Central Mortgage Bldg., San Diego, 1 and 2 story, concrete and tile. $275,000 bonds voted.

Calif., Paso Robles—High School—Paso Robles Union High School Dist., having plans prepared by Miller & Warnecke, archts., Perry Bldg., Oakland, and J. J. Donovan, consult. archt., Pacific Bldg., Oakland, group of buildings. $200,000.

Calif., San Diego—College—St. Augustine Fathers, through A. Martel, plan college for boys. $250,000. A. V. Mayrhofer, 1572 2nd St., business agent.

Calif., San Diego—Y. M. C. A. having plans prepared by H. L. Rogers, archt., San Diego, for Army and Navy building. $750,000. Noted **July 27.**

Calif., San Francisco—Exposition—Corporation of San Francisco Businessman, headed by M. H. De Young, Chronicle Bldg., and supervs. A. Rossi and R. McLeran, San Francisco, plan exposition. First unit $600,000.

Calif., Santa Barbara—High School—Santa Barbara High School Dist. had plans prepared by W. H. Weeks, archt., 369 Pine St., San Francisco, group of school buildings, one wing containing 9 rooms, another 6 rooms with laboratories, 55 x 92 ft. auditorium, domestic science departments, etc. Will exceed $150,000.

Ont., Hamilton—School—Bd. Educ. having plans prepared by Hutton & Souter, archts., Bank of Hamilton Bldg., 2 story and basement, brick, concrete, steel and tile. $150,000.

Ont., Toronto—Church—Eglington Ave. Presbyterian Church, 53 Glengrove Ave., plans 1 story and basement, rein.-con., brick, steel and stone, Lytton Blvd. $150,000. W. G. Back, pastor. Architect not selected.

Ont., Toronto—Church—St. Clair Ave. Methodist Church, 725 St. Clair Ave., W., plans 1 story and basement, rein.-con., brick and steel, St. Clair Ave. $150,000. W. H. Graham, pastor. Architect not selected.

Ont., Toronto—Hospital—Toronto Hospital for Incurables, Dunn Ave., plans 3 story and basement, rein.-con., brick, stone, steel and tile, Dunn Ave. $200,000. Architect not selected.

Ont., Toronto—School—Bd. Educ. having plans prepared by W. W. Pearse, archt., 155 College St., 2 story and basement, 8 or 10 room, concrete, brick, steel and stone, St. Clair Dist. on Rountree and Turnbull Aves. $160,000.

BIDS DESIRED

Mass., Springfield—Theatre and Store—Schubert Amusement Co., 225 West 44th St., New York City, will build 3 story, 120 x 155 ft., brick, State St., here, by separate contracts. $300,000. H. J. Krapp, 116 East 15th St., New York City, archts.

Conn., New Britain — Hotel — United Hotels Co., 140 Main St., will build 5 story, brick, steel and stone, plain foundation, West Main St., by separate contracts. $500000. H. L. Stevens Co., 522 5th Ave., New York City, archts. Noted Nov. 9.

N. Y., Mineola—Hospital—Nov. 17, by Nassau Hospital, 5 story, brick, steel and stone addition, plain foundation. $350,000. Lord & Hewlett, 2 West 45th St., New York, archts. and engrs. Noted Nov. 2.

N. Y., New York—Apartment—Arrowhead Building Corp., c/o G. F. Pelham, archt. and engr., 200 West 72nd St., 5 story, 85 x 100 ft., brick, steel and stone, plain foundation, West 151st St. $250,000. Work will be done by separate contracts. H. H. Uhlfelder, pres.

N. Y., Port Washington—School—Dec. 9, by M. C. Mitchell, secy. Bd. Educ. of Union Free School Dist. 4, North Hempstead, new grade school buildings, here. W. B. Bessell, 58 West 49th St., New York, archt.; adv. this issue.

Pa., Allentown—Temple—Dec. 14, by L. G. Schmidt & Co., archts., 154 West Randolph St., Chicago, 7 story, 160 x 225 ft. rein.-con., brick and steel, Linden St., here. $500,000. Owner's name withheld.

Pa., Phila.—Apartment Hotel—Neubauer & Supowitz, archts., 929 Chestnut St., receiving bids 3 story and basement, 56 x 120 ft., rein.-con., brick and steel, plain foundation, 42nd and Baltimore Sts., for E. Zion c/o architects. $200,000.

Pa., Phila.—Bank—N. Hulme, archt., 1524 Chestnut St., taking bids 1 story and basement, 40 x 98 ft. rein.-con., brick and steel, plain foundation, 4826 Baltimore Ave., for Belmont Trust Co. $150,000.

Pa., Phila.—Hospital—P. H. Johnson, archt., 1713 Sansom St., receiving bids 2 story and basement, 71 x 180 ft., rein.-con., brick and steel, 34th and Pine Sts., for Dept. Public Health, City Hall. $250,000.

Pa., Phila. — School — P. Monaghan archt., 128 Chestnut St., taking bids 3 story and basement, 62 x 142 ft. rein.-con., brick and steel, plain foundation, 68th and Landsdowne Aves., for St. Callistas Roman Catholic Church, 68th and Landsdowne Aves. $200,000.

Pa., Williamsport—Office and Administration—Nov. 21, by Williamsport Mirror & Glass Co., c/o R. W. Scott, treas., 647 East 3rd St., and F. A. Rianhard, archt., Masonic Temple, 3 story and basement, 75 x 80 ft. brick, 3rd and Railway Sts.

O., Cleveland—Hotel—J. L. Cameron, archt., 10406 Euclid Ave., taking bids 9 story, 50 x 85 ft., brick, steel and concrete, 633 Huron Rd., for G. Koller, 724 Prospect Ave. $250,000.

Mich., Detroit — Apartment — Varney & Varney, archts., 1422 Washington Blvd., receiving bids and opens same about Nov. 24, 3 story and basement, 90 x 130 ft. brick and steel, plain foundation, Collingwood Ave., for B. Brown, 271 Hendrie Ave. $150,000.

Ill., Chicago — Apartment — Johnston Bros., 109 North Dearborn St., receiving bids 3 story, 110 x 125 ft., rein.-con., brick and steel, 72nd and Bennett Sts. $150,000. L. M. Mitchell, 138 North Dearborn St., archt.

Ill., Chicago—Store and Apartment—H. Sierks, archt., 5036 Lincoln Ave., receiving bids 5 story, 250 x 340 ft., rein.-con., brick and steel, Lincoln and Winnemac Sts., for E. Planer, 2016 West 36th St. $600,000.

Tex., San Antonio—Temple—Nov. 22, by R. H. Cameron, archt., Central Trust Bldg., completing Masonic temple, terra cotta, stone and brick, Ave. E and 4th St. for Scottish Rite, $600,000. W. E. Simpson Co., Natl. Bank of Commerce Bldg., engrs. Steel frame and concrete work completed.

Calif., Bakersfield — Hospital — Dec. 18, (change of date), by Supervs. Kern Co., group of buildings for hospital, brick, stone and terra cotta. To exceed $500,000. C. H. Biggar, Bank of Italy Bldg., archt. Noted Nov. 9.

Calif., Chico—Bank and Office—C. Cole, archt., Waterland-Breslauer Bldg., receiving bids 4 story and basement, brick and concrete, 3rd and Main Sts., for First Natl. Bank of Chico. $175,000. Noted Sept. 21.

Calif., San Francisco—Office—Reid Bros., archts., 105 Montgomery St., receiving bids 15 story addition, 6th and Market Sts., for Western States Life Insurance Co. $800,000.

Ont., Smiths Falls—Church—Nov. 30, by W. A. Woodside, secy. executive com. of Westminster Presbyterian Church, 1 story, 80 x 120 ft. steel and stone. $175,000.

BIDS RECEIVED

N. Y., Buffalo—School—Bd. Educ., 1401 Telephone Bldg., opened bids Nov. 8, general contract School 7, 3 story, 180 x 250 ft., rein.-con., brick, steel and stone, Newburgh St., from Tifft Constr. Co., Iroquois Bldg., $322,800, Eastern Concrete Steel Co., Morgan Bldg., $324,400, C. H. Everitt, 295 Auburn Ave., $336,000; plumbing work, from J. J. Bresnahan, 462 Elk St., $24,974, Batt Co., 955 Michigan Ave., $26,995, Power Efficiency Corp., White Bldg., $28,600; heating and ventilating work, from J. J. Bresnahan, 462 Elk St., $64,974, R. J. Moran, 379 East Utica St., $64,000, J. W. Danforth Co., 70 Ellicott St., $67,986. Noted Nov. 2.

N. J., Trenton—School—Bd. Educ., opened bids Nov. 9, general contract 2 story, 150 x 350 ft., brick and steel school for negroes, North Montgomery St., from Karno-Smith Co., Broad St. Bank Bldg., $448,000, C. J. Smith Co., 202 Academy St., $454,217, De Riso Bros., 17 Bergenline Ave., Union Hill, $474,568; heating and ventilating work, from Deckman Power, Heat & Refrigeration Co., Goff Bldg., Camden, $50,988, W. G. Royer Co., 510 Stuyvesant Ave., $51,224, E. G. Britz & Co. New York City, (street address not available) $52,000; plumbing work, from Trenton Plumbing & Heating Co., Broad and Greenwood Sts., $29,224, Piper Bros., 108 Brunswick Ave., $30,700, W. P. Dunn, Inc., $31,762. Noted Oct. 26.

Pa., Phila.—Schools—Bd. Educ. 18 East Chestnut St., opened bids (1) 3 story and basement, Germantown Ave. and Southampton St., (2) 3 story and basement, 9th and Oregon Aves., (3) 2 story, 3rd and Duncannon Sts., all rein.-con., brick, steel and stone, plain foundations, from Cramp & Co., Denckla Bldg., (1) $428,562 (2) $412,762 (3) $444,297; Ketcham & McQuade, 1716 Sansom St., (1) $437,418; Wark Co., Broad and Walnut Sts., (1) $441,657 (2) $415,875 (3) $460,000; McCloskey & Co. Inc., Richmond and Ontario Sts., (2) $406,666 (3) $457,653. Noted Nov. 2.

Pa., Pittsburgh—School—Bd. Educ., Fulton Bldg., 2 story and basement, 76 x 298 ft. rein.-con., brick and tile addition to Beechwood School, Rockland Ave., general contract from Williams & Haas, Empire Bldg., $349,996, West Bros., 635 Trenton Ave., Wilkinsburg, $359,957, S. M. Siesel, First Natl. Bank Bldg., $371,000; heating and ventilating from Steel City Heating & Plumbing Co., 3612-5th Ave., $36,341, Ryan Heating Co., 53 Tunnel St., $36,620, J. A. Langdon, 2030-5th Ave., $36,744. Noted Oct. 26.

O., Centerville—School—Bd. Educ. of Washington Twp. School Dist., opened bids Nov. 1, general contract 2 story and basement, 60 x 110 ft., rein.-con. and brick, from H. R. Blagg Co., 1229 East 3rd St., Dayton, $89,225; I. F. Weber Co., 809 Commercial Bldg., Dayton, $90,975; F. K. Vaughn Building Co., Hamilton, $98,160. Noted Oct. 12.

O., Cleveland — School — Bd. Educ., East 6th St. and Rockwell Ave., 2 story, 146 x 295 ft., brick, steel and concrete, Jefferson Ave., from A. Dall, 3079 Euclid Heights Blvd., $433,420; F. J. Hohloch, Davis and Farley Bldg., $462,500.

Minn., Minneapolis—Institution—Bethany Home, 3719 Bryant Ave., S., general contract incl. part of foundation for 3 story and basement, 44 ft. high, L shaped, one wing 41 x 142 ft. other 41 x 172 ft., from Madsen Constr. Co., 848 Builders Exch. Bldg., $110,935; Pike & Cook, 416 South 5th St., $112,930; J. A. McDonald Constr. Co., 752 Builders Exch. Bldg., $115,390. Noted Sept. 21.

Kan., Winfield—Gymnasium—Southwestern College, 3 story, 150 x 170 ft., stone, plain foundation, from Gassman Constr. Co., Arkansas City, $152,000; H. I. Ellis Constr. Co., Brosius Bldg., Wichita, $183,427; J. H. Mitchell & Son, Wellington, $189,403. Noted Oct. 26.

Mo., St. Louis—School—Bd. Educ., 9th and Locust Sts., opened bids Nov. 8, (1) Edward Long Grade School, 2 story and basement, 95 x 221 ft., rein.-con. and brick, Morganford Rd. and Walsh St., (2) two, 2 story and basement, 40 x 50 ft. wings to Sumner High School, (3) Cyrus P. Waldbridge Grade School, 2 story and basement, 95 x 221 ft., rein.-con. and brick, Davison and Lillian Aves., (a) building complete excluding plumbing, sewering, gas fitting, heating and ventilating apparatus air washer, heat regulation, electric light wiring, clocks, bells, telephone system and vacuum cleaner (b) heating and ventilating apparatus incl. air washer and heat regulation, from Humes-Deal Co., Century Bldg., (1a) $281,966 (3a) $253,579; Dickey Constr. Co., Syndicate Trust Bldg., (1a) $286,526 (2a) $48,747; Kellerman Contg. Co., Victoria Bldg., (1a) $289,855 (2a) $45,753 (3a) $257,000; E. P. Ambler, 2822 La Salle St., (1b) $35,052 (3b) $35,052; Urbauer-Atwood Heating Co., 1452 South 2nd St., (1b) $35,090 (3b) $35,090; Sodeman Heating & Power Co., 23rd and Morgan Sts., (1b) $35,237 (3b) $35,237; Murch Bros. Contg. Co., Ry. Exch. Bldg., (2a) $47,960; Woerman Constr. Co., Syndicate Trust Bldg., (3a) $256,600. Noted Oct. 19.

CONTRACTS AWARDED

Me., Brunswick—Church—St. John the Baptist Roman Catholic Church, 1 story and basement, 116 x 160 ft., brick, stone and steel, plain foundation, Main St., to F. W. Cunningham & Sons Co., 181 State St., Portland. Archts. est. $250,000.

N. H., Bedford—Clubhouse—Manchester Country Club, Manchaster, 2 story, 65 x 125 ft. with 35 x 55 ft. and 33 x 90 ft. ells, timber and brick, here, to L. H. Shattuck, Inc., 208 Granite St., Manchaster. Archts. est. $150,000.

Mass., Boston—Apartment—Washington Heights Building Corp., 1607 Commonwealth Ave., will build 4 story, brick, steel and concrete, plain foundation, Washington St., by day labor. $150,000. Private plans.

Mass., Gardner—Hotel—Gardner Hotel Co., c/o H. L. Stevens Co., archts. and

Buildings (Continued)

engrs., 522 5th Ave., New York City, will build 5 story, 85 x 100 ft., brick, steel and stone plain foundation Pleasant St. here, by day labor. $250,000. Noted Nov. 2.

Conn., Bridgeport — Y. W. C. A., 263 Golden Hill St., 4 story, 55 x 120 ft., brick, concrete and steel, plain foundation, Park Ave., to W. R. Muirhead, Nichols (Bridgeport P. O.). Archts. est. $150,000. Noted Sept. 21.

Conn., East Haddam—School—Bd. Educ. 2 story, 12 room, brick and steel, plain foundation, in Moodus, to Pieretti Bros., Essex. Archts. est. $150,000. Noted Oct. 12.

N. Y., New York—Apartment—Bway. and 170th St. Holding Corp., c/o D. S. Lang, archt. and engr., 110 West 34th St., 5 story, 85 x 100 ft., brick, steel and stone, plain foundation, 117th St. and Bway., by day labor. $225,000.

N. Y., New York—Apartment—Lygeni Arms, Inc., c/o A. J. Thomas, archt. and engr., 15 East 47th St., will build 9 story, 60 x 85 ft., brick, steel and stone, plain foundation, 47 East 61st St., by day labor. $275,000.

N. Y., Rochester—Bank—J. F. Warner, archt., Granite Bldg., 5 story, 84 x 85 ft., brick and stone, 22-32 State St., to A. W. Hopeman & Sons Co., 569 Lyell Ave., for Natl. Bank of Commerce, 22 State St. Archts. est. $225,000. Noted Aug. 31.

N. Y., Rochester—Nurses' Home—St. Marys Hospital, 68 x 139 ft., 55 ft. high, brick, Genesee St., to Gorsline & Swan Constr. Co., 243 Powers Bldg. Archts. est. $200,000. Noted Dec. 15.

N. Y., Rochester—Y.M.C.A., Gibbs St., masonry contract for 2 story, 130 x 140 ft., brick, Arnett, Blvd. corner of Kenwood Ave. also 2 story, 86 x 120 x 140 ft., brick, Monroe Ave., to Rankin Constr. Co., Rochester (street address not available); carpentry work, to J. Luther & Sons Co., 87 Stillson St. Archts. est. $150,000 each. Noted Oec. 29.

N. J., Jersey City—Y. M. C. A., 2 West 45th St., New York City, 6 story, 114 x 261 ft., brick, steel and stone, Bergen Ave., here, to Edward Corning Co., 145 East 45th St., New York City. Archts. est. $500,000. Noted Oct. 26.

Pa., Phila.—Theatre and Store—Stanley Co., 1214 Market St., 2 story and basement, rein.-con., brick and steel, plain foundation, 64th St. and Saybrook Ave., to P. Haiback Constr. Co., 1261 North 26th St. $154,000. Noted Sept. 14.

Pa., Phila.—Clubhouse—Y. W. C. A., Morris Bldg., 5 story and basement, 32 x 72 ft. and 41 x 49 ft. rein.-con., brick and steel, caisson foundation, Cherry and Lambert Sts., to W. R. Dougherty, 1016 Sansom St., $152,000.

Pa., Pittsburgh—High School—Bd. Educ., Fulton Bldg., 3 story, basement and subbasement, 135 x 160 ft. rein.-con., brick, steel and stone addition, East Carson and 10th Sts., to P. H. Kelly, 1713 Sansom St., Phila., $452,400, heating and ventilating to R. T. Withers, New Castle, $73,826, plumbing to L. B. Buerkle Co., 1160 Penna Ave., $37,791. Noted Oct. 26.

Md., Baltimore — Memorial — State of Maryland and City of Baltimore, 3 story, Indiana limestone, plain foundation, Gay and Fallsway Sts., from Consolidated Eng. Co., Calvert Bldg., $687,000, P. H. Kelly Constr Co., 1713 Sansom St., Phila., Pa., $698,765; G. A. Fuller Co., American Bldg., $708,000. Contract awarded to lowest bidder. Noted Oct. 12.

D. C., Wash.—Office and Church—Bd. Temperance, Prohibition and Public Morals of Methodist Episcopal Church, Westley Bldg., Phila., Pa., 5 story, 129 x 153 ft., rein.-con., brick and steel, plain foundation, Maryland Ave., here, to Boyle-Robertson Constr. Co., Evans Bldg. Archts. est. $500,000. Noted Oct. 12.

Ga., Americus—Church—First Methodist Church 1 story and basement, rein.-con., brick and steel, rock foundation, to E. W. Rawlings, Americus, $150,000.

Fla., Sarasota—Apartment—A. McAnsh, 208 South La Salle St., R. C. Caples, 327 South La Salle St., and associates, all of Chicago, 2 story and basement, 47 x 75 ft. and 75 x 155 ft. rein.-con. and brick, Palm Ave., here, to W. R. Carmen Co., 601 Santiago St., Tampa, cost plus percentage basis. Archts. est. $500,000.

Mich., Marquette—School—State Normal School Bd., general contract 3 story and basement, 64 x 228 ft., rein.-con., brick, steel and tile addition, to Albinson Constr. Co., 300 5th Ave. S., Minneapolis, Minn., $179,000. Noted Oct. 26.

Ill., Chicago—Apartment—E. Doerr, c/o W. P. Doerr archt. 28 East Jackson Blvd., 3 story, 60 x 70 ft., rein-con., brick and steel, 4826 Lake Park Ave., to Turnquist Bros., 217 East 69th Pl. Archts. est. $150,000.

Ill., Chicago—Hotel—R. S. De Goyler, archt., 7 South Dearborn St., 12 story, 107 x 135 ft., rein.-con., brick and steel, Pearson and Seneca Sts., to Paschen Bros., 111 West Washington St. Archts. est. $2,250,000. Owner's name withheld.

Ill., Chicago—Lodge—Fraternal Order of Eagles, 5241 West Madison St., 4 story, 130 x 150 ft., rein.-con., brick and steel, to Great Lakes Constr. Co., 25 East Jackson Blvd. Archts. est. $250,000. Noted Jan. 12.

Ill., Chicago—Office—Chicago Trust Co., 7 West Madison St., 14 story, 90 x 99 ft., rein.-con., brick and steel, Monroe and Clark Sts., to H. Erickson, 139 North Clark St. Archts. est. $1,000,000. Noted Sept. 28.

Ill., Chicago—Store and Office—G. Derte, 4220 North Lincoln Ave., 2 and 3 story, 123 x 248 x 90 x 200 ft., rein.-con., brick and steel, 4224-46 Lincoln Ave., to J. J. Schwarm, 4803 Lincoln Ave. Archts. est. $300,000.

Minn., Chisholm—City Hall—General contract 3 story and basement, 75 x 140 ft., concrete, brick, steel and tile, Main St., to Pfeffer Constr. Co., 412 Torrey Bldg., Duluth, $127,800. Noted Oct. 26.

Mo., Kansas City—School—Bd. Educ., Askew School, 1 and 2 story and basement, 230 x 250 ft., rein.-con., brick and terra cotta, 27th and Topping Aves., to Rosenthal & Co., Ridge Bldg., $233,577.

Tex., Ft. Worth—Dormitory—Masonic Orphans Home general contract 2 story and basement, 50 x 150 ft., rein.-con. and brick, plain foundation, at Keystone Stop Dallas Interurban, to J. T. Taylor Constr. Co., Burkburnett Bldg., $100,000. Archts. est. $150,000

Tex., Laredo—Hotel—Laredo Hotel Co. 7 story, rein.-con. and brick, caisson foundation, Hidalgo and San Berdo Sts., to Jambers & Tillman, Laredo, $260,000.

Okla., Enid. — Office — American Natl. Bank, 7 story and basement, 50 x 100 ft., brick and steel, plain foundation, to G. Buxton, Enid, $300,000.

Ariz., Phoenix—Depot—Atchison, Topeka & Santa Fe R.R., Kerchoff Bldg., Los Angeles, Calif., and Arizona Eastern R.R., 165 Bway., New York City, union depot, 480 ft. long, here, to R. E. McKee, 1916 Texas St., El Paso, Tex. Archts. est. $850,000. Noted Sept. 28.

Calif., Fresno—Office—Holland & Holland, 2 story and mezzanine, 150 x 191 ft. with 75 x 90 ft. court, L St. near Fresno St., to R. F. Felchlin Co., Bank of Italy Bldg., $160,000. Sun Maid Raisin Growers, Inc., lessee.

Federal Government Work

PROPOSED WORK

N. Y., Buffalo—Superstructure—U. S. Engineer, Federal Bldg., rejected bids stone and concrete superstructure on breakwater in harbor, here. Noted Nov. 8.

Pa., Pittsburgh—Lock Gates—U. S. Engineer, Pittsburgh, plans steel lock gates for Lock 1, Allegheny River.

Del., Wilmington—Bridge—U. S. Engineer Wilmington, plans temporary wooden trestle bridge.

Md., Annapolis—Deferrization Plant—Spec. 4682—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids for deferrization plant for radio station at Naval Academy, here. Noted Nov. 9.

Tenn., Nashville—Barges—U. S. Engineer,, Nashville, plans 5 steel barges.

Tenn., Nashville—Dredge—U. S. Engineer, Nashville, plans 5 steel barges. "Watanga."

Ill., Chicago—Pier Removal, etc.—U. S. Engineer, 1201-537 South Dearborn St., rejected bids opened Oct. 24, for pier removal, dredging, etc., in Calumet Harbor. Noted Sept. 28.

Tex., Galveston—Dredging—U. S. Engineer, Galveston, plans dredging Houston Ship Channel.

Calif., Crescent City—Stone and Breakwater—U. S. Engineer, 240 Montgomery St., San Francisco, plans to purchase stone and construct breakwater, here.

Calif., San Diego—Dredging—U. S. Engineer, 725 Central Bldg., Los Angeles, rejected bids opened Oct. 21, dredging in harbor, here. Noted Oct. 5.

Calif., San Francisco—Dredging, etc.—U. S. Engineer, 240 Montgomery St., dredging and building training wall in Richmond Harbor, here.

BIDS DESIRED

Pa., Altoona—Extension, etc.—Dec. 4 by Treas. Dept., Wash., D. C., extension to building and driveway, and remodeling U. S. Court House and Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Pa., Phila.—Repairs—Spec. 4748—Dec. 6, by Bureau Yards & Docks, Navy Dept., Wash., D. C., repairs to roof, here. Noted Nov. 2.

W. Va., Huntington—Dwellings—Dec. 7 by U. S. Engineer, Huntington, for 5 lockkeepers dwellings at Dam 30, Ohio River near Greenup, Ky.

Miss., Vicksburg — **Barges** — Dec. 14, at office Mississippi River Comn., 3rd Dist., P. O. Box 404, furnishing steel barges; adv. this issue.

Mich., Detroit — **Dredging** — Dec. 15, at office U. S. Engineer, Detroit, dredging and rock removal in Livingstone Channel, Detroit River; adv. this issue.

Ill., Rock Island—Steel Barges—Dec. 11, by U. S. Engineer, Rock Island, for 10 steel barges; adv. this issue.

Ia., Knoxville—Hospital—Dec. 12, by Director U. S. Veterans' Bureau, at office Quartermaster General, 2306 Munitions Bldg., Wash., D. C., for Neuro-Psychiatric Hospital, here, complete, incl. water, lighting, heating systems, etc. Noted Sept. 28; adv. this issue.

Tex., Ft. Sam Houston—Hangar—Nov. 25, at office Constructing Quartermaster, for 14 x 66 x 140 ft. steel hangar at Kelly Field, here.

California—Road—Nov. 24, by C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., 881 Mills Bldg., San Francisco, grading and building structures on 15.1 mi. Cuyama Rd. in Santa Barbara Natl. Forest, Santa Barbara and San Luis Obispo Counties, 629,100 cu.yd. unclassified excav., 1,759 cu.yd. Class A and 315 cu.yd. Class C concrete, 227,300 lb. reinforcing steel, 1,470 sq.yd. ditch paving, etc. Noted May 11.

California—Road—Nov. 28, by C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., 881 Mills Bldg., San Francisco, grading and building structures on 10.9 mi. Adin-Adin Summit Natl. Forest Highway, about 28 mi. southwest of Alturas, Modoc Co., $5,750 cu.yd. rock and 56,550 cu.yd. common excav., 63,200 cu.yd. overhaul, 403 cu.yd. Class A, 218 cu.yd. Class B, 122 cu. yd. Class C concrete, 55,500 lb. structural steel, etc. Noted May 11.

Calif., San Diego — Garage, etc. — Spec. 4741—Dec. 14, by Bureau Yards & Docks, Navy Dept., Wash., D. C., for garage, fence and pavement, here. Noted Oct. 12.

Calif., San Diego—Repairs—Spec. 4751—Bureau Yards & Docks, Navy Dept., Wash., D. C., receiving bids for repairs to coaling wharf, here. Noted Nov. 2.

H. T., Pearl Harbor—Piers—Spec. 4687—Jan. 3 by Bureau Yards & Docks, Navy Dept., Wash., D. C. for two 335 ft. rein.-con. piers, 18 ft. wide, incl. some dredging and filling, here. Noted Nov. 2.

BIDS RECEIVED

Wis., Milwaukee—Piers, etc.—U. S. Engineer, Federal Bldg., completion South Arrow Head pier, removing old timber crib pier and dredging at Racine Harbor, from Greiling Bros., 110 East Walnut St., Green Bay, $134,553; McMullen & Pitz, Manitowoc, $151,008; Great Lakes Dredging & Dock Co., 216 West Water St., $151,771. Noted Oct. 12.

Nevada—Road—C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., 881 Mills Bldg., Ean Francisco, Calif., grading and building structures on Currant Creek Rd. in Nevada Natl. Forest, here, 44.5 acres clearing and grubbing, 3,000 cu.yd. rock and 45,000 cu.yd. earth excav., etc., from Nevada Contg. Co., Fallon, $62,633; Kroft & Bundy, Ogden, Utah, $64,749; T. M. Olney, 358 Vernon St., Oakland, Calif., $66,767. Engrs. est. $42,389. Noted Oct. 19.

CONTRACTS AWARDED

N. H., Portsmouth—Re-Roofing—Spec. 4711—Bureau Yards & Docks, Navy Dept., Wash., D. C., re-roofing marine barracks and boiler house, here, to H. A. Wood, 21 Brewster St., $6,820 (60 days). Noted Oct. 26.

Va., Richmond—Alterations, etc.—Treas. Dept., Wash., D. C., alterations, etc., in U. S. Post Office and Custom House, here, to Garber & Cissel, Inc., Bethlehem, Pa., $44,000. Noted Oct. 5.

Va., Yorktown — Standpipe, etc.—Spec. 4609—Bureau Yards & Docks, Navy Dept., Wash., D. C., standpipe and piping at Navy Mine Depot, here, to Penn Bridge Co., Beaver Falls, Pa., $29,480 (150 days). Noted Nov. 9.

Federal Government Work (Continued)

N. C., Cape Hatteras (Hatteras P. O.)—Extension, etc.—Spec. 4706—Bureau Yards & Docks, Navy Dept., Wash., D. C., extension to barracks and painting, Naval Radio Station, here, to H. M. Lucas, 115 Bruce St., Portsmouth, Va., $3,719 (60 days). Noted Nov. 2.

Ill., Chicago—Breakwater—U. S. Engineer, 537 South Dearborn St., concrete caisson breakwater at Indiana Harbor, Ind., to Great Lakes Dredge & Dock Co., 104 South Michigan Ave., $126,679. Noted Oct. 12.

Minn., Rochester — Extension to Workroom, etc.—Treas. Dept., Wash., D. C. extension to workroom, etc., in U. S. Post Office, here, to Pearce Bros., Inc., 220 West 42nd St., New York City, $13,781 (4 months). Noted Oct. 5.

N. D., Fargo — Extension, etc. — Treas. Dept., Wash., D. C., extension to workroom and mailing vestibule U. S. Post Office, here, to W. D. Lovell, 1415 8th St., S. E. Minneapolis, Minn., $11,530. (90 days). Noted Oct. 19.

Ore., Portland—Dike—U. S. Engineer, 2nd Dist., dike in Columbia River at Martin Island Bar, to A. Burcham, St. Helens, $22,533.

Calif., San Jose—Extension—Treas. Dept., Wash., D. C., extension to building and driveway United States Post Office, here, to J. Morton, 217 Balboa Bldg., San Francisco, $14,193 (120 days). Noted Oct. 19.

Miscellaneous

PROPOSED WORK

Parks, Etc.—Boston, Mass.—Park Dept. had plans prepared constructing park and playground in northeasterly portion of Back Bay Fens, $50,000; extension and improvement of Franklin Park, $100,000. A. A. Shurtleff, 89 State St., landscape archt.

Golf Course—Marion, Mass.—See "Buildings."

Park Development—Rockville, Conn. — Park Comn. plans to develop and lay out new Fox Hill Park. $25,000. Private plans.

Golf Course—New Rochelle, N. Y.—See "Buildings."

Transmission Line—Springville, N. Y.—Niagara, Lockport & Ontario Power Co., Buffalo, c/o F. Fox, Springville, plans high power transmission line from here to Wellsville and Olean to follow route of old Wellsville & Buffalo R.R. to exceed $50,000.

Wharf—Burlington, N. J.—See "Waterworks."

Playground—Cape May, N. J.—Plans to issue $25,000 bonds to purchase site and erect playground on Park Blvd.

Transmission Line—Titusville, Pa.—Titusville Light & Power Co., plans high tension transmission line from here to Hydetown and Pleasantville, also additional lines in and around Titusville, factory district.

Suburban Development—Asheville, N. C.—An Asheville concern (name not available), plans sub-division of Kimberly property into 65 resident lots, grading, constructing water, sewer and gas lines, sidewalks and streets, located at intersection of Merimon Ave. and Edgewood Rd. $100,000. C. H. Neal, Asheville, engr.

Suburban Development—Greensboro, N. C.—Guilford Insurance & Realty Co. plans sub-division of J. T. Moorehead property near extension of West Market St., incl. grading, paving streets sidewalks, water and sewerage systems. $1,000,000. C. L. Grubbs, Greensboro, pres.

Transmission Lines, Etc. — Statesville, N. C.—Southern Power Co., 432 South Church St., Charlotte, plans extending transmission lines from Lookout Shoals, near here to Winston-Salem, Greensboro and High Point; also switching station near four mile post on Southern Ry. near Greensboro. $1,000,000. W. S. Lee, 433 East Morehead St., Charlotte, engr.

Cables, etc.——Cleveland, O.—Plans to expend $40,000 for cables and accessories, $15,000 for ducts, manholes and underground equipment, $55,000 for transformers, poles and wire equipment, $65,000 for labor and engineering. G. Beckwith, City Hall, engr.

Asphalt Plant—Dayton, O.—Plans to purchase new asphalt plant of 1,500 sq.yd. daily capacity. $12,000. I. E. Houk, city engr.

Park-Grandview Heights, O. — Voted $29,500 bonds to purchase and beautify land for park purposes.

Retailing Wall—Des Moines, Ia.—Soon receives bids for 180 ft. rein.-con. retaining wall, 40 ft. high, along east bank Des Moines River, north of University Ave. $25,000. K. C. Kastberg, city engr.

Gas Reservoir—Duluth, Minn.—Water and Light Dept., plans steel gas reservoir, 1,000,000 cu.ft. capacity, 34th Ave. E. E. K. Coe, City Hall, engr.

Transmission Lines, etc.—Missouri—U. S. Pub. Serv. Co., Ry. Exch. Bldg., St. Louis, having plans prepared extending transmission lines 15 mi. in southeast Missouri, 40 mi. in Texas and several miles near Mitchell, S. D., $125,000; enlarging various power plants, $200,000; extensions and equipments for same, $200,000. Above amounts are part of $1,100,000 bond issue recently disposed of by U. S. Pub. Serv. Co. Balance of proceeds were used to reimburse the Light & Development Co. of St. Louis, Ry. Exch. Bldg., for moneys expended in extending lines, etc. controlled by company. These companies are inter-related, the U. S. being sort of financing company, although it does not control all of plants owned by Light & Development Co.

Harbor and Terminal Facilities—Corpus Christi, Tex.—Corpus Christi Navigation Dist. Nueces Co., voted $1,000,000 for harbor and terminal facilities. C. J. Howard, city engr. Noted Oct. 19.

Retaining Wall—Seattle, Wash.—Associated Oil Co.soon takes bids concrete retaining wall at 1747 Railroad Ave. S. $75,000.

Transmission Line—Tacoma, Wash.—See "Waterworks."

Tractor—Bakersfield, Calif.—City Council plans to purchase tractor for use of street department. Not to exceed $5,000. W. D. Clarke, city engr.

Terminal, etc.—Oakland, Calif.—Southern Pacific Co., 65 Market St., San Francisco, purchased 300 acres waterfront land for port terminal and industrial purposes. G. W. Boschke, ch. engr.

Levees—Riverside, Calif.—Palo Verde Joint Levee Dist., Palo Verde Valley, lying in Riverside and Imperial Counties, voted $371,378 bonds and soon receives bids reconstructing levees, destroyed by flood, and for other flood-protection work.

Electric Lighting and Power System—Brodhagen, Ont.—Logan Twp. plans electric lighting and power distribution system. $40,000. Bylaw will probably be voted on in January. L. G. Rock, member Twp. Council.

Drilling—Camperdown, Ont.—Canada Oil & Gas Ltd., plans extensive drilling. $50,000.

Eliminating Grade Crossings—Kitchener, Ont.—Grand Trunk Ry., McGill St., Montreal, Que., plans to elevate tracks and build 7 subways, between Strange and Lancaster Sts., here. City Council instructed S. Shupe, city engr., to prepare report on land damages, etc. $1,000,000. F. L. C. Bond, ch. engr.

Transmission Line, etc.—Port Burwell, Ont.—Plans 13,000-volt transmission line from Tillsonburg, also distribution plant. $60,000. G. A. Vanorder, chn.

Eliminating Grade Crossings — Toronto, Ont.—Plans eliminating grade crossings on Bloor St. W. at Wallace, Royce and St. Clair Aves., $300,000. R. C. Harris, city engr.

BIDS DESIRED

Gate Valves, etc.—New York, N. Y.—Dec. 5, by Bd. Water Supply, Municipal Bldg., furnishing and delivering gate valves and hydrants for Mt. Prospect, Park Slope, Ft. Hamilton and Clove conduits and Narrows Siphon 2 of Catskill Aqueduct, Contr. 213. J. G. Gillespie, pres.; adv. this issue.

Dock—Newark, N. J.—Nov. 27, at office of T. L. Raymond, dir. Dept. Streets & Pub. Impvts., City Hall, 1,000 ft. relieving platform type of marginal dock, at Port Newark Terminal; adv. this issue.

Railings and Stairs—Phila., Pa.—Nov. 28, by F. Caven, dir. of Pub. Wks., City Hall, installing 37,800 ft. metal railings and stairs in North East sewage disposal plant. $75,000. C. A. Allen, City Hall, engr.

Retaining Walls—Phila., Pa.—Nov. 28 by F. H. Caven, dir. Pub. Wks., City Hall, retaining walls along Winghocking Creek. $25,000. J. A. Vogelson, City Hall, engr.

Crane—Baltimore, Md. — D. C. Elphinstone, 488 Continental Bldg., in market for crane, 75 ft. beam, electrically operated, capable of handling 2 yd. clamshell on 60 ft. radius.

Crane—New Cumberland, W. Va.—Cutler Steel Co., Bowman Bldg., Pittsburgh, Pa., in market 10 ton crane for plant, here.

Locomotive Crane—Wheeling, W. Va.—Wheeling Steel Corp., Wheeling Steel Bldg., in market locomotive crane.

Flume—New Smyrna, Fla.—Nov. 21, by City Comn., constructing flume or storm water culvert. P. P. Pilcher, city mgr.; adv. this issue.

Lumber—New Orleans, La.—Nov. 23 by Bd. Port Comrs., Court Bldg., furnishing 127,000 ft. untreated yellow pine, also quantity of creosoted piling.

Crane—Dayton, O.—Advance Fdry. Co., Parnell St., taking bids 15 ton electric crane.

Foundation—Milwaukee, Wis.—R. Messmer & Bros., archts., 221 Grand Ave., taking bids on concrete foundation for 9 story and basement, 110 x 145 ft., brick and concrete, Juneau Pl., for Milwaukee Elks Lodge., 448 Jefferson St. Total cost $1,000,000. Noted Aug. 17, under Buildings.

Traveling Crane—San Francisco, Calif.—Dec. 6, by city and San Francisco Co., furnishing and delivering electric traveling crane for Moccasin Creek Power Plant, Contr. 70, Hetch Hetchy Water Supply. W. J. Fitzgerald, secy.

BIDS RECEIVED

Sea Walls — Gloucester, Mass. — Dept. Pub. Wks., State House, Boston, opened bids Oct. 13, 1008 ft. granite faced concrete seawall, 47 ft. concrete seawall, 76 ft. granite seawall, here, from Bay State Dredging and Contg. Co., 62 Condor St., East Boston, $54,630, G. T. Rendle, Condor St., East Boston, $62,790, J. Williams Co., Gloucester, $64,800. Noted Oct. 5.

Column Foundations—New York, N. Y.—Transit Comn., 49 Lafayette St., opened bids Nov. 10, column foundations for part of Rapid Transit R.R., Flushing Route, from Gustin Morris Co., Creek St. and Anabel Pl., Long Island City, $91,000; Necaro Contg. Co., 97 Court St., Brooklyn, $102,822; C. Meads Co., 217 West 14th St., $104,280. Noted Nov. 2.

Structural Steel—New Orleans, La.—Bd. Port Comrs., New Court Bldg., structural steel for sacking plant at grain elevator, from St. Louis Structural Steel Co., Bank of Commerce Bldg., St. Louis, Mo., $30,205; Virginia Bridge & Iron Co., Maison Blanche Bldg., $30,668; Nashville Bridge Co., Shelby Ave., Nashville, Tenn., $30,902. Noted Oct. 19.

Spillway Gates—Turlock, Calif.—Dirs. Turlock and Modesto Irrigation Dist., furnishing, fabricating and delivering spillway gates for Don Pedro Dam, Schedules 1, 2, 3, 4 and 5, from Union Constr. & Dry Dock Co., Key Route Basin, Oakland, $59,465; Kyle & Co., 648 Call Bldg., San Francisco, $61,643; Bethlehem Shipbuilding Corp., Ltd., 20th and Illinois Sts., San Francisco, $62,478.

CONTRACTS AWARDED

Dock—New Haven, Conn.—New England Steamship Co., Bridge St., will rebuild dock on Bridge St., wood and steel, by day labor. $30,000. Private plans.

Dock System — Jacksonville, Fla. — Constructing 2,933 lin.ft. bulkhead wall necessary to the constructing of new pier, 1,000 ft. long, 350 ft. wide, incl. placing of (3,442 ton steel sheet piling and fabricated master piles, already purchased from Lackawanna Steel Co.) and furnishing and placing 275,480 lin.ft. wood piling and 655,000 ft. lumber in construction of wooden relieving platform, to J. A. Kidd, Realty Bldg., $102,420. Noted Oct. 19.

Collier—Birmingham, Ala.—Consolidated Coal Iron Co., constructing collier, 110 ft. long, 35 ft. beam, equipped with 90 ft. tower, and hull, hourly capacity of 200 ton, to Johnson Iron Wks., Algiers, La., $50,000.

Grade Separation — Milwaukee, Wis. — Grade separation of 8th Ave., etc., to M. E. White Co., 133 West Washington St., Chicago, $49,975. Noted Nov. 2.

Passenger Liner—Seattle, Wash.—Alaska Steamship Co., Pier 2, 365 ft. twin screw passenger liner, 49 ft. beam, 26 ft. deep, with speed of 16 knots, to Todd Drydock & Constr. Co., Hylebos Waterway, Tacoma, $1,000,000.

Concrete Pipe—Delhi, Calif.—Division of Land Settlement (State of California), laying 68 mi. concrete pipe, to T. Cogo, 715 L St., Fresno, $33,138. Noted Nov. 9.

Underground Conduits—Stratford, Ont.—Bell Telephone Co., Albert St., will build underground conduits in various streets, by day labor. $50,000. Noted Nov. 2.

Car Barn and Station—York Mills, Ont.—Ontario Hydro Comn., Hydro Bldg., Toronto, 2 story, 40 x 60 ft. car barn and station, etc., concrete, brick and stone, general contract to Sullivan & Fried, 81 Victoria St., Toronto, $50,000, stone to Nicholson & Curtis, 1117 Yonge St., Toronto, electrical work to Richardson & Cross, 81 King St., East.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: **Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.**

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Plans and Specifications **for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.**

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OFFICIAL PROPOSALS

Bids: Nov. 21.

Storm Water Culvert

New Smyrna, **Fla.**

Sealed bids will be received by the City Commission of New Smyrna, Florida, at 11 o'clock, Tuesday, the 21st day of November, 1922, at the office of the City Manager at the City Hall, for the construction of a flume or storm water culvert, to be located along the north side of Canal Street where the present open canal is located between Myrtle Street and the river just east of Hillsborough Street.

The length of the structure to be constructed is approximately 3,000 ft. and 9 ft. wide, and the principal items of work are as follows:

2,500 sq.yds. reinforced concrete slabs.
1,400 cu.yds. concrete walls.

An alternate design provides for a circular storm water culvert 7 feet in diameter to be built of plain concrete.

Plans and specifications will be on file at the office of the City Manager at the City Hall in New Smyrna on or after noon, the 14th day of November, 1922.

Cash or certified check for $2,500.00, made payable to the city of New Smyrna, Florida, must accompany each bid as evidence of good faith and as a guarantee that if awarded the contract, the bidder will execute the contract and give bond as required.

Each bidder will be required to furnish with his bid a letter from a surety company, licensed to do business in Florida, stating that the surety company will furnish the bond required in case the bidder is successful in securing the contract. Bond will be required in the sum of 25 per cent. of the total estimate of cost.

The right is reserved to reject any or all bids. P. P. PILCHER, City Manager.

Bids: Dec. 12.

Motor Driven Water Works Pumps

Wheeling, W. Va.

Sealed proposals for the design, construction, erection and putting in operation of three (3) low service and three (3) high service motor driven, centrifugal pumping engines in units of 10, 15 and 20 million gallons, will be received by the city of Wheeling, W. Va., until 12 o'clock noon, Eastern Standard Time, on the 12th day of December, 1922, and will then be opened and read publicly.

Official proposal blanks, instructions to bidders, specifications, form of contract and bond may be seen at the office of the City Clerk, Wheeling, W. Va., or two (2) copies of each may be obtained by bona fide bidders upon application to The J. N. Chester Engineers, Pittsburgh, Pa., or to the city of Wheeling, W. Va., upon deposit of twenty-five dollars ($25.00), which amount will be refunded to bidders on receipt of a bona fide bid or upon the reutrn of both copies in good order.

The right is reserved to reject any or all bids.

C. H. DOWLER,
City Manager.

Attest:
W. M. EVANS,
City Clerk.

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Its distribution among the contractors of any one state is in proportion to the number of contractors situated in that state. The Official Proposal Colums of *Engineering News-Record* offer precisely the same efficient service to municipalities, counties, and state and government departments in every section of the United States.

OFFICIAL PROPOSALS

Bids: Nov. 24.

High School

Yonkers, N. Y.

The Board of Education will receive proposals for the erection of the Charles E. Gorton High School, on Palisade Avenue and Shonnard Place, Yonkers, New York, (excepting Heating, Plumbing and Electrical work).

Plans and specifications will be ready for inspection in the office of the Board of Education in the High School Building, November 3rd. A deposit of $15 for each set taken from the office will be required. Plans may be taken by general contractors only.

Proposals must be made on blank forms which will be furnished at the office of the Board.

The building must be complete in every respect and ready for occupancy December 1st, 1923.

Inasmuch as the work specified is to be devoted to public use, time is of the essence of the contract, and for failure of the contractor to fully complete the same on or before the time specified, the sum of Twenty-five Dollars a day will be deducted from the contract price, as liquidated damages, for each day that shall elapse until the final completion of the contract.

Each proposal must be accompanied by a certified check, payable to the Board of Education for five per cent of the amount of such proposal, which will be retained by the Board until a satisfactory bond is filed and the contract executed. All other checks will be returned to the bidders as soon as the proposals are opened, and the result of the competition declared.

The bidder to whom the contract may be awarded will be required to furnish a security bond for one-quarter of the contract price named in his bid, and a liability policy from companies approved by the Board. Each proposal must be inclosed in a securely sealed envelope, endorsed with the name of the bidder and the work for which the proposal is made, and must be delivered to the Secretary of the Board on or before 5:00 o'clock p.m., Friday, November 24th, 1922.

The Board reserves the right to reject any and all proposals.

EDWARD A. FITCH,
Chairman.
ROSCOE S. CONKLING.
JOHN W. BURKE.
Committee on Architecture and Construction

OFFICIAL PROPOSALS

Bids: Nov. 21.

Road Grading

Newton, N. J.

Notice is hereby given that sealed bids will be received by The County of Sussex for grading of Fredon Stillwater Road in the Township of Fredon and the County of Sussex. Estimated amount of excavation required is 34,865 cu.yd. and opened and read in public at the Freeholders Office, Newton, N. J., on November 21, 1922, at 11:30 a.m.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Harvey Snook, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at Newton, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and addres of bidder and name of road on the outside, addressed to The County of Sussex, Newton, N. J., and must be accompanied by a Surety Company Certificate and a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to Engineer.

By order of The County of Sussex.
(Signed) WILLIAM S. VOUGHT, Clerk.

Bids: Nov. 25.

Reservoir Dam

Bluefield, W. Va.

Sealed proposals or bids for the construction of a clay or earthern dam, containing about 40,000 cubic yards of material, to be sluiced into place, will be received at the office of the Bluefield Water Works & Improvement Company, at Bluefield, West Virginia, until three o'clock p.m. on the 25th day of November, 1922, when they will be publicly opened and read. All proposals shall be enclosed in an envelope furnished by the above styled company and shall be accompanied by a certified check on some national bank, in the sum of five (5%) per cent of the amount of the proposed bid. The contractor to whom the award is made will be required to furnish surety company bond in the sum of thirty-five (35%) per cent of the amount of the contract, within thirty days after official notice of the award of contract and in accordance with the terms of the specifications. The right is reserved to reject any or all bids. Drawings, specifications and blank forms of proposals may be consulted at the office of company, 601 Princeton Avenue, Bluefield, West Virginia, or they will be forwarded by mail upon request if $4 accompanies the order. This amount will be refunded upon return of the Plans and Specifications in reasonably good order.

BLUEFIELD WATER WORKS &
IMPROVEMENT COMPANY
WM. McCARTHY, Superintendent.
November 8th, 1922.

Bids: Nov. 27.

Water Works and Sewerage Improvements

Kings Mountain, N. C.

Sealed proposals will be received by the Board of Commissioners of the town of Kings Mountain, North Carolina until 12 o'clock M., Monday, November 27, 1922, for making water works and sewerage improvements.

The work includes: Construction of a 500,000-gallon reinforced concrete reservoir; small pumping station of reinforced concrete and brickwork; reinforced concrete sewage sedimentation tank; furnishing and laying two (2) miles of water mains six (6) to fourteen (14) inches in diameter, with accessories; building two (2) miles of sewers, and furnishing eight (8) inch and ten (10) inch sewer pipe.

The principal quantities involved are:

900 cu.yd. of earth excavation for structures.
170 cu.yd. of 1-1½-3 concrete.
255 cu.yd. 1-2-4 concrete.
47,000 lb. reinforcing steel.
2,100 lin.ft. fourteen (14) inch water mains.
6,470 lin.ft. twelve (12) inch water mains.
460 lin.ft. ten (10) inch water mains.
2,700 lin.ft. six (6) inch water mains.
6,200 lin.ft. eight (8) inch sewer mains.
1,650 lin.ft. ten (10) inch sewer mains.
40 valves and hydrants.

Plans will be on file and may be seen at the office of the Town Clerk, Kings Mountain, N. C., and at the office of The Ludlow Engineers, Winston-Salem, N. C., after November 10, 1922.

For the convenience of prospective bidders, the engineers will furnish copies of the plans upon application accompanied by a check for $10 to cover the cost, or separate prints will be furnished at $1 each.

Each bid must be accompanied by a certified check in the sum of $2,500, or 5 per cent of the amount of partial bids.

Proposals will be opened publicly with the usual rights reserved.

W. H. McGINNISS, Mayor.
GEO. E. LOVELL, Sec. and Treas.
THE LUDLOW ENGINEERS.
Winston-Salem, N. C.,
J. L. Ludlow, Consulting Engineer.

Bids: Nov. 21.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m., on Tuesday, November 21, 1922, for the improvement of highways in the following counties:

CHAUTAUQUA	(one highway: 4.25)
COLUMBIA.........	(one highway: 4.27)
NASSAU............	(one highway: 0.24)
ORANGE...........	(one highway: 1.90)
SARATOGA..........	(one highway: 1.33)
SUFFOLK...........	(one highway: 0.24)
OTSEGO............	(one highway: 7.20)
WAYNE............	(one highway: 2.24)

Also for the reconstruction of the following:

MONTGOMERY......	(two contracts: 1.50 & 2.50)
ONONDAGA..........	(one contract: 2.04)
ORANGE.....	(two contracts: 1.43 & 1.74)
TOMPKINS..........	(one contract: 1.99)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.
J. C. FINCH,
Secretary.

Bids: Dec. 1.

Cast Iron Pipe and Castings

San Juan, Porto Rico.

Sealed proposals for the furnishing of about 20,020 tons of cast iron pipe and of 250 tons of special castings, or its equivalent in steel pipe and specials, delivered at San Juan, Porto Rico, for the City of San Juan, will be received in the office of the Commissioner of Public Service until December 1, 1922, at 10 a.m.

All plans, specifications, instruction to bidders, blanks, forms for proposals and all other information may be obtained at the office of the City Commissioner of Public Works at San Juan, Porto Rico.

The right is reserved to reject any and all bids.

MARTIN TRAVIESO,
Commissioner of Public Service.

A Bonding Company's Suggestion to Official Proposal Advertisers

"A large part of our contract bond business is submitted to us by wire, and I am a constant reader of the Official Proposals in order to find out the size and nature of the work that is referred to in the bond application. Very frequently I am unable to get any clear idea of what the advertisers are asking bids on, and of course the prospective bidder or contractor is also at a loss to know what kind of a job is being advertised.

"Traveling expenses are heavy at the present time, and contractors pay out considerable sums during the course of a year in investigating prospective contracts. This of course is a large charge that the owners eventually pay, and anything that will reduce the general overhead of contract work will eventually be to the advantage of the owner.

"One way to reduce this overhead is to word the advertisement so that the contractor sitting in his office will know whether or not he should investigate and prepare a bid on the proposed work."

Bids: Dec. 11.

Labor-Material Percentage Contract

New Orleans, La.

Sealed proposals will be received at the Sewerage and Water Board, Room 401, No. 526 Carondelet Street, New Orleans, La., up to 12 o'clock noon of Monday, December 11th, 1922, on Labor-Material Percentage Contract for year 1923.

Specifications and blank forms of proposal may be obtained at the office of the Board.

The right is reserved to reject any or all bids.

October 12th, 1922.

A. G. MOFFAT,
Secretary.
GEO. G. EARL,
General Superintendent.

Bids: Dec. 8.

Bridge Superstructure, Machinery and Electrical Equipment

Seattle, Wash.

Sealed proposals will be received by the Board of Public Works of the City of Seattle, up to 10 o'clock a.m., Friday December 8, 1922, in room 234, County-City Building, for the fabrication and erection of the Super-structure, Machinery and Electrical Equipment of a Steel Bascule Bridge and two Side Spans over the West Waterway at West Spokane Street, under authority of Ordinance No. 43397.

The structure will comprise a double-leaf bascule span 288 feet center to center of trunions, 2 approach spans each about 140 feet long and a steel girder span about 136 feet long. The width of the bascule span will be 45 feet center to center of trusses and of the side spans 52 feet center to center of trusses, and of the girder span about 40 feet.

No proposal will be considered except as same is made strictly in conformity with the advertisement therefor and upon the forms of proposals furnished by the Board of Public Works, bound together with the specifications, general clauses and form of contract which must be submitted unbroken and unaltered in every particular.

This improvement shall be made in accordance with the respective plans and specifications now on file in the offices of the Secretary of the Board of Public Works and the City Engineers, respectively, and in acordance with plans prepared by the Strauss Bascule Bridge Company, which will also be available at the above offices. Bidders must make proposals on both the City of Seattle plans and the Strauss Bascule Bridge Company's plans.

The successful bidder will be required to file with the City Comptroller a bond in the sum specified in the specifications.

Each bid must be accompanied by money, a satisfactory surety company bid bond approved by the Mayor and City Comptroller as to sufficiency and the Corporation Counsel as to form, or a certified check payable to the order of the City Comptroller of the City of Seattle for a sum not less than five (5) per cent of the total amount of bid, and no bid will be considered unless so accompanied.

A deposit of Twenty-five Dollars ($25.00) will be required for each set of plans and specifications, which will be returned upon return of the plans in good order.

Special attention of bidders is called to the State Law and City Charter regarding the number of hours constituting a day's work, minimum wage scale, American citizenship and heads of families.

The Board of Public Works reserves the right to reject any or all bids.

By order of the Board of Public Works.
C. B. BAGLEY,
Secretary.

First publication June 20, 1922.

Bids: Dec. 12.

Engines and Boilers

Wheeling, W. Va.

Sealed proposals for the design, construction, erection, putting in operation and testing of two (2) engine driven centrifugal low service pumping engines; one turbine driven centrifugal high service pumping engine, three (3) 350 hp. boilers with stokers and the dismantling, moving and reerecting of the existing Allis-Chalmers pumping engine will be received by the city of Wheeling, W. Va., until 12 o'clock noon, Eastern Standard Time, on the 12th day of December, 1922, and will then be opened and read publicly.

Official proposal blanks, instructions to bidders, specifications, form of contract and bond may be seen at the office of the City Clerk, Wheeling, W. Va., or two (2) copies of each may be obtained by bona fide bidders upon application to The J. N. Chester Engineers, Pittsburgh, Pa., or to the city of Wheeling, W. Va., upon deposit of twenty-five dollars ($25.00), which amount will be refunded to bidders on receipt of a bona fide bid or upon the return of both copies in good order.

The right is reserved to reject any or all bids.

C. H. DOWLER,
City Manager.
Attest:
W. M. EVANS,
City Clerk.

OFFICIAL PROPOSALS

Bids: Dec 5.

Bridge

Cape May, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Cape May, for the construction of a bridge across Grassy Sound Channel, including Strauss Bascule Draw Span, Cresoted Timber Trestle and Abutments with Graveled Approaches on Sand Fill, on the line of the North Wildwood to Burleigh Road in Middle Township, Cape May County, N. J., and opened and read in public at Cape May Court House, Cape May County, N. J., on Tuesday, December 5th, 1922, at 12 o'clock noon.

Drawings, specifications and forms of bid, contracts and bond for the proposed work, prepared by R. Fendall Smith, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at Marmora, Cape May County, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings, by the Engineer on proper notice, and a deposit of $25.00, which will be refunded upon the return of the Plans and Specifications in good condition.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of Bridge and road on the outside, addressed to The Board of Chosen Freeholders of the County of Cape May, N. J., and must be accompanied by a Certificate from a Surety Company and a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of The Board of Chosen Freeholders, of the County of Cape May, N.J.

IRVING FITCH, Clerk.
Sea Isle City, N. J.

OFFICIAL PROPOSALS

Bids: Nov. 27.

Marginal Dock

Newark, N. J.

Sealed proposals will be received from 10:00 to 10:15 a.m. on Monday, November 27, 1922, at the office of the Director of the Department of Streets and Public Improvement on the second floor of the City Hall, Newark, N. J., and then publicly opened and read for the construction of a relieving platform type of marginal dock approximately 1,000 feet long at Pork Newark Terminal.

Approximate Quantities:

Piling	
Short and Long Leaf Yellow Pine	114,240 lin.ft.
White Oak	10,080 lin.ft.
Squared Timber	
Southern Yellow Pine	731,268 B.M.
White Oak	25,050 B.M.
Rip-Rap	
Rip-Rap	14,000 tons
Concrete	
1:2:4 (course aggregate)	1,715 cu.yds.
1:2:4 (small aggregate	160 cu.yds.
Reinforcement	
1-inch Rods	24,000 lbs.
Triangle Mesh-Style No. 049	3,000 lbs.
Dock Hardware	
Bitts (New York Dock Standard)	7
Cleats (New York Dock Standard)	30
Mooring Posts (N.Y. Dock Standard)	4

Bids must be made upon blanks to be furnished by the Department.

Plans and specifications and proposal blanks may be obtained at the office of the Bureau of Docks, room 205 City Hall.

Terms of proposal and surety required are fixed by the specifications.

The contract will be awarded to the lowest responsible bidder, the right being reserved to reject any and all bids or waive informalities therein, and to award contracts for the whole or any part thereof.

By direction of the Board of Commissioners of The City of Newark.

THOMAS L. RAYMOND,
Director, Department of Streets
and Public Improvements.

OFFICIAL PROPOSALS

Bids: Dec. 6.

Bridge

Freehold, N. J.

Notice is hereby given that sealed bids **will be received by the** Board of Chosen **Freeholders of the County** of Monmouth **for the Reconstruction of** Grand Avenue **Bridge, No. N-14, over Sunset** Lake; consisting of three forty foot spans and thirty foot roadway, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey, on December 6th, 1922, at 11.00 a.m.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BYRANT B. NEWCOMB, Director.
Attest: CHAS. E. COLE, Clerk.
Freehold, N. J., November 8th, 1922.

Engineering News-Record

(Circulation over 30,000 weekly)

prints more than twice as many announcements advertising contracts to be let than appear in any other one publication

Practically every form of public work and the furnishing of material and supplies were printed in the Official Proposal Columns of *Engineering News-Record* last year. They include calls for bids on:

Boilers
Bridges
Building Alterations
Canal Construction
Cast Iron Pipe
Dams
Drainage
Dredging
Engines
Excavation
Filling
Filtration Plants
Generators
Heating and Ventilating
Highway Construction
Paving
Pumps
Pumping Plants
River and Harbor Improvements
Road Oil
Road Building Equipment
Schools and Public Buildings
Sewage Disposal Plants
Sewers
Street Improvements
Street Lighting Systems
Supplies and Material
Water Works
Well Drilling, Etc.

THIS wide use of *Engineering News-Record's* Official Proposal Columns and the rapidly growing recognition of this paper's value as an advertising medium is due to RESULTS—keen competition, lower bids, better work—and savings.

For more than 40 years contractors, manufacturers, and dealers everywhere have consulted the Official Proposal Columns of *Engineering News-Record* and its predecessors for opportunities for business. Today, many of those interested in bidding on contracts for work, material, and supplies depend entirely upon the advertisements that appear in this dominant paper and would be unlikely to see those printed elsewhere.

The Dominant Proposal Medium

OFFICIAL PROPOSALS

Bids: Nov. 29.

Delaware River Bridge Main Towers

Contract No. 6

Philadelphia, Pa.

Sealed proposals for the construction of the two Main Towers of the bridge over the Delaware River connecting the City of Philadelphia, Pa., and the City of Camden, N. J., will be received by the Delaware River Bridge Joint Commission at Room 806, Widener Building, Philadelphia, Pa., until 3:00 o'clock P.M. Eastern Standard Time, November 29, 1922, when they will be publicly opened and read. The contract will be awarded, or all bids rejected, within fourteen days after the bids are opened. The right is reserved to reject any or all bids.

The two piers on which the towers are to be erected are located in the Delaware River near the pier head lines on the Pennsylvania and New Jersey sides of the river at points approximately opposite to Race Street in Philadelphia and Pearl Street in Camden. The work will include the furnishing, fabricating, painting and erecting of the two steel towers complete, with top saddle castings, as shown in the contract drawings, ready to receive the cables. The work comprises approximately 9,500 tons of steelwork, and must be completed within a period of fifteen months.

Bids must be made upon the blank proposal form, which, together with specifications, bond and contract form, and con- office of the Joint Commission upon tract drawings, may be obtained at the deposit of $25, which deposit will be refunded upon the receipt of bid or upon their return in good condition.

Each proposal must be accompanied by a certified check for seventy-five thousand dollars, drawn upon a national or state bank or trust company having an office either in Philadelphia or Camden, and payable to the Delaware River Bridge Joint Commission, and sureties' consent must be shown. The bidder or bidders to whom the concract is awarded will be required to give bond in the sum of fifty per cent of the amount of the concract.

WILLIAM C. SPROUL, Chairman,
JOSEPH K. COSTELLO, Secretary,
DELAWARE RIVER BRIDGE JOINT COMMISSION

Bids: Nov. 28.

Highway Work

Montpelier, Vt.

Sealed **Bids** will be received by the office of the Commissioner of Highways, Montpelier, Vermont, until 2 p.m. November 28, 1922, and then publicly opened and read. for the construction of 1.16 miles of bituminous macadam road in Highgate, Vermont; and 4.78 miles of gravel road in Danville, Vermont.

Plans and specifications for each of the above may be seen at the office of the State Engineer at Montpelier, Vermont. Plans and specifications for the Highgate Project may be seen at the residence of Mr. Rupert A. Phelps, Highgate Springs, Vermont, and for the Danville Project at the Town Clerk's Office, Danville, Vermont.

Bidders should satisfy themselves before bidding as to the character of the work and the obstacles to be encountered. The estimated quantities are not guaranteed, but are given as a basis for the comparison of bids.

A certified check for $1,500 on the Highgate Project and $4,000 on the Danville Project, payable to the State Highway Board, must accompany each bid.

The right is reserved to reject any or all bids.

By Order of the State Highway Board.
THURMAN W. DIX,
Commissioner of Highways.
Dated Nov. 6, 1922.

OFFICIAL PROPOSALS

Bids: Dec. 7.

Sewerage Extensions

Athol, Mass.

Sealed proposals for the construction of sewerage extensions in Athol, Mass., will be received by the Sewer Commissioners until noon on Thursday, Dec. 7th, 1922, at the office of the Selectmen, in Athol, and will then and there by publicly opened and read by them.

The proposed work consists of approximately 12,000 feet of 8-inch pipe sewer, 2,100 feet of 10-inch pipe sewer and 4,200 feet of 12-inch pipe sewer, including 50 manholes.

The work is to be completed by October 1st, 1923.

Plans, specifications and blank forms of proposal may be obtained at the Selectman's office, Athol, Mass. A deposit of $5.00 will be required for plans furnished, and will be refunded on their return.

The proposal must be made on one of the blank forms provided and must be accompanied by a certified check for $500.00.

The amount of bond for faithful performance, to be furnished when the contract is executed, will be the amount of the contract.

The sewer Commissioners reserve the right to reject any or all bids.

Athol, Mass., Nov. 8, 1922.
By order of the Sewer Commissioners,
BURTON T. HALE, Clerk.

Contractors Everywhere Read These Advertisements

to see where bids are desired on contracts suited to their available plant and organization. The suggestion is therefore made to advertisers that they word their advertisements so that the contractor will get a good idea of the size and kind of work to be let, and perhaps the plant needed. This should result in an increased number of desirable bidders.

Bids: Dec. 5.

Gate-Valves and Hydrants Contract 213

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Center and Chambers streets, New York City, until 11 a.m., Eastern Standard time, on Tuesday, December 5, 1922, for Contract 213, for furnishing and delivering gate-valves and hydrants for the Mt. Prospect, Park Slone, Fort Hamilton and Clove conduits and Narrows Siphon No. 2 of the Catskill aqueduct, all as set forth in the specifications. All deliveries shall be made, with all transportation charges prepaid, at designated storage yards within the limits of the City of New York.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, etc., can be obtained at the office of the Secretary at the above address. by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer at the above address.

GEORGE J. GILLESPIE.
President,
JAMES P. SINNOTT,
PHILIP F. DONOHUE,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

OFFICIAL PROPOSALS

Bids: Dec. 9.

School Buildings

Port Washington, N. Y.

Separate sealed proposals will be received by Mollie C. Mitchell, Secretary of the Board of Education of Union Free School District No. Four (4), Town of North Hempstead, Nassau County, New York, until 2.30 o'clock P.M., on December 9th, 1922, for the construction of the new grade school buildings in said District, Port Washington, Nassau County, New York, under the following separate headings:

A—Estimate for General Construction.
B—Estimate for Heating and Ventilating.
C—Estimate for Plumbing.
D—Estimate for Electrical Work.

The proposals will be opend, in public, by the Board of Education, at the Board rooms, in the High School Building, in said District, on Saturday, December 9th 1922, at 3 o'clock, P.M., and the Board reserves the right to reject any or all bids if they deem it for the best interests of the District so to do.

The amount of security that will be required, is 50% of the amount of the contract, same to be secured by individual or surety company bonds, satisfactory to the Board, in that amount to be filed at the time of signing of the contract or contracts.

Each bid or estimate shall state the name, place of business or residence of each of the persons making the same and the names of all persons interested with the bidder or bidders therein.

No bid or estimate will be considered, unless accompanied by either a certified check, upon a National or New York State Bank, drawn to the order of Harry Brown, as Treasurer of said District, or cash, in the amount of 5% of the amount of the bid, submitted in the manner and under the terms, set forth in the specifications herein referred to.

For particulars, as to the nature of the work, required, bidders are referred to the drawings and specifications at the office of the architect, Wesley Sherwood Bessell, 58 West 49th Street, Boro of Manhattan, New York City, N. Y.

A deposit of $50.00 will be required from each person or persons applying for such drawings and specifications, which deposit, less cost of prints, will be refunded upon the return of such drawings, and specifications, in good condition, to the office, from which they are obtained.

Dated, Port Washington, N. Y., Nov. 17th, 1922.

MOLLIE C. MITCHELL,
Secretary of The Board of Education, of Union Free School District No. Four (4) Town of North Hempstead, Nassau County, New York.

Bids: Nov. 29.

Filtration Plant and Reservoir

San Juan, Porto Rico.

Sealed proposals for the furnishing of all labor and material for the construction of a 8,000,000 gals. filtration plant and a 10,500,000 gals. filtered water concrete reservoir for the City of San Juan will be received in the office of the Commissioner of Public Service until November 29, 1922, at 10 A.M.

All plans, specifications, instruction to bidders, blanks, forms for proposals and all other information may be obtained at the office of the City Commissioner of Public Works at San Juan, Porto Rico.

The right is reserved to reject any and all bids.

MARTIN TRAVIESO,
Commissioner of Public Service.

If you and I could sit down and talk **Contract Bonds** and **Compensation Insurance** for just 30 minutes your troubles along that line would be over and I'd have a new client.

SWART
92 William St., New York

CONTRACT BONDS FOR RESPONSIBLE CONTRACTORS

An Ætna bond is a virtual guarantee that the contractor is efficient, financially responsible, honest and fair.

ÆTNA CASUALTY AND SURETY COMPANY
HARTFORD, CONN.
AGENTS EVERYWHERE

OFFICIAL PROPOSALS

Bids: Nov. 27.

12,000,000 Gallons Pumping Engine

Norfolk, Va.

Sealed proposals will be received at the Office of the Director of Public Works, City of Norfolk, Virginia, until 12:00 o'clock noon on the 27th day of November, 1922, for one 12,000,000 Horizontal, Cross Compound, Crank and Fly Wheel, Condensing Pumping Engine of the double opposed type.

Instructions to Bidders, Form of Proposal, Specifications, Contract and Form of Bond may be inspected, at the Office of the Director of Public Works, Norfolk, Virginia, or at the Office of the Consulting Engineer, Dabney H. Maury, 1445 Monadnock Block, Chicago, Ill., and a complete set of all of the above papers may be obtained by intending bidders either from the Director of Public Works or from the Consulting Engineer, upon application accompanied by a check or Postal Order for Fifteen ($15.00) dollars, payable to B. Gray Tunstall, City Treasurer, which amount will be refunded to the party depositing it on the return of all the foregoing papers in good order.

A certified check on an approved bank either in the City of Norfolk, or in the City of New York, or in the City of Chicago, in the sum of $500.00, and payable to B. Gray Tunstall, City Treasurer, must accompany each bid, subject to the conditions expressed in the Instructions to Bidders and Form of Proposal.

The City of Norfolk reserves the right to reject any or all bids.

WALTER H. TAYLOR, 3rd.
Director of Public Works.

Bids: Nov. 27.

Pumps and Chain Drive

Saranac Lake, N. Y.

Sealed bids will be received by the Sewer and Water Board of the Village of Saranac Lake, N. Y., until 8:00 o'clock p.m., on Monday, November 27, 1922, for furnishing two 3,000,000 gallon horizontal double-acting duplex plunger type pumps and also, at the same time, bids for furnishing a chain drive equipment for each pump, separate bids will be received for the pumps and the chain drive.

Forms of proposal, contract and specifications will be furnished upon application to S. A. Miller, Clerk of the Sewer and Water Board, or to John L. Collins, Engineer.

A certified check to the amount of $1,500.00, drawn payable to S. A. Miller, Clerk, must accompany the bids for pumps and to the amount of $50.00 with the bids for chain drive.

The Board reserves the right to reject any or all bids.

S. A. MILLER,
Clerk of the Board.
JOHN L. COLLINS,
Consulting Engineer.

Bids: Nov. 27.

Road Work

Gainesville, Fla.

Sealed proposals addressed to the Board of Trustees, Special Road and Bridge District No. 1, Alachua County, Florida, will be received by the Board at its office in the Alachua County Court House in Gainesville, Fla., until 11:00 o'clock a.m., Monday, November 27, 1922, for surface treatment on the following roads: Gainesville Archer Road, approximately 80,000 square yards scarifying and reshaping old rock base, approximately 80,000 square yards surface treatment; Gainesville Fairbanks Waldo Road, approximately 150,000 square yards surface treatment.

Specifications and proposal forms may be secured at the office of the District Engineer, Room 7, Baird Bldg., Gainesville, Fla., at five dollars ($5.00) per set. Each bid must be accompanied with a certified check on an Alachua County Bank, or proposal bond executed by a reputable bonding company authorized to do business in the state of Florida, in the amount of 5 per cent of the contract price, made payable to the Chairman of the Board of Bond Trustees.

The Board reserves the right to reject any or all bids, or to award the work in one or more contracts.

W. R. THOMAS,
Chairman.
ALVA B. GROSS,
District Engineer.

U. S. GOVERNMENT

PROPOSALS FOR LEVEE WORK. — Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., Nov. 23, 1922, for constructing about 170,000 cubic yards of earthwork by the hydraulic method in Sub-District No. 1 of Drainage Union District No. 1, Ill. Further information on application.

U. S. ENGINEER OFFICE, JACKSONVILLE, FLA.—Sealed proposals will be received here until 12 m., Nov. 27, 1922, and then opened, for dredging in Key West Harbor, Fla. Further information on application.

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these advertisers through *Engineering News-Record's* large NATIONAL circulation, reaching almost every worthwhile contractor, dealer, and manufacturer in the country interested in bidding on public work contracts. It is the DOMINANT MEDIUM for advertising contracts for work, material, and supplies for towns, cities, counties, state and government departments, and private organizations.

PROPOSALS FOR NINE STEEL BARGES.—Office Mississippi River Commission, Third District, P. O. Box 404, Vicksburg, Miss. Sealed proposals will be received here until 11 a.m. December 14, 1922, and then opened, for furnishing nine steel barges. Further information on application.

PROPOSAL FOR STEEL BARGE—U. S. Engineer Office, Montgomery, Ala. Sealed proposals will be received here until 11 a.m,. Dec. 1st, 1922, and then opened, for one 80 ft. x 26 ft. x 5 ft. steel barge. Further information on application.

U. S. ENGINEER OFFICE, HUNTINGTON, W. VA., October 20, 1922. Sealed proposals will be received here until 11 a.m. (Eastern time), November 20, 1922, and then opened, for furnishing and delivering horses and props for Ohio River Dam No. 32. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., Nov. 23, 1922, for constructing about 380,000 cubic yards of earthwork in the Kings Lake Drainage District, Mo. Further information on application.

U. S. ENGINEER OFFICE, Charleston, S. C.—Sealed proposals will be received here until noon, November 25, 1922, and then opened, for dredging western channel and Sampit River, Winyah Bay, S. C. Further information on application.

UNITED STATES ENGINEER OFFICE, DETRIOT, MICH.—Sealed proposals will be received here until 11 a.m., December 15, 1922, and then opened, for dredging and rock excavation in Livingstone Channel, Detroit River, Mich. Further information on application.

U. S. ENGINEER OFFICE, PITTSBURGH, PA. Sealed proposals will be received here until 12 noon (Eastern time) November 20, 1922, and then opened, for furnishing and delivering one steel derrick boat hull. Further information on application.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, PITTSBURGH, PA. Sealed proposals for constructing and delivering one steel dipper dredge hull afloat at Pittsburgh, Pa., will be received at this office until 12 noon (Eastern time), December 1, 1922, and then opened. Information on application.

U. S. ENGINEER OFFICE, PITTSBURGH, PA. Sealed proposals will be received here until 12 noon (Eastern time), November 25, 1922, and then opened, for furnishing and delivering three steel deck barges. Further information on application.

U. S. ENGINEER OFFICE, MILWAUKEE, WIS., Oct. 25, 1922. Sealed proposals will be received here until 2 p.m., Nov. 27, 1922, and then opened, for the construction of one dipper dredge hull and house. Further information on application.

PROPOSALS FOR BOILERS.—Office, Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Dec. 2, 1922, and then opened, for furnishing boilers for hydraulic grader No. H.G. 2-1-1-2-23. Further information on application.

PROPOSALS FOR STEEL BARGES.—Office, Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Dec. 2, 1922, and then opened, for furnishing six steel barges. Further information on application.

PROPOSALS FOR MACHINERY FOR HYDRAULIC GRADER.—Office, Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn.—Sealed proposals will be received here until 11 a.m., Dec. 2, 1922, and then opened, for furnishing turbines, pumps, feed-water heater, boiler-feed pumps, and electric-light plant. Further information on application.

U. E. ENGINEER OFFICE, ROCK ISLAND, ILL., Nov. 10, 1922. Sealed proposals will be received here until 10 a.m., December 11, 1922, and then opened, for construction and delivery of ten (10) 100 ft. x 30 ft. x 6 ft. steel barges, complete as specified. Further information on application.

SEALED PROPASALS will be received and publicly opened by the Director of the U. S. Veterans Bureau in the office of the Quartermaster General, 2306 Munitions Building, Washington, D. C., at 11 a.m., December 12, 1922, for the construction of a Neuro-Psychiatric Hospital at Knoxville, Iowa for the Veterans Bureau. Work will include the construction of fifteen buildings of reinforced concrete and brick, complete with water, lighting, heating, and sewer systems, roads and walks. Plans and specifications may be obtained after November 14, 1922 from the Quartermaster General, 2312 Munition Building, Washington, D. C., upon deposit of $100. One set of plans and specifications will be on exhibition at each of the following stations: Constructing Quartermasters at 30 Whitehall Street, New York City and Scott Field, Belleville, Illinois; also Quartermaster Supply Officers at 1819 West Pershing Road, Chicago, Illinois and Second and Arsenal Streets, St. Louis, Mo.

TREASURY DEPARTMENT. Supervising Architect's Office, Washington, D. C., Nov. 10, 1922. Sealed proposals will be received at this office until 3 p.m., Dec. 4, 1922, and then opened for an extension to the building and driveway, and remodeling, at the United States Court House and Post Office, at Altoona, Pa., in accordance with the specification and drawings mentioned therein, copies of which may be had at this Office or at the office of the Custodian in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Nov. 27	Norfolk, Va.	Nov. 9
Nov. 27	Kings Mountain, N. C Adv. Nov. 16 and 23.	Nov. 16
Nov. 27	St. Paul, Minn.	Nov. 23
Nov. 28	Mt. Prospect, Ill.	Nov. 23
Nov. 28	Brooklyn, N. Y.	Nov. 23
Nov. 29	San Juan, Porto Rico Adv. Oct. 12 to Nov. 23.	Oct. 19
Nov. 29	Bay St. Louis, Miss.	Nov. [illegible]
Nov. 29	Phila., Pa.	Nov. 16
Dec. 1	San Juan, Porto Rico Adv. Oct. 19 to Nov. 23.	Oct. 19
Dec. 1	Cleveland, O.	Nov. 16
Dec. 1	Dillon, S. C.	Nov. 16
Dec. 2	Victoria, Tex.	Nov. 23
Dec. 4	Victoria, Tex.	Nov. 23
Dec. 5	Ponca City, Okla.	Nov. 23
Dec. 11	Monroe, Mich. Adv. Nov. 23.	Nov. 23
Dec. 12	Wheeling, W. Va Adv. Nov. 16 and 23.	Nov. 16
Dec. 19	Houma, La.	Nov. 23
Feb. 1	Spokane, Wash.	Nov. 16

SEWERS

Bids Close		See Eng. News-Record
Nov. 27	Saranac Lake, N. Y. Adv. Nov. 16 and 23.	Nov. 23
Nov. 28	Madison, Wis.	Nov. 23
Nov. 28	Springwells, Mich.	Nov. 23
Nov. 29	Brooklyn, N. Y.	Nov. 23
Dec. 7	Athol, Mass.	Nov. 16
Dec. 11	New Orleans, La. Adv. Oct. 12 to Nov. 23.	Oct. 12

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Dec. 18	Allentown, Pa. Adv. Nov. 23.	Nov. 23

BRIDGES

Bids Close		See Eng. News-Record
Nov. 27	Glen Rose, Tex.	Nov. 23
Nov. 28	Little Rock, Ark.	Nov. 9
Nov. 28	Minnesota	Nov. 16
Nov. 28	Cambridge, Mass.	Nov. 16
Nov. 29	Phila., Pa. Adv. Nov. 2 to 23.	Nov. 2
Nov. 29	Georgia	Nov. 16
Nov. 29	Perry, Ga.	Nov. 23
Dec. 5	Cape May, N. J. Adv. Nov. 16 and 23.	Nov. 16
Dec. 5	Alabama	Nov. 16
Dec. 5	Jefferson, Tex.	Nov. 23
Dec. 6	Freehold, N. J. Adv. Nov. 16 and 23.	Nov. 16
Dec. 8	Seattle, Wash. Adv. Nov. 16 and 23.	Nov. 16
Dec. 9	Yankton, S. D.	Nov. 9
Dec. 12	Brunswick, Ga.	Nov. 9
Dec. 12	Alabama	Nov. 16
Jan. 23	Spokane, Wash	Sept. 21
Sept. 1, 1923	Sydney, New South Wales, Australia	Aug. 3

DAMS

Bids Close		See Eng. News-Record
Nov. 25	Bluefield, W. Va. Adv. Nov. 16 and 23.	Nov. 16

RAILWAYS

Bids Close		See Eng. News-Record
Dec. 4	Ontario	Nov. 23

EXCAVATION, DRAINAGE, IRRIGATION

Bids Close		See Eng. News-Record
Nov. 27	Maricopa, Ariz.	Nov. 16
Dec. 1	Owatonna, Minn.	Nov. 23

STREETS AND ROADS

Bids Close		See Eng. News-Record
Nov. 27	Washington, N. C.	Nov. 2
Nov. 27	Arma, Kan.	Nov. 16
Nov. 27	Girard, Kan.	Nov. 16
Nov. 27	Tavares, Fla.	Nov. 23
Nov. 27	Gainesville, Fla. Adv. Nov. 16 and 23.	Nov. 23
Nov. 27	Missouri	Nov. 23
Nov. 27	New York, N. Y.	Nov. 23
Nov. 28	Vermont Adv. Nov. 16 and 23.	Nov. 16
Nov. 28	Anamosa, Ia.	Nov. 16
Nov. 28	Louisiana	Nov. 16
Nov. 28	Minnesota	Nov. 16
Nov. 28	Union, S. C.	Nov. 16
Nov. 28	Connecticut Adv. Nov. 23.	Nov. 23
Nov. 28	Kaufman, Tex.	Nov. 23
Nov. 28	Newton, N. C.	Nov. 23
Nov. 29	Richmond Hill, N. Y.	Nov. 23
Nov. 29	Brooklyn, N. Y.	Nov. 23
Nov. 29	Oklahoma	Nov. 16
Nov. 29	Georgia	Nov. 16
Nov. 29	Ebensburg, Pa.	Nov. 23
Nov. 29	Oklahoma	Nov. 23
Nov. 30	Highland Park (Dallas P. O.), Tex.	Nov. 23
Dec. 1	Newberry, S. C.	Nov. 16
Dec. 1	Louisiana	Nov. 23
Dec. 2	Missouri	Nov. 23
Dec. 4	Earlington, Ky. Adv. Nov. 23.	Nov. 23
Dec. 4	Chatham, Va.	Nov. 23
Dec. 4	San Diego, Calif.	Nov. 23
Dec. 5	Albert Lea, Minn.	Nov. 9
Dec. 5	Alabama	Nov. 16
Dec. 5	Stockton, Calif.	Nov. 23
Dec. 5	Ridgeland, S. C.	Nov. 23
Dec. 5	Canton, S. D.	Nov. 23
Dec. 5	Jefferson, Tex.	Nov. 23
Dec. 5	Michigan	Nov. 23
Dec. 6	Camden, S. C.	Nov. 23
Dec. 7	Aiken, S. C.	Nov. 23
Dec. 7	Michigan	Nov. 23
Dec. 8	Pecos, Tex.	Nov. 23
Dec. 11	California	Nov. 23
Dec. 12	Alabama	Nov. 16
Dec. 12	St. Louis, Mo.	Nov. 23
Dec. 16	Mound City, Kan.	Nov. 23
Dec. 16	Quebec	Nov. 23
Dec. 19	Topeka, Kan.	Nov. 23
Dec. 22	Spokane, Wash.	Nov. 2
Dec. 22	Eldorado, Kan.	Nov. 23
Dec. 30	Quebec	Nov. 23
Dec. 30	Quebec	Nov. 2
Dec. 30	Quebec	Nov. 9
Dec. 30	Quebec	Nov. 16
Jan. 7	Duluth, Minn.	Sept. 28

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Dec. 1	Sheepshead Bay (Brooklyn P. O.), N. Y.	Nov. 23
Dec. 9	Pittsburgh, Pa.	Nov. 16

BUILDINGS

Bids Close		See Eng. News-Record
Nov. 25	Bowling Green, O.	Nov. 23
Nov. 27	Toledo, O.	Nov. 23
Nov. 27	New York, N. Y.	Nov. 23
Nov. 29	Baltimore, Md.	Nov. 23
Nov. 30	Smiths Falls, Ont.	Nov. 16
Dec. 1	Oil City, Pa.	Oct. 26
Dec. 1	Abilene, Tex.	Nov. 9
Dec. 4	Cleveland, O.	Nov. 23
Dec. 4	Freeport, N. Y.	Nov. 23
Dec. 4	Memphis, Tex.	Nov. 23
Dec. 5	Wichita Falls, Tex.	Nov. 23
Dec. 7	Corydon, Ia.	Nov. 23
Dec. 7	Lodi, Calif.	Nov. 23
Dec. 9	Port Washington, N. Y	Nov. 16
Dec. 14	Allentown, Pa.	Nov. 16
Dec. 15	Chisholm, Minn.	Nov. 23
Dec. 18	Bakersfield, Calif.	Nov. 16
Dec. 20	Binghamton, N. Y.	Nov. 23
Jan. 2	Olean, N. Y.	Nov. 9
Jan. 2	Duluth, Minn.	Nov. 23
Mar. 23	Shreveport, La.	Nov. 9

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Nov. 25	Barges—Pittsburgh, Pa. Adv. Nov. 2 to 23.	Nov. 2
Nov. 27	Dredge Hull, etc.—Milwaukee, Wis. Adv. Nov. 2 to 23.	Nov. 2
Nov. 27	Dredging — Jacksonville, Fla. Adv. Nov. 2 to 23.	Nov. 2
Nov. 27	Remodeling — St. Louis, Mo.	Nov. 9
Nov. 28	Roads—California	Nov. 16
Dec. 1	Steel Hull — Pittsburgh, Pa. Adv. Nov. 9 to 23.	Nov. 9
Dec. 1	Barge—Montgomery, Ala.	Oct. 26
Dec. 1	Dredging—Honolulu, H. T.	Nov. 2
Dec. 2	Boilers—Memphis, Tenn Adv. Nov. 2 to 23.	Nov. 2
Dec. 2	Barges—Memphis, Tenn. Adv. Nov. 2 to 23.	Nov. 2
Dec. 2	Machinery — Memphis, Tenn. Adv. Nov. 2 to 23.	Nov. 2
Dec. 4	Extension, etc. — Altoona, Pa.	Nov. 16
Dec. 4	Power Houses—Cape Henry, Va.	Nov. 9
Dec. 6	Repairs—Phila., Pa.	Nov. 16
Dec. 6	Pumping Units — Boise, Idaho	Oct. 19
Dec. 7	Dwellings—Huntington, W. Va.	Nov. 16
Dec. 11	Barges—Rock Island, Ill. Adv. Nov. 16 and 23.	Nov. 16
Dec. 11	Changes—Oakland, Calif. Adv. Nov. 23.	Nov. 23
Dec. 12	Hospital—Knoxville, Ia. Adv. Nov. 16 and 23.	Nov. 16
Dec. 13	Dredging—New York, N. Y.	Nov. 23
Dec. 14	Garage, etc.—San Diego, Calif.	Nov. 16
Dec. 14	Barges—Vicksburg, Miss. Adv. Nov. 16 and 23.	Nov. 16
Dec. 15	Dredging—Detroit, Mich. Adv. Nov. 16 and 23.	Nov. 16
Dec. 15	Maneuver Boat—Huntington, W. Va. Adv. Nov. 23.	Nov. 23
Dec. 18	Buildings, Electrical Work, etc. —Livermore, Calif. Adv. Nov. 23.	Nov. 23
Dec. 20	Barges—Milwaukee, Wis. Adv. Nov. 23.	Nov. 23
Dec. 20	Lock Gates — Pittsburgh, Pa. Adv. Nov. 23.	Nov. 23
Dec. 20	Excavating Cut-offs—Wilmington, Del. Adv. Nov. 23.	Nov. 23
Dec. 20	Repairs—San Diego, Calif.	Nov. 23
Dec. 20	Pier Extension—Puget Sound, Wash.	Nov. 23
Dec. 20	Riprapping Dike—Mare Island, Calif.	Nov. 23
Dec. 21	Breakwater—Phila., Pa. Adv. Nov. 23.	Nov. 23
Jan. 3	Piers—Pearl Harbor, H. T.	Nov. 16

MISCELLANEOUS

Bids Close		See Eng. News-Record
Nov. 27	Electrical Work, Plumbing, Heating, etc. — Johnstown, Pa.	Nov. 2
Nov. 27	Dock—Newark, N. J.	Nov. 16
Nov. 27	Fire Alarm, etc.—Richmond, Va.	Nov. 23
Nov. 28	Railings and Stairs—Phila., Pa.	Nov. 16
Nov. 28	Retaining Walls—Phila., Pa.	Nov. 16
Nov. 29	Pipe—Atlanta, Ga.	Nov. 23
Nov. 29	Refined Asphalt, etc.—Brooklyn, N. Y.	Nov. 23
Dec. 1	Creosote Oil—Phila., Pa.	Nov. 23
Dec. 4	Landscape Work—Redwood City, Calif.	Nov. 23
Dec. 4	Electrical Distribution System —Ridgway, S. C.	Nov. 23
Dec. 5	Gate Valves, etc.—New York, N. Y. Adv. Nov. 16 and 23.	Nov. 16
Dec. 6	—Traveling Crane—San Francisco, Calif.	Nov. 16
Dec. 18	Coal Handling Plant — Melbourne, Victoria, Australia	Sept. 21
Jan. 1	Transmission Line—Spokane, Wash.	Nov. 9

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Batavia—Defeated $30,000 bonds for new mains in various streets. Noted Aug. 24.

Pa., Wampum—Voted $15,000 bonds improving waterworks system.

N. C., Whiteville—Plans water and electric light systems. $80,000.

Fla., St. Petersburg—Dec. 5, to vote on $160,000 bonds extending waterworks system. R. E. Ludwig, dir. pub. utilities.

Ill., Libertyville—See "Sewers."

Ill., Nokomis—Postponed letting, Nov. 2, material and labor for 4 wells, 4,300 ft. 8 in. Class B c.i. mains, etc. Will readvertise. Taylor & Woltmann, 428 Unity Bldg., Bloomington, engrs. Noted Oct. 19.

Mo., St. Charles—Dec. 2 to vote on $18,000 bonds for mains, $25,000 for machinery, $16,000 for meters, etc., $3,500 for meter connections, $1,500 for cleaning mains and $2,000 for flow meters. A. L. Mullergren, 555 Gates Bldg., Kansas City, engr. Noted Oct. 5.

Waterworks (Continued)

Okla., Cyril—Soon receives bids water mains and other improvements. $31,000. M. Perryjohn, clk. V. V. Long & Co., Colcord Bldg., Oklahoma City, engrs. Noted Oct. 26.

Okla., Morris — Having surveys made supply site, mains, etc. Cost to exceed $25,000. H. M. Olmsted & Co., Tradesman Bank Bldg., Oklahoma City, engrs.

Okla., Skiatook—Had plans prepared new mains. $17,000. Hughes Eng. Co., Cole Bldg., Tulsa, engr.

Okla., Woodward—Plans election in December to vote on $175,000 bonds for waterworks and mains. Black & Veatch, 701 Mutual Bldg., Kansas City, Mo., engrs. Noted Aug. 31.

Colorado—State voted $6,000,000 highway bonds. L. D. Blauvelt, Denver, highway engr.

Calif., Pasadena—Bd. Dirs. plan $550,000 bonds issue ($300,000 of which will be used to purchase plants and equipment of Precipice Canyon and Pasadena Consolidated Water Companies), balance to extend present water mains and make further developments.

Ont., Haileybury—Town retained F. Barber and asociates, engrs., 40 Jarvis St., Toronto, to report on fire protection scheme, incl. new pumps, electric and possibly gasoline driven turbine fire pumps. $30,000.

BIDS DESIRED

N. Y., Brooklyn — Nov. 28, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains and appurtenances in Colonial Rd., Hendrix and 35th Sts., Blake, Marine and 2nd Aves., here.

S. C., Ridgeway—See "Miscellaneous."

La., Houma—Dec. 19, by Mayor and Bd. Aldermen, waterworks system, incl. daily capacity, 1,000,000 gal. pumping plant, mechanical filtration plant 1,000,000 gal. 10,000,000 gal. earthen storage reservoir, 800 tons c.i. mains, 1 mi. transmission line, brick power station and rein.-con. filter structures. D. Angers, city clk. G. W. Fuller, 170 Bway., New York City, consult. engr.

Mich., Monroe—Dec. 11, by F. M. Kressbach, city clk., furnishing and installing pumping station equipment. Hoad, Decker, Shoecraft & Drury, Ann Arbor, consult. engrs.; adv. this issue.

Ill., Mt. Prospect—Nov. 28 for waterworks. $60,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ia., Chariton—Nov. 27, for water purification plant extensions, incl. 2 filters, building, and settling basin. W. M. Householder, clk. Merton G. Hall Co., Centerville, engrs.

Minn., St. Paul—Nov. 27, by H. W. Austin, city purch. agt., gate valves and service connection boxes for Water Dept.; about 3,000 stop boxes and 500 gate boxes. O. Claussen, city engr.

Tex., Pampa—Taking bids installing extensive waterworks distribution system, 14,700 lin. ft. 6-8 in. Class B. c.i. pipe 14,000 lin. ft. 2 in. standard galvanized w.i. pipe, hydrants, gate valves, etc. A. H. Doucette, city engr.

Tex., Victoria—Dec. 2, one 300,000 gal. water tower. Address City Engineer.

Tex., Victoria—Dec. 4, drilling two 10 in. wells. Address City Engineer.

Tex., Wichita Falls—A. Lawton, city mgr., receiving bids 8,000 ft. mains. M. R. Rugely, city engr.

Okla., Ponca City—Dec. 5, by City clerk, furnishing and erecting 500,000 gal. water tank and tower. P. R. Dunton, Ponca City, engr.

BIDS RECEIVED

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, opened bids Nov. 17, mains in (1) Ditmars Ave. (2) Griffith St., here, from F. Paino, 572 1st St., Brooklyn, (1) $7,762 (2) $5,805; Tuohy & Upton, 98 Main St., Flushing, (1) $10,000. Noted Nov. 9.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., opened bids Nov. 17 mains in Bogart Ave., Bronx Boro, from C. De Blasio, 339 7th Ave., Mt. Vernon, $21,000; Angelo & Demicco, $34,000; Paladino Contg. Co., 437 East 120th St., $34,975. Noted Nov 9.

O., Cleveland Heights (Warrensville P. O.)—For c.i. mains in (1) Allston Rd. (2) Navahoe Rd. (3) Beverly Rd. (4) Bluestone Rd. (5) Cambridge, Sylvania, Ardmore, Erieview and Rosemouth Rds., from Iafornaro Constr. Co., 3218 Murray Hill Rd., Cleveland, (1) $7,868 (4) $4,156; B. H. Whittaker, 343 The Arcade, Cleveland, (1) $8,035 (3) $4,357; Salem & George Bros., 237 Bradley Court, Cleveland, (2) $5,178 (3) $4.077 (5) $27,397; A. Marra, Ulmer Bldg., Cleveland, (2) $5,462 (5) $29,251; N. Carroccio, Benwood Ave., Cleveland, (4) $4,924.

Wis., Cedarburg—Furnishing two hundred ⅝ in. and ¾ in. water meters, from Badger Meter Mfg. Co., 841 30th St., Milwaukee, Model A $10; Worthington Pump Co., Cudahy St., Milwaukee, Model G $8.50; Buffalo Meter Mfg. Co., 2917 Main St., Buffalo, N. Y., $8.77 and $7.87 respectively. Noted Oct. 26.

Calif., Ventura—Mutual Water Companies constructing concrete pipe line, from Fowler & Myers, San Fernando, $69,438; United Concrete Pipe Co., Montalvo, $79,435; Boyd & Tellyer, San Diego (street address not available), $91,607.

CONTRACTS AWARDED

Fla., Tampa—Temple Terraces, Inc., 801 Citrus Exch. Bldg., 8,200 ft. 6 in. and 6,600 ft. 4 in. c.i. pipe, to Central Fdry Co., 41 East 42nd St., New York City; one 250 gal. main supply pump, etc., to Allis-Chalmers Mfg. Co., West Allis, Wis. Noted Oct. 5.

Ill., Marshall—Removing old pumps from pumping station, new concrete floor, waterproofing walls and floors, furnishing and installing 2 motor driven triplex pumps, 350 g.p.m., furnishing and erecting about 1.8 mi. transmission line incl. transformers and lighting fixtures from power house to pumping station, to Chuse Engine and Mfg. Co., 1411 Chemical Bldg., St. Louis, Mo., $13,808. Noted Oct. 26.

Minn., St. Paul—Water Dept., 4 line tanks and agitators, to St. Paul Fdry. Co., Como and Mackubin Aves., $2,095; 800 cu.yd. gravel, to J. L. Shiely Co., 305 Dakota Bldg.; 1,500 cu.yd. special filter sand, to G. C. Lauer, foot of Chestnut St., $4.48 per cu.yd. Noted Oct. 26.

Tex., Marlin—For 562.5 ton 12 in. c.i. pipe, to Natl. Cast Iron & Fdry. Co., Tarrant City, Ala., $51 per ton f.o.b. Marlin. Noted Oct. 19.

Colo., Boulder—Rein.-con. reservoir 8,000,000 gal. capacity, to Phelps & Son, Knoxville, Ia. $57,400. Noted Oct. 26.

Sewers

PROPOSED WORK

N. Y., Rochester—Plans sewage disposal plant in Hopper Hollow Sect., $50,000; sewers and walks in Crossman Terrace, $31,300. C. A. Poole, city engr.

N. Y., Rochester—See "Sewers."

Pa., Harrisburg—Voted $150,000 bonds for sewers. M. B. Cowden, city engr.

Pa., Pottstown—Voted $200,000 for sewage disposal plant.

Fla., St. Petersburg—Dec. 5, to vote on $463,000 bonds for storm and sanitary sewers. E. C. Garvin, St. Petersburg, engr. Noted Oct. 19.

O., Akron—Voted $3,000,000 bonds trunk sanitary and storm sewers in various parts of city. J. E. Root, Delaware Bldg., engr. Noted Aug. 31.

Ill., Libertyville—Making plans sewer and water extensions. $25,000. Kelker, De Leuw & Co., 111 West Washington St., Chicago, engrs.

Minn., Tracy — Having plans prepared sewage disposal plant. $28,000. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs.

Tex., Cleburne—See "Streets and Roads."

Okla., Pauls Valley—Voted $50,000 bonds for storm sewers. V. V. Long & Co., Colcord Bldg., Oklahoma City, engrs.

Colo., Denver—Making plans South Side Special Sanitary Sewer 7, incl. 27,000 ft. 8 in. vitr. pipe. $34,811. A. K. Vickery, City Hall, engr.

Calif., Morgan Hill—Having plans prepared sewage disposal plant. $50,000. C. C. Kennedy, Call Bldg., San Francisco, engr. Noted June 29.

Ont., Toronto—York twp. plans complete sewerage system, incl. vitr. tile pipe with some sort of sewage disposal works. Two alternative schemes are proposed, one at cost of $846,170, other $1,050,425. F. Barber and associates, 40 Jarvis St., engrs.

BIDS DESIRED

N. Y., Brooklyn—Nov. 29, by E. Riegelmann, boro pres., Boro Hall, sewers in East 17th St. between Ave. Q and Ave. R, East 37th St. between Ave. K and Ave. L, Riverdale Ave. between Wyona and Vermont Sts., Brooklyn Ave. from Farragut Rd. to property line of Flatbush Water Works, 15th Ave. between 49th and 50th Sts.; sewer basins in Ocean Ave. west side about 26 ft. north of north curb line of Ave. J and east side about 46 ft. south of south curb line of Ave. J, southwest corner of Snyder and Brooklyn Aves., northeast and southeast corners of 87th St. and Narrows Ave.

N. Y., Saranac Lake—Nov. 27, by Sewer and Water Bd., furnishing two 3,000,000 gal. horizontal double-acting duplex plunger type pumps, and chain drive equipment for each pump. J. L. Collins, consult. engr.; adv. this issue.

S. C., Ridgeway—See "Miscellaneous."

Mich., Springwells—Nov. 28, by B. P. Esper, village clk., 4,878 ft. sewer in Sect. 20, incl. 3,000 ft. 36 in. and 1,800 ft. 66 in. brick, concrete or segment block pipe; 2,463 ft. sewer in Sect. 21, incl. 2,000 ft. 27 in. and 500 ft. 72 in. brick, concrete or segment block pipe. A. Roth and C. W. Hubbell, 2348 Penobscot Bldg., Detroit, engrs.

Wis., Madison—Nov. 28, by Wisconsin Memorial Hospital Assn., Capitol Bldg., sewage disposal plant, incl. all equipment. J. G. S. Mack, Capitol Bldg.; engr.

BIDS RECEIVED

O., Cleveland Heights (Warrensville P. O.)—For segmental and tile block sewers in (1) Allston Rd. (2) Navahoe Rd. (3) Beverly Rd. (4) Bluestone Rd. (5) Cambridge Rd. (6) Sylvania Rd. (7) Ardmore Rd. (8) Erieview Rd. (9) Rosemond Rd. (10) Elmwood Rd., from N. Carroccio, Benwood Ave., Cleveland, (1) $18,452 (4) $20,585; Iafornaro Constr. Co., 3218 Murray Hill Rd., Cleveland, (1) $19,749 (4) $21,326; A. Marra, Ulmer Bldg., Cleveland, (2) $7,976 (5) $27,284 (6) $21,153 (7) $6,002 (8) $5,450 (9) $7,138 (10) $9,202; Salem & George Bros., 237 Bradley Court, Cleveland, (2) $8,370 (3) $13,278 (5) $26,768 (6) $22,516 (7) $6,553 (8) $5,421 (9) $7,411; B. H. Whittaker, 343 The Arcade, Cleveland, (3) $13,534; Hadded-Mall Co., Schofield Bldg., Cleveland, (10) $11,346.

CONTRACTS AWARDED

N. J., Hillside—Township Clerk, 12,000 ft. 12-45 in. tile and concrete sewers, 75 manholes and 65 catch basins, to J. Miele, 21 Hillcrest Terrace, East Orange, $99,989. Noted Nov. 2.

O., Cleveland—Sewer in Cedar Ave. from East 22nd to East 30th Sts., to Manson Co., 343 The Arcade, $20,594; Cedar Ave. from East 30th to East 40th Sts., to Amato Constr. Co., 343 The Arcade, $37,536. Noted Nov. 16.

O., Cleveland—Sewer in Fairmount Rd., to Gallagher Burke Constr. Co., 1339 Irene Ave., Lakewood, $28,151. Noted Nov. 16.

Mich., Ferndale—Lateral sewer in alley between Vester and Rockwell Aves., to L. Kovorkian, 555 Paddock Bldg., Pontiac, $3,040; sewer in Hazelhurst Ave. W. and lateral sewer in block bounded by Hilton Rd., Woodward, Silman and Jewell Aves., to Hammen & Co., 516 Garfield Bldg., Detroit, $7,996; lateral sewer in alley between Breckenridge, Cambourne and Michelson Aves., to Cappello & Fatore, 2161 Hale St., Detroit, $7,900; laterals in Saratoga Ave., blocks between Vester, Rockwell and Bermuda Aves., and Wolcott, Burdette, Lewiston and Drayton Aves., to Halpin & Reilly, 304 West Bancroft St., Toledo, O. $11,277.

Mich., Grosse Pointe Farms (Detroit P. O.)—For 3,500 ft. vitr. crock sewer in Kerby Rd. from Ridge Rd. to Black Marsh Ditch, to V. Teetaert, 448 St. Clair Ave., Detroit, $25,000. Noted Oct. 12.

Minn., Amboy—Sanitary sewerage system and disposal plant, 14,200 ft. 8-12 in. vitr. tile sewer, 40 manholes, 1 Imhoff tank, sludge bed and outlet, to Gedney & Murphy, 211 Lumber Exch. Bldg., Minneapolis, $18,000. Noted Oct. 19.

Colo., Denver—For 36,040 ft. 8-10 in. vitr. pipe and 134 manholes, in Berkeley Special Sanitary Sewer Dist., to Dennis Gibbons & Son, 1059 Downing St., $35,417. Noted Oct. 26.

Calif., Madera—Constructing sewage disposal plant, to L. R. Adell, Madera, $32,292. Noted Nov. 16.

Waste Disposal

PROPOSED WORK

Pa., Harrisburg—Voted $85,000 bonds for 1 story and basement, 44 x 54 ft. incinerator, 85 ton daily capacity. M. B. Cowden, city engr. Noted Oct. 26.

Fla., St. Petersburg—Dec. 5, to vote on $125,000 bonds constructing new incinerator and repairing old one. E. C. Garvin, St. Petersburg, engr. Noted July 6.

Mo., St. Louis—Soon takes bids three 80 ton unit garbage incinerators, fireproof construction. $225,000. C. E. Fisk, City Hall, engr. Noted Feb. 16.

Wash., Spokane—Preparing plans garbage incinerator, 50-60 ton daily capacity. Building and chimney completed. $30,000. Address H. Coe, supt. municipal garbage plant.

Ore., Portland—Plans to sell $200,000 bonds for garbage incinerator under 4 separate proposals, (1) addition of 100 ton per day to present plant, (2) erection of 100 ton plant at some other point, (3) erection

Waste Disposal (Continued)

of 200 ton unit at present plant; (4) erection of 200 ton plant at some other point, present plant has capacity of 150 tons per day. O. Laurgaard, city engr., preparing plans. C. A. Biglow, comr. Pub. Affairs.

BIDS DESIRED

Pa., Allentown—Dec. 18, by M. W. Gross, mayor, Room 301, City Hall, refuse incinerator. H. F. Bascom, city engr.; adv. this issue.

Calif., Redwood City—See "Miscellaneous."

Bridges

PROPOSED WORK

Pa., Johnstown—Voted $400,000 bonds for bridges. H. L. Wilson, city engr.

North Carolina—State Hy. Dept., Raleigh, plans steel or rein.-con. bridge over Neuse River, State Project 237, Johnston Co., $25,000, over Neuse River, State Project 487, Wake Co., $25,000; rein.-con. bridges on Federal Aid Projects 49 and 60, Lenoir Co., $25,000. C. M. Upham, state highway engr.

North Carolina—State Hy. Dept., Raleigh, having plans prepared and soon takes bids constructing Edwards Ferry Bridge over Roanoke River, near Scotland Neck, Project 138, Halifax and Northampton Counties, steel draw span and number short rein.-con. or creosoted timber spans. $200,000 to $275,000. C. M. Upham, state highway engr.

Fla., St. Petersburg—Dec. 5, to vote on $79,000 bonds constructing several concrete arch bridges across Booker Creek. C. E. Garvin, St. Petersburg, engr.

Ia., Northwood—Worth Co. had plans prepared 49 culverts and extensions, 4 I beam and 3 pony truss bridges, 1,973.8 cu.yd. rein.-con., 85.85 ton steel, 124,095 lb. reinforcing, etc. $59,538. Iowa Hy. Comn., Ames, engrs.

Ia., Sigourney—Keokuk Co. had plans prepared 28 box and circular culverts and extensions, 1 deck girder and 1 slab bridge, 1,045.8 cu.yd. rein.-con., 420 lb. steel, 77,475 lb. reinforcing, etc. $26,920. Iowa Hy. Comn., Ames, engrs.

Minnesota—State Hy. Dept., St. Paul, plans Bridge 3921 over Straight River, and Bridge 3940 over Chicago, Rock Island & Pacific R.R., both steel and concrete, in Owatonna, Steele Co., $28,000 and $25,000 respectively; Bridge 3945 over Minnesota River, 500 ft., steel and concrete, in LeSueur Co., $50,000. J. T. Ellison, St. Paul, state bridge engr.

Minn., Brainerd — Crow Wing Co. and State, having plans prepared bridge on State Rd. 8, over Mississippi River, two 60 ft. steel spans, one 14 ft. steel centre span, 2 concrete piers, 2 concrete abutments. $30,000. W. M. Murphy, Brainerd, and Eng. Dept., State Hy. Dept., 1246 University Ave., St. Paul, engr.

Ont., Brantford—Having plans prepared rein.-con. bridge over Lorne St., central arch 140 ft. long, 2 end arches 135 ft. Election in January to vote on $335,000 by law. T. H. Jones, City Hall, engr. Prices wanted on all materials.

BIDS DESIRED

S. C., Ridgeland—See "Streets and Roads."

Ga., Perry—Nov. 29, by State Hy. Dept., Atlanta, 152 ft. concrete bridge, Houston Co., bids only on basis of state furnishing cement f.o.b. cars nearest railroad station. W. R. Neel, Atlanta, highway engr.

Missouri—See "Street and Roads."

Tex., Glen Rose — Nov. 27, by R. L. Bryan, judge Somerville Co., 2 steel and concrete bridges over Paluxy Creek, near here. $31,500. H. J. Cox, co. engr.

Tex., Jefferson—Dec. 5, by E. B. Lewis, judge Marion Co., 470 ft. bridge, concrete approaches, 150 ft. steel truss and sixteen 20 ft. concrete slab spans, over Big Cypress Bayou on State Highway 8. $46,750. T. B. Warden, co. engr.

California—See "Streets and Roads."

BIDS RECEIVED

New Jersey—State Hy. Dept., Trenton, opened bids Nov. 15, concrete and steel bridge with two 45 ft. spans, 30 ft. roadway, at M.P. 23.8 over north branch of Raritan River, Route 16, in municipalities of Bridgewater and Bedminster, Somerset Co., from Eng. Constr. Corp., Montclair, $32,750; Kolyn Constr. Co., Commonwealth Bldg., Trenton, $33,677; D. B. Hoover, Pottstown, Pa., $35,700. Noted Nov. 2.

Ia., Greenfield—Supervs. Adair Co., one 80 x 24 ft. steel truss bridge with two 30 ft. I beam approach spans, 23 box culverts and extensions, on Primary Rd. Project 24, from F. W. Kemp, Greenfield, $30,275; Des Moines Eng. & Constr. Co., Polk Bldg., Des Moines, $31,310; F. E. Marsh & Co., Jefferson, $32,980.

Colo., Denver—Foundation for 16th St. Bridge from Blake to Platte Sts., furnishing all materials, (except cement) labor, etc., from F. P. Varnum, 2035 East 18th Ave., $58,402; F. Kirchhof Constr. Co., 718 Lawrence St., $61,407; P. Seerie, Interstate Trust Bldg., $81,669. Noted Nov. 9.

CONTRACTS AWARDED

North Carolina — State Hy. Dept., Raleigh, rein.-con. bridges and culverts on State Project 152, Hyde Co., to O. A. Mann & Co., La Grange, Ga., $59,369; on State Project 133, Gates and Pasquotank Counties, to Pittsburg-Des Moines Steel Co., Curry Bldg., Pittsburg, Pa., $34,483; on State Project 254, Pitt and Lenoir Co., to Roanoke Iron & Bridge Wks., Roanoke, Va., $66,541. Noted Nov. 2.

Fla., Milton—See "Streets and Roads."

Ia., Carroll—Carroll Co. 240 ft. steel and concrete bridge, (3 spans), Sect, 35, Union Twp., to Lundgren Reis Co., 65 College Ave., Des Moines, $29,250.

Tex., Ft. Worth—Tarrant Co. concrete girder bridge over Mary Creek on State Highway 16, three 40 ft. spans, to Hamer Constr. Co., Ft. Worth, $27,061; concrete slab over Little Fossil Creek, on State Highway 40, six 10 ft. spans, also concrete slab over Walnut Creek, State Highway 34, nine 20 ft. spans, to J. D. Fawks, Ft. Worth $5,114 and $15,727, respectively. Noted Oct. 26.

Wash., Everett—See "Streets and Roads."

Calif., Hopton (Snelling, P. O.)—Yosemite Valley R.R., Merced, rebuilding wooden approaches to bridge across Merced River, here, creosoted piles to be driven, to replace wooden piles in place, to Healy-Tibbitts Constr. Co., 9 Main St., San Francisco. $50,000.

Railways

PROPOSED WORK

Utah—Los Angeles and Salt Lake R.R. plans 32 mi. road from Lund to Cedar City. $800,000. F. Strong, Salt Lake City, div. engr. R. L. Huntley, Omaha, Neb., ch. engr.

Ontario—Temiskaming & Northern Ontario Ry., North Bay, having surveys and estimates prepared diverting main line, so as to pass through Iroquois Falls, plans include 20-40 mi. new line at $50,000 per mi.

BIDS DESIRED

Ontario—Dec. 4, at office H. T. Hazen, acting ch. engr. Canadian Natl. Rys., 407 Old Union Sta., Toronto, 29½ mi. railroad diversion near Nakina, incl. grading, clearing and grubbing culverts, timber bridges, etc. $1,500,000. A. F. Stewart, 407 Old Union Sta., Toronto, ch. engr.

CONTRACT AWARD

West Virginia—Norfolk & Western Ry., N & W Bldg., Roanoke, Va., double tracking railway from Bluestone to Ruth, to Walton Constr. Co., Roanoke, Va. Engrs. est. $150,000.

Excavation, Drainage, Irrigation

PROPOSED WORK

Fla., Bradentown—Having surveys made excavating from Manatee River and filling in about 7 acres. Election soon to vote on $50,000 bonds. Kirley & Myler, Bradentown, engrs.

Ill., Lincoln — Comrs. Upper Salt Creek D.D., Logan Co., making plans and take bids about Jan. 1, excavating 1,500,000 cu. yd. $195,000. Kelker, De Leuw & Co., 111 West Washington St., Chicago, engrs.

Minn., Redwood Falls — Redwood and Brown Counties having plans prepared Judicial Ditch 24, 7,600 lin.ft. open ditch, 17,490 cu.yd. excav., 79,490 lin.ft. 6-30 in. tile. $51,480. F. B. Forbes, Redwood Falls, engr.

Wash., Newport—Marshall Lake Power & Land Co. plans 5,000 acre development, concrete and wood flume, concrete ditch, and 100 ft. dam, 6 ft. high, at Marshall Lake. $200,000. W. H. Wright, supt.

Ont., Westboro—Nepean Twp. plans land drainage system, 300,000 cu.yd. clay excav. $135,000. Patterson & Bryne, 72½ Sparks St., Ottawa, engrs.

BIDS DESIRED

Minn., Owatonna—Dec. 1, by G. Griffin, aud. Steele Co., Judicial Ditch 12. 65,052 lin. ft. 6-32 in. tile, 2 timber bridges, 5 floodwater control structures, 1 rein.-con. headwall, 58 surf water inlets. $30,000. J. H. Severson, Albert Lea, engr.

BIDS RECEIVED

Calif., Tracy—Naglee-Burk Irrrigation Dist., will build 6,476 lin.ft. concrete canals, 9.2 mi. drainage laterals, 2,600 lin.ft. main drainage canal, 1,800 ft. 18 in. rein.-con. pipe, rein.-con. superstructure to house pumping machinery equipment. Contrs. 2 and 3, by day labor. Former bids rejected. W. D. Harrington, Tracy, engr. Noted Nov. 16.

CONTRACTS AWARDED

Ill., Carrollton—Comrs. Keach Drainage and Levee Dist., grading, levee repair and cleaning out ditches to W. E. Callahan Constr. Co., Great Southern Life Bldg., Dallas, Tex., 376,000 cu.yd. excav. $0.1848 per cu.yd.; grading and levee construction, to McWilliams Dredging Co., 332 South Michigan Ave., Chicago, $0.1695 per cu.yd. Noted Oct. 19.

Minn., Minneapolis—Bd. Park Comrs., City Hall, dredging Lake Calhoun and filling lowlands and neighboring boulevards. 85,500 cu.yd. sand shore dykes, 264,400 cu. yd. sand fill, 312,200 cu.yd. mud fill, to Minneapolis Dredging Co., 514 Lumber Exch. Bldg., $148,551. Noted Nov. 2.

Streets and Roads

PROPOSED WORK

Massachusetts — State Hy. Dept., State House, Boston, having surveys made 20 mi. highway through Blanford, Otis and New Boston, bituminous macadam, $400,000.-$500,000. State Hy. Dept., State House, Boston, engrs.

N. Y., Mayville—Chautauqua Co. plans concrete paving 3.25 mi. Busti-Sugar Grove Rd., 16 ft. $95,818. S, E. Fitch, Westfield, co. engr. Address Bd. Supervs.

N. Y., Rochester—Plans extending Ruggles St. $4,000; asphalt paving Harvard St. $8,500, Putnam St. $8,100, Franklin St. $5,000. C. A. Poole, city engr.

N. J., Princeton—Princeton Battle Monument Assn., preparing plans 11,450 sq.yd. waterbound macadam pavement. Sincerbeaux & Moore, Amer. Mechanic Bldg., Trenton, engrs.

Pa., Avoca—Plans paving McAlpine St. and regrading Grove St. $60,000.

Pa., Erie—Erie Co. voted $1,000,000 bonds for improving Erie-Wattsburg Rd., Erie-Albion Rd., Fairview-Franklin Center Rd., East Lake Rd., and North East-Greenfieid Rd. F. Hill, co. engr.

Pa., Harrisburg—Voted $50,000 for paving work. M. B. Cowden, city engr.

Pa., Johnstown—Voted $400,000 bonds for paving work and $450,000 for repaving work. H. L. Wilson, city engr.

Va., Ft. Myer Heights—Arlington Co. plans $500,000 bond issue to construct system of county roads to connect with State Highway System.

North Carolina — State Hy. Dept., Raleigh, plans grading and concrete or asphaltic paving 4 mi. road from end of Project 236 to Smithfield, State Project 237, Johnston Co. $110,000. C. M. Upham, state highway engr.

N. C., Greensboro—Guilford Co. plans constructing 2 mi. old Pleasant Garden Rd., some type of hard surface; resurfacing 1.1 mi. topsoil road, 20 ft. wide. $60,000. W. C. Boren, Chn. Bd. Co. Hy. Comn.

Fla., Bradentown—Having surveys made paving various streets, shell, oil treated, asphalt block, and shell, untreated. Election soon to vote on $50,000 bonds. Kirley & Myler, Bradentown, engrs.

Ala., Northport—City and State having plans prepared grading and paving ½ mi. Main St. from River Bridge to Byler Rd., 36 ft. $50,000. Engineer not selected.

Mich., Detroit — Had plans prepared, grading and paving 14 alleys, 20,300 sq.yd. one course 6 in. concrete, with 2 x 6 in. retaining plank sides. Total cost $53,270. J. W. Reid, city engr.

Ill., Libertyville—making plans and takes bids about May 1, paving various streets. $150,000. Kelker, De Leuw & Co., 111 West Washington St., Chicago, engrs.

Ill., Lyons—Making plans paving various streets. 600,000. Kelker, De Leuw & Co., 111 West Wasihngton St., Chicago, engrs.

Ill., Riverside — Making plans paving various streets. $30,000. Kelker, De Leuw & Co., 111 West Washington St., Chicago, engrs.

Ia., Clinton—Plans paving, curbing, and guttering various streets. $80,000. Currie Eng. Co., Webster City, engrs.

Ia., Council Bluffs—Plans resurfacing and brick repaving on various streets $50,000. E. E. Stepman, city engr.

Ia., Mt. Vernon—Plans paving 6 blocks Main St., various types. $25,000. C. M. Hartung, clk.

Streets and Roads (Continued)

Kan., Frontenac—Making plans paving 10,000 yd. various streets, brick or concrete, concrete curb and gutter. A. E. Archer & Co., 612 New England Bldg., Kansas City, Mo., engrs.

Kan., Mound City—Comrs. Linn Co. soon take bids hard surfacing 3 mi. La Cygne-Pleasanton-Prescott Rd., Project 132, 18 ft., $100,000; 3 mi. La Cygne-Pleasanton-Prescott Rd., Project 109 A, 18 ft., concrete, brick, bituminous macadam or gravel on completed grade, $100,000. Kansas Eng. Co., Topeka, engrs.

Tex., Brownsville — Cameron Co. had plans prepared concrete paving various roads. $400,000. W. O. Washington, Brownsville, engr.

Tex., Cleburne—Plans paving 48,000 sq. yd. North and South Main Sts., also storm sewer work. $175,000. R. O. Whiteaker, city engr.

Tex., Crockett—Houston Co., making plans grading, gravel surfacing and bridging 7.2 mi. State Highway 21, 16 ft. $124,083. G. W. Courter, co. engr.

Tex., Dallas—Having plans prepared paving 50,000 sq.yd. Turtle Creek Blvd., bituminous macadam. $50,000. G. D. Fairtrace, city engr.

Tex., Laredo — Webb Co. making plans grading, paving, curbing, guttering, etc., Main and principal streets. $450,000. Bond issue of $150,000 voted, other two-thirds to be financed by property owners. S. F. Crecelius, city engr.

Okla., Healdton—Plans paving business and resident districts. Towell & Harris, Oklahoma City, engrs.

Okla., Pauls Valley—Voted $50,000 bonds constructing various roads. V. V. Long & Co., Colcord Bldg., Oklahoma City, engrs.

Colo., Denver—Making plans paving 11 blocks in Washington Park Paving Dist. 1, 30 ft., 15,500 sq.yd. asphalt. $31,770. A. K. Vickery, City Hall, engr.

Calif., Fresno—Had plans prepared improving San Pablo and M Sts. between Merced and Divisadero Sts., 100,375 sq.ft. grading, 92,840 sq.ft. asphaltic pavement, 6,920 sq.ft. concrete gutter, 3,725 lin.ft. concrete curb, etc. W. Stranahan, city engr.

Calif., San Diego—Had plans prepared paving Chatsworth Blvd., Lytton and Curtis Sts., 3,386 cu.yd. 1½ in. warrenite on 2½ in. asphaltic concrete, 342 cu.yd. 2 in. single course warrenite. F. A. Rhodes, city engr.

Calif., San Diego—Had plans prepared paving Silverado, Torrey Rd. and Ivanhoe Ave., 7,112 sq.yd. 5 in. concrete, 1,256 lin.ft. cement curbing, 6,322 sq.ft. cement sidewalk; 65th, 69th and Klauber Sts., 5,979 sq. yd. 1½ in. bituminous macadam, 5,610 cu.yd. excav. F. A. Rhodes, city engr.

Calif., San Diego—Plans paving, etc., Ivy St. from India St. to Balboa Park, 60 ft., 76,098 sq.ft. 4 in. cement concrete paving, 63,035 sq.ft. 1½ in. asphaltic concrete wearing surface on 2½ in. bituminous base, 314 lin. ft. cement concrete curb, 1,809 sq.ft. cement concrete sidewalk, etc. F. A. Rhodes, City Hall, engr.

Ontario—Dept. Pub. Highways, Parliament Bldgs., Toronto, having preliminary estimates made for 150 mi. Blue Water Highway from Windsor to Owen Sound, concrete or macadam. $2,000,000. G. Hogarth, ch. engr.

BIDS DESIRED

Connecticut—Nov. 28, by C. J. Bennett, state hy. comr., 12 Washington St., Hartford, paving Lebanon Rd. in Franklin, waterbound macadam; State St. in Hamden, rein.-con.; Cornwall Hollow Rd. in Cornwall, native stone macadam; adv. this issue.

N. Y., Brooklyn—Nov. 29, by E. Riegelmann, boro pres., Boro Hall, paving roadway of Elbert Lane from Jamaica Ave. to Fulton St., permanent asphalt on 6 in. concrete; grading, curbing and flagging 78th St. from 15th to 16th Aves., Ave. I from East 28th St. to Nostrand Ave.; laying cement sidewalks on west side of Flatbush Ave. between Fillmore Ave. and Ave. T.

N. Y., New York—Nov. 27, by J. Miller, pres. Manhattan Boro, Municipal Bldg., curbing, recurbing, flagging, reflagging and paving roadway of Pleasant Ave. from 123rd to 124th Sts., roadway of 9th Ave. from northerly side of 209th St. to southerly side of 210th St., roadway of West 192nd St. from St. Nicholas to Wadsworth Aves., roadway of West 173rd St. from St. Nicholas to Fort Washington Aves., all permanent asphalt on concrete; roadway of West 190th St. from Wadsworth Ave. to Wadsworth Terrace, Wadsworth Terrace for width of 20 ft. west of easterly curb line from southerly building line of West 190th St. to point about 182 ft. northerly therefrom, Wadsworth Terrace for width of 20 ft. west of easterly curb line from point about 182 ft. north of southerly building line of West 190th St. to point about 294 ft. northerly therefrom, permanent granite block on concrete.

N. Y., Richmond Hill—Nov. 29, by Park Bd. at office Dept. Parks, Municipal Bldg., New York, improving main drive in Forest Park from Woodhaven Ave. to Union Turnpike, here. F. D. Gallatin, pres.

Pa., Ebensburg—Nov. 29, by Cambria Twp. Comrs., c/o H. T. Jones, controller Cambria Co., reconstructing 16,136 lin.ft. Wilmore Plank Rd. from Wilmore to Summerhill Twp. lines, vitr. brick on concrete. $150,000. L. R. Owen, and J. L. Plummer, Otto Bldg., Johnstown, engrs.

Va., Chatham—Dec. 4, by J. J. Whitehead, chn. Bd. Supervs. Pittsylvania Co., 6.7 mi. soil road beginning at Gretna and running west to Pittsville, 19 ft., 32,000 cu.yd. excav., 2,400 lb. reinforcing, etc. G. P. Coleman, Richmond, highway comr.

N. C., Newton—Nov. 28, by town, 1,200 cu.yd. excav., 5,625 sq.yd. concrete paving, 5,065 ft. combined curb and gutter, etc. $25,000. S. B. Howard, Newton, engr.

S. C., Aiken—Dec. 7, by Comrs. Aiken Co., constructing 14.7 mi. State Route 39, from Aiken-Orangeburg Co. line towards Monetta, 61,903 cu.yd. common excav., 36,195 cu.yd. sand-clay surfacing, 1,345 lin.ft. rein.-con. pipe, 104 cu.yd. concrete.

S. C., Camden—Dec. 6, by Bd. Comrs. Kershaw Co., constructing 3.3 mi. State Route 26, between survey station 0-00, end of county road work, and Kershaw-Sumter Co. line, 23,158 cu.yd. excav., 8,275 cu.yd. sand-clay surfacing, 362 lin.ft. rein.-con. pipe, etc.

S, C., Ridgeland—Dec. 5, by Jasper Co. Hy. Comn., constructing 9.79 mi. State Route 36, between here and Gillisonville, 47,393 cu.yd. common excav., 24,094 cu.yd. sand clay or gravel surfacing, 232 cu.yd. rein.-con., 383 lin.ft. rein.-con. pipe, 7,658 lb. reinforcing; 9.1 mi. State Route 36, between Gillisonville and Hampton Co. line, 61,122 cu.yd. common excav., 22,475 cu.yd. sand-clay surfacing, 566 lin.ft. rein.-con. pipe, 288 cu.yd. rein.-con., 19,921 lb. reinforcing; also creosoted timber bridge on above road, incl. twelve 14 ft. bents, 1,175 lin.ft. treated piles, 26,443 ft. treated lumber, 338 sq.yd. bituminous paving, etc.

Fla., Gainesville — Nov. 27, by Bd. Trustees, Special Rd. and Bridge Dist. 1, Alachua Co., surface treating Gainesville-Archer Rd. and Gainesville-Fairbanks-Waldo Rd. A. B. Gross, dist. engr.; adv. this issue.

Fla., Tavares—Nov. 27, by Comrs. Lake Co., grading and sand-clay surfacing 10.3 mi. road C-D, Lake Shore Dr., East Lake Special Rd. and Bridge Dist. $100,000. G. S. Heller, Tavares, engr.

Louisiana — Dec. 1, by State Hy Dept., Reymond Bldg., Baton Rouge, grading and gravel surfacing 16.7 mi. Project 114, Sect. B, Monroe-Ruston Highway, Ouachita Parish. J. M. Bourmy, state engr.

Ky., Earlington—Dec. 4, by C. B. Johnson, mayor, paving various streets, warrenite bitulithic or vitr. brick on rolled stone base; adv. this issue. Noted Oct. 26.

Michigan—Dec. 5, by State Hy. Dept., Lansing, grading and surfacing 12.871 mi. Federal Aid Project 80, Sect. F, Machinac Co., 12.5 acres clearing, 54,751 cu.yd. excav., 135,826 sq.yd. gravel or waterbound macadam. F. F. Rogers, state highway comr.

Michigan—Dec. 7, by State Hy. Dept., Lansing, grading and surfacing 7.255 mi. Federal Aid Project 64, Crawford and Otsego Counties, 31,821 cu.yd. excav., 76,612 sq.yd. gravel. F. F. Rogers, state highway comr. Noted Nov. 16.

Kan., Mound City—Dec. 16, by Comrs. Linn Co., grading, etc., 10.473 mi. La Cygne-Pleasanton-Prescott Rd., Project 109-C, 27 ft., $55,000; 7.28 mi. Lay Cygne-Pleasanton-Prescott Rd., Project 146-A, 30 ft., $75,000. Kansas Eng. Co., Topeka, engrs.

Kan., Topeka—Dec. 19, by Comrs. Lyons Co., concrete or brick slab on 10 mi. Santa Fe Trail, Federal Aid Project 30-C-D, 18 ft. W. S. Ruggles, Emporia, engr.

S. D., Canton—Dec. 5, by E. A. Jones, aud. Lincoln Co., gravel surfacing 17 mi. Project 8. $30,000.

Missouri—Nov. 27, by State Hy. Dept. at div. office Charleston, 10.25 mi. road from Charleston to New Madrid, 24 ft., Federal Aid Project 198 A, Mississippi Co.; 14.841 mi. road from Anniston westwardly, 30 ft., Federal Aid Project 198 B, Mississippi Co., 30,831 cu.yd. earth excav., 18,277 cu.yd. borrow, 78,335 sq.yd. 1 course plain cement concrete, 60,615 sq.yd. specification A gravel pavement, 315.2 cu.yd. concrete masonry, etc. B. H. Piepmeier, Jefferson City, state highway engr. Noted Oct. 19 and Nov. 16.

Missouri—Dec. 2, by State Hy. Dept., Jefferson City, grading 3.078 mi. road from Jefferson City to Eldon, 24 ft., State Project Route 15, Sect. 57, Miller Co., 4.991 mi. road from Cole Co. line to Eldon, 24 ft., State Project Route 15, Sect. 56, Miller Co., 2.322 mi. road on Capitol Highway, 24 ft., State Project Route 12, Sect. 29, Moniteau Co., 4.375 mi. road from Douglas Co. line to Howell Co. line, 26 ft., State Project Route 5, Sect. 96, Ozark Co., 5 mi. road from Douglas Co. line to Howell Co. line, 26 ft., State Project Route 5, Sect. 95, Ozark Co., 5 mi. road from Milan to Green City, 24 ft., State Project Route 6, Sect. 34, Sullivan Co.; grading and gravel surfacing 4.061 mi, road from Vienna to Osage Co. line, 16 ft. wide, 9 in. at center, 9 in. at edges, State Project Route 7, Sect. 55, Maries Co., 5 mi. road on Capitol Highway, 16 ft., State Project Route 12, Sect. 30, Moniteau Co.; 4.914 mi. road from Monett to Eureka Springs, 16 ft. wide, 9 in. at center, 9 in. at edges, State Project Route 37, Sect. 7, Barry Co., 1.403 mi. road McBride Hill Relocation, 12 ft., 9 in. at center, 9 in. at edges, State Project Route 51, Sect. 3, Perry Co., 4.896 mi. road from Bolivar to Buffalo, 16 ft. wide, 9 in. at edges, 9 in. at center, State Project Route 15, Sect. 80, Dallas Co. B. H. Piepmeier, state highway engr.

Missouri—Dec. 2, by State Hy. Dept., Jefferson City, 3.24 mi. road from Monett to Eureka Springs, 16 ft., State Project Route 37, Sect. 10, Barry Co., 161,798 cu.yd. earth and 2,185 cu.yd. rock excav., 7,756 cu.yd. 1 course gravel surfacing ¼ mi. haul, 38,784 cu.yd. 1 course gravel surfacing additional ¼ mi. haul, 210.5 cu.yd. concrete masonry, etc.; 4.866 mi. road from Centerville to Ellington, 24 ft., State Project Route 21, Sect. 25, Reynolds Co., 50,056 cu.yd. earth and 610 cu.yd. rock excav., 5,498 cu.yd. borrow, 86.6 cu.yd. concrete masonry, etc., 2.585 mi. road on Kings Highway from Jackson to Perry Co. line, 26 ft., State Project Route 25, Sect. 19, Cape Girardeau Co., 17,856 cu.yd. earth and 3,144 cu.yd. rock excav., 4,413 cu.yd. borrow, 103.8 cu.yd. concrete masonry, etc.; 2.886 mi. road on Santa Fe Trail, State Project Route 20, Sect. 10, Lafayette Co., 10,092 cu.yd. earth and 176 cu.yd. rock excav., 17,349 cu.yd. borrow, 30,561 sq.yd. concrete pavement, 18 ft. wide, 7 in. at center and 7 in. at edges, 258 cu.yd. concrete masonry, etc.; 2.061 mi. road from Cairo to Poplar Bluff, State Project Route 16, Sect. 94, Mississippi Co., 5,564 cu.yd. earth excav., 15,703 cu.yd. borrow, 2,176 cu.yd. gravel, 2,176 cu.yd. gravel ¼ mi. haul, 3,970 cu.yd. gravel additional ¼ mi. haul, 10,882 sq.yd. 1 course concrete pavement, 64.1 cu.yd. concrete masonry, etc.; 1.942 mi. road north and south through Linn Co., 18 ft., State Project Route 5, Sect. 15, 9,882 cu.yd. earth excav., 590 cu.yd. borrow, 3,957 cu.yd. sledged stone base, 3,957 cu.yd. sledged stone base ¼ mi, haul, 68,364 cu.yd. sledged stone base additional ¼ mi. haul, 424 cu.yd. waterbound macadam, 424 cu. yd. waterbound macadam, ¼ mi. haul, 7,324 cu.yd. waterbound macadam additional ¼ mi. haul, 1,389 cu.yd. crushed stone, 1,389 cu.yd. crushed stone ¼ mi. haul, 27,468 cu.yd. crushed stone additional ¼ mi. haul, 33,210 gal. bituminous binder, 54.5 cu.yd. concrete masonry, etc.; 3.095 mi. road from Carter Co. line to Ellsinore, 24 ft., State Project Route 16, Sect. 73, Carter Co., 17,725 cu.yd. earth excav.; 3,160 cu.yd. borrow, 78.3 cu.yd. concrete masonry, etc.; 1.279 mi. road from Hartville to Mansfield, 12 ft., State Project Route 5, Sect. 86, Wright Co., 6,750 lin.ft. grading, 2,362 cu.yd. gravel surfacing ¼ mi. haul, 49,989 cu.yd. gravel surfacing additional ¼ mi. haul; 4.991 mi. road from Excelsior Springs to Carroll Co. line, 26 ft., State Project Route 10, Sect. 14, Ray Co., 11,033 cu.yd. earth excav., 7,802 cu.yd. borrow, 25.9 cu.yd. concrete masonry, etc.; 2.244 mi. road from St. Louis to Springfield, 18 ft., State Project Route 14, Sect. 77, St. Louis Co., 16,214 cu.yd. earth excav., 202 cu.yd. borrow, 23,699 sq.yd. concrete pavement, 282.7 cu.yd. concrete masonry, etc.; 4.489 mi. road from Elsinore to Poplar Bluff, 24 ft., State Project Route 16, Sect. 74, Carter Co., 18,604 cu.yd. earth excav., 1,224 cu.yd. borrow, 67.4 cu.yd. concrete masonry, etc.; 5 mi. road north and south through DeKalb Co., 24 ft., State Project Route 31, Sect. 1, 20,477 cu.yd. earth excav., 3,754 cu.yd. borrow, 208.9 cu.yd. concrete masonry, etc.; 2.01 mi. road from Wright Co. line to Ozark Co. line, 24 ft., State Project Route 5, Sect. 93, Douglas Co., 14,209 cu.yd. earth and 2,366 cu.yd. rock excav., 198 cu.yd. borrow, 45.6 cu. yd. concrete masonry, etc.; 3.31 mi. road from Wright Co. line to Ozark Co. line, 24 ft., State Project Route

Streets and Roads (Continued)

5, Sect. 94, Douglas Co., 18,577 cu.yd. earth and 1,117 cu.yd. rock excav., 90 cu.yd. borrow, 19.4 cu.yd. concrete masonry; 4.482 mi. road through St. Genevieve Co., 16 ft., State Project Route 25, Sect. 5, 5,397 cu.yd. earth and 2,307 cu.yd. rock excav., 1,761 cu.yd. borrow, 16,480 lin.ft. grading, 10,647 cu.yd. gravel surfacing ¼ mi. haul, 18,632 cu.yd. gravel surfacing additional ¼ mi. haul, 162.8 cu.yd. concrete masonry, etc.; 4.636 mi. road on Kings Highway, 16 ft., State Project Route 25, Sect. 12, Perry Co., 13,681 cu.yd. earth excav., 404 cu.yd. borrow, 13,341 cu.yd. 1 course gravel surfacing ¼ mi. haul, 96,216 cu.yd. gravel surfacing additional ¼ mi. haul, 13,341 cu.yd. screening gravel, 29.3 cu.yd. concrete masonry, etc. B. H. Piepmeier, state highway engr. Noted **Oct. 26.**

Missouri—Dec. 2, by State Hy. Dept., Jefferson City, 4.855 mi. road from Jefferson City to Eldon, 12 ft., State Project Route 15, Sect. 52, Cole Co., 27,507 cu.yd. earth and 7,503 cu.yd. solid rock excav., 12,651 cu.yd. borrow, 10,500 cu.yd. 1 course gravel surfacing ¼ mi. haul, 53,009 cu.yd. gravel surfacing additional ¼ mi. haul, 10,500 cu.yd. gravel screening, 62.8 cu.yd. concrete masonry, etc., 3.564 mi. road south of Memphis, 16 ft., State Project Route 15, Sect. 4, Scotland Co., 5,186 cu.yd. earth excav., 2,111 cu.yd. borrow, 120 sta. yd. grading, 8,476 cu.yd. grading at siding, 8,476 cu.yd. 1 course gravel surfacing ¼ mi. haul, 70,226 cu.yd. gravel surfacing additional ¼ mi. haul, 55.1 cu.yd. concrete masonry, etc., 4.985 mi. road from Ozark Co. line to West Plains, 24 ft., State Project Route 80, Sect. 8, Howell Co., 29,569 cu.yd. earth excav., 14,510 sta.yd. overhaul, 299.9 cu.yd. concrete masonry, etc., 4.94 mi. road from Ozark Co. line to West Plains, 24 ft., State Project Route 80, Sect. 7, Howell Co., 27, 839 cu.yd. earth excav., 15,495 sta.yd. overhaul, 192.1 cu.yd. concrete masonry, etc., 2.575 mi. road from Green Co. line to Seymour, 16 ft., State Project Route 16, Sect. 35, Webster Co., 5,295 cu.yd. earth excav., 6,106 cu.yd. borrow, 6,133 cu.yd. 1 course gravel ¼ mi. haul, 49,064 cu.yd. gravel additional ¼ mi. haul, 6,133 cu.yd. screening gravel, 68.1 cu.yd. concrete masonry, etc., 3.548 mi. road east and west through Beaufort, 16 ft., State Project Route 12, Sect. 52, Franklin Co., 8,487 cu.yd. gravel pavement ¼ mi. haul. 119,665 cu.yd. gravel pavement additional ¼ mi. haul, 8,487 cu. yd. screening gravel, 3.994 mi. road from Wayland southwardly, 24 ft., State Project Route 9, Sect. 7, Clark Co., 22,454 cu.yd. earth excav., 12,632 cu.yd. borrow, 254.3 cu.yd. concrete masonry, etc., 0.871 mi. road from Unionville northwardly, 16 ft., State Project Route 5, Sect. 2, Putnam Co., 8,053 cu.yd. earth excav., 2,508 cu.yd. gravel surfacing, 2,508 cu.yd. gravel surfacing ¼ mi. haul, 10,296 cu.yd. gravel additional ¼ mi. haul, 35.4 cu.yd. concrete masonry, etc., 2.746 mi. road from Unionville southwestwardly, State Project Route 5, Sect. 3, Putnam Co., 12,771 cu.yd. earth excav., 4,000 cu.yd. borrow, 7,905 cu.yd. gravel surfacing ¼ mi. haul, 39,517 cu.yd. gravel surfacing additional ¼ mi. haul, 44.5 cu.yd. concrete masonry, etc.; grading, etc. 2.4 mi. road from Tarkio southwardly toward Fairfax, 30 ft., State Project Route 61, Sect. 4, Atchison Co., 3.3 mi. road from Mexico eastwardly, 30 ft., State Project Route 22, Sect. 9, Audrain Co., 5 mi. road from Fairfax northwardly toward Tarkio, 30 ft., State Project Route 1, Sect. 7, Atchison Co., 4 mi. road from Jackson Co. line to Warrensburg, 30 ft. crown, State Project Route 12, Sect. 5, Johnson Co., 5 mi. road from Jackson Co. line to Odessa, 30 ft. crown, State Project Route 2, Sect. 7, Lafayette Co., 1.6 mi. road from Grayson to Clay Co. line, 30 ft., State Project Route 33, Sect. 9, Clinton Co., 4 mi. road from Grayson to Clay Co. line, 30 ft., State Project Route 33, Sect. 10, Clinton Co.; grading and 16 ft. gravel paving 4.1 mi. road from Festus to St. Genevieve Co. line, 30 ft., State Project Route 25, Sect. 2, Jefferson Co., 5 mi. road from Neosho southwardly, 30 ft., State Project Route 1, Sect. 106, Newton Co., 5 mi. road from Jefferson City, to Lebanon, 30 ft. crown, State Project 5, Route 73, Laclede Co., 3 mi. road from Malden to Risco, 30 ft. crown, State Project 82, Sect. 3, New Madrid Co.; grading and 18 ft. concrete paving 5.322 mi. road from Poplar Bluff to Fisk, 30 ft., Federal Aid Project 204A, Butler Co., 4.8 mi. road from Poplar Bluff to Fisk, 30 ft., Federal Aid Project 204A, Butler Co., 2.5 mi. road from Kansas City to St. Louis, 30 ft. crown, State Project Route 2, Sect. 69, St. Charles Co., 3 mi. road from Kansas City to St. Louis, 30 ft. crown, State Project Route 2, Sect. 71, St. Charles Co., 4.5 mi. road from Opolis to Asbury, 30 ft. crown, State Project Route 57, Sect. 2, Jasper Co., 5 mi. road from Tipton Ford to Neosho, 30 ft. crown, State Project Route 1, Sect. 104, Newton Co., 2 mi. road from Tipton Ford to Neosho, 30 ft., State Project Route 1, Sect. 105, Newton Co.; grading, 9 ft. concrete paving and 7 ft. gravel paving 2.5 mi. road from East Prairie to New Madrid Co., 30 ft. crown, State Project 55, Sect. 2, Mississippi Co.; grading and 18 ft. concrete or asphaltic concrete paving on sledged stone, 5 mi. road from Clinton Co. line to Hamilton, 30 ft., State Project Route 8, Sect. 12, Caldwell Co., 5 mi. road from Clinton Co. line to Hamilton, 30 ft., State Project Route 8, Sect. 13, Caldwell Co.; grading and paving 2.5 mi. road from Lawrence Co. line to Billing, 30 ft., State Project Route 16, Sect. 20, Christian Co., 16 ft. bituminous macadam or rock asphalt, 12 in. curb, 1.35 mi. road from Pettis Co. line at Windsor southwestwardly, 30 ft., Federal Aid Project Route 133A, Sect. 6, Henry Co., and 5 mi. road from Pettis Co. line at Windsor southwestwardly, 30 ft., Federal Aid Project Route 133A, Sect. 5, Henry Co., both 18 ft. bituminous macadam or 6 in. concrete; grading and approach fills to 4 bridges, on road from Chillicothe to Trenton, 30 ft. crown, State Project 3, Sect. 16, Livingston Co., to bridge over Wildcat Creek near Princeton, etc., on road from Princeton southwardly, 30 ft., State Project Route 13, Sect. 6, Mercer Co., at end of Boonville Bridge over Missouri River on 0.08 mi. road from St. Louis to Kansas City, 30 ft., State Project Route 2, Sect. 33, Howard Co., to bridge over Dry Fork of Merramec River near Salem on 0.25 mi. road from Salem to Licking, 30 ft. crown, State Project Route 32, Sect. 4, Dent Co., to bridge over Gasconade River near Lebanon on 0.56 mi. road from St. Louis to Springfield, 30 ft. crown, State Project Route 14, Sect. 38, Laclede Co., to bridge over Big North Fork of White River on road from Gainesville to Arkansas state line, Federal Aid Project 111 B, Ozark Co., to 4 bridges on road from Faucette to New Market, 30 ft. crown, State Project Route 1, Sect. 34, Buchanan Co., to bridge over Big Piney River near Waynesville, on road from St. Louis to Springfield, 30 ft. crown. State Project Route 14, Sect. 45, Pulaski Co. B. H. Piepmeier, state highway engr. Noted Nov. 16.

BRIDGES—MONTANA

Following are lowest three bids opened Oct. 27 by J. N. Ely, ch. engr., State Highway Dept., Helena, for constructing bridges on Belt-Riceville Rd., Cascade Co., (A) McGuire & Blakeslee, Great Falls (awarded contract); (B) Security Bridge Co., Billings; (C) Illinois Steel Bridge Co., 551 Gilfillan Bldg., St. Paul, Minn. The Unit bids were as follows:

	A	B	C
137,000 lb. structural steel	$0.07	$0.068	$0.08
10,400 lb. reinforcing steel	.06	.06	.062
77 cu.yd. class "A" concrete	16.00	20.00	23.00
600 cu.yd. class "B" concrete	13.90	15.00	17.25
660 cu.yd. excavation	4.75	5.50	5.00
37 M.F.B.M. lumber	55.00	65.00	65.00
Extended totals	$27,452	$29,167	$32,374

ROAD WORK—MONTANA

Following are lowest three bids opened Oct. 27 by J. N. Ely, ch. engr., State Highway Dept., Helena, for constructing 10.64 mi. Belt-Riceville Rd., Cascade Co., (A) White, Brown & Leahy, Ford Bldg., Great Falls (awarded contract); (B) B. Helean, 606 West Pine St., Missoula; (C) B. P. Melchert, Lewistown. The unit bids were as follows:

	A	B	C
104,692 cu.yd. unclassified excavation	$0.35	$0.38	$0.38
2,117 cu.yd. excavation from railway embankments	.75	.38	.60
19,555 cu.yd. rock excavation	1.00	.80	1.10
75,692 sta. yd. overhaul	.01	.01	.01
8,425 cu.yd. crushed gravel surfacing	2.00	2.20	2.00
280 lin.ft. 15 in. corrugated metal pipe culvert	1.40	1.61	1.70
104.16 cu.yd. class "B" concrete in headwalls	25.00	20.00	21.00
67.65 cu.yd. class "A" concrete in box culvert	25.00	25.00	23.00
3,600 lb. reinforcing steel in culverts	.10	.08	.10
11,918 lin.ft. timber guard rail	.50	.70	.65
964 cu.yd. rock retaining wall	3.00	3.00	4.00
91 cu.yd. random rip rap	1.50	1.00	2.00
30.7 acres clearing	50.00	25.00	60.00
13.5 acres grubbing	50.00	50.00	125.00
16.481 M.F.B.M. lumber in cattle passes	60.00	65.00	85.00
21,115 lin.ft. removal of fences	.03	.04	.03½
325 cu.yd. stock piled gravel	1.75	1.50	2.00
10.64 mile finishing	150.00	150.00	100.00
Sub-total	$95,424	$96,804	$103,918
Alternates			
1,404 lin.ft. 18 in. corrugated metal pipe culvert	$1.75	$1.73	$1.90
382 lin.ft. 24 in. corrugated metal pipe culvert	2.40	2.40	2.80
68 lin.ft. 30 in. corrugated metal pipe culvert	3.00	2.90	3.55
188 lin.ft. 36 in. corrugated metal pipe culvert	4.00	3.92	4.80
Sub-total	$4,330	$4,280	$4,881
1,404 lin.ft. 18 in. concrete pipe culvert	$2.00	$2.63	$2.35
382 lin.ft. 24 in. concrete pipe culvert	3.00	3.72	3.60
68 lin.ft. 30 in. concrete pipe culvert	4.00	4.96	5.06
188 lin.ft. 36 in. concrete pipe culvert	5.00	5.71	5.70
Sub-total	$5,166	$6,524	$6,086
Extended totals using corrugated metal pipe	$99,753	$101,084	$108,799
Extended totals using concrete pipe	*$100,590	$103,328	$110,004
10% for engineering and contingencies	$9,975	$10,108	$10,880
Extended grand totals	$109,729	$111,192	$119,679

*Awarded contract.

Mo., St. Louis—Dec. 12, at office of Bd. Pub. Serv., City Hall, grading 860 ft. Esther Ave. from Elizabeth to Wilson Aves., 5,600 cu.yd. earth excav., $7,250; 3,000 ft. Goodfellow Ave. from Maffitt to Natural Bridge Aves., 28,100 cu.yd. earth excav., $17,400; 700 ft. Tennessee Ave. from Iron to Fillmore ts., 5,035 cu.yd. excav., $5,200. W. W. Horner, City Hall, engr.

Tex., Highland Park (Dallas P. O.)—Nov. 30, by City Comn., paving Euclid St. from Drexel to Highland Sts. and Highland St. from Euclid to Beverly Sts., bitulithic or Uvalde rock asphalt. Cost to exceed $25,000. Myers & Noyes, Dallas County Bank, Dallas, engrs.

Tex., Jefferson—Dec. 5, by E. B. Lewis, judge Marion Co., grading, claying, gravel surfacing and bridging 3.56 mi. road from here to Marion Co. line, 16 ft., 74 cu.yd. concrete, 6,784 lb. reinforcing, 2,371 cu.yd. claying sub-grade, 8,245 cu.yd. shipped gravel, 40,988 ft. creosoted lumber, 25,335 ft. oak lumber, etc., $66,945; 8.8 mi. State Highway 8 from here to Cass Co. line, 47,889 cu.yd. roadway and 44,325 cu.yd. borrow excav., 379.6 cu.yd. concrete, 10,533 cu.yd. claying sub-grade, 9,554 cu.yd. shipped gravel, 10,838 cu.yd. local gravel, 46,135 ft. cresoted lumber, 29,835 ft. oak lumber, etc., $100,980. T. B. Worden, co. engr.

Tex., Kaufman—Nov. 28, by W. P. Williams, judge Kaufman Co., grading, etc., 9.37 mi. State Highway 15 from Terrell west to Talty-Forney Rd., 24 ft., 27,555 cu. yd. roadway and 71,469 cu.yd. borrow excav., 92,246 lb. reinforcing, $60,000; 10.31 mi. State Highway 15 from Van Zandt Co. line west, and from Terrell east, 24 ft., 20,497 cu.yd. roadway and 19,251 cu.yd. borrow excav., 413 cu.yd. concrete, 42,920 lb. reinforcing, etc., $30,000. L. M. Ferlet, Terrell, co. engr.

Tex., Pecos—Dec. 8, by J. F. Ross, judge Reeves Co., grading and gravel surfacing 4.53 mi. State Highway 27, 16 ft. 465 cu.yd.

Streets and Roads (Continued)

concrete, 10,183 cu.yd. roadway, 9,876 cu.yd. borrow and 9,816 cu.yd. loose rock excav., 6,445 cu.yd. gravel surfacing, 43,398 lb. reinforcing, $30,292; 3.75 mi. State Highway 17-A, 16 ft., 13,336 cu.yd. roadway and 7,058 cu.yd. borrow excav., 338 cu.yd. concrete, 36,673 lb. reinforcing, 7,942 cu.yd. gravel, $25,000. A. J. Adcock, Balmorhea, co. engr.

Oklahoma—Nov. 29, by M. M. Henderson, comr. highways, Oklahoma City, grading and concrete paving 3.49 mi. Federal Aid Project 86, Tulsa Co., 12,500 sq.yd. concrete, 4,110 cu.yd. earth and 4,756 cu. yd. rock excav., 205 cu.yd. concrete, 19,222 lb. reinforcing; 11.9 mi. Federal Aid Project 59, Bryan Co., 555 cu.yd. concrete, 31,000 cu.yd. gravel, 60,000 cu.yd. earth excav., 31,000 cu.yd. gravel, 43,000 lb. reinforcing. M. L. Cunningham state highway engr.

Ore., Portland—Receiving bids grading, curbing and paving East 50th St. $788, 43rd St. S. E. $2,326, Fessenden St. $7,177, Mississippi Ave. $8,409, East Stark St. $21,496, East 7th St. $3,724, Forest St. $2,787, concrete or bitulithic concrete. O. Laurgard, city engr.

California—Dec. 11, by State Hy. Dept., Sacramento, grading 9.8 mi. highway between 2 mi. south of Hornbrook and Oregon State line, Siskiyou Co., 8.9 mi. highway between Parkfield Junction and Coolinga, Fresno Co.; grading and gravel surfacing 11.9 mi. highway between Willows and point 3 mi. south of Glenn, Glenn Co., 4.5 mi. highway between 5 mi. east of Gilroy and San Felipe, Santa Clara Co.; asphalt concrete surfacing 0.5 mi. highway between Roseville and Lincoln, Placer Co.; grading and paving with either portland cement concrete, asphaltic concrete or asphaltic macadam, 8.5 mi. highway between Granada and Yreka, Siskiyou Co.; constructing bridge over Northwestern Pacific R.R. near Lytton, Sonoma Co., including three 32 ft. rein.-con. girder spans, with necessary bents, abutments and wing walls. A. B. Fletcher, state highway engr.

Calif., San Diego—Dec. 4, by Common Council, improving Adams and Works Aves., Utah and 30th Sts., 4,904 lin.ft. cement concrete curbing, 23,428 sq.ft. cement concrete sidewalk, 239,438 sq.ft. 1½ in. asphaltic concrete on 4 in. cement concrete, 113,090 sq.ft. 1½ in. asphaltic concrete on 2½ in. asphaltic concrete, etc. F. A. Rhodes, City Hall, engr. Noted Aug. 10.

Calif., Stockton—Dec. 5, by Supervs. San Joaquin Co., improving Brian-Woods Ferry Rd., 4,500 cu.yd. grading, 5,770 ton crushed rock, 770 ton pea gravel, 630 bbl. asphaltic oil, 40 cu.yd. concrete. F. E. Quail, co. surv.

Quebec—Dec. 16, by J. L. Boulanger, deputy minister of roads, Quebec, building 103,032 ft. Laprairie-Lacolle Highway, in St. Jean, St. Blaise, St. Paul and Notre Dame du Carmel Parishes, oil macadam. M. Nectkar, ch. engr.

Quebec—Dec. 30, by J. L. Boulanger, deputy minister of highways, Quebec, graveling 11.97 mi. Rawdon-L'Assomption Highway in towns of Rawdon, St. Jacques, St. Alexis, Montcalm, St. Esprit, St. Roch, and L'Epiphanie, also 6.5 mi. Drummondville-Annaville Highway, in St. Leonard, St. Celestin and Annaville Parishes, tar macadam on 6 mi. Levis-St. Lambert Highway, through vilage of St. Angele de Laval. M. Necktar, ch. engr.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids Nov. 15, resurfacing (1) Albany Ave., repaving with permanent asphalt (2) Church Ave. (3) Empire Blvd. (4) Ave. R, from Cranford Co., 52 9th St., (1) $22,295 (2) $21,270 (3) $15,090 (4) $3,657; Boro Asphalt Co., 1301 Metropolitan Ave., (1) $25,946 (2) $20,898 (3) $12,666 (4) $4,071; Cleveland Trinidad Paving Co., Flushing, (2) $20,574 (3) $12,090 (4) $4,003; Sicilian Asphalt Paving Co., 41 Park Row, New York, (2) $21,445 (3) $14,052. Noted Nov. 9.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., opened bids Nov. 17, grading, curbing and laying sidewalks on 101st (Jerome) Ave. from Van Wyck to Liberty Aves., etc., from E. Bloch, Woodhaven, $12,990, Kennedy & Smith, 93 Amity St., Flushing, $13,846, Galecor Contg. Co., $13,866; paving 101st (Jerome) Ave. from Van Wyck to Liberty Aves., permanent sheet asphalt on concrete, from Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, $17,805, Cranford Co., 52 9th St., Brooklyn, $17,979, W. P. McDonald Co., 17 West 42nd St., New York, $21,665. Noted Nov. 9.

Pa., Ebensburg—Supervs. Cambria Co. opened bids Nov. 13, paving 5,800 ft. Jackson Twp. Rd., vitr. brick blocks on combination concrete, from Owen & Plummer, Inc., Otto Bldg., Johnstown, $76,555, G. T. Morgan, Woolf Blk., Johnstown, $79,443; also 3 mi. Prospect Hill Rd., East Taylor Twp., vitr. brick on concrete, from E. A. James, Trust Bldg., Johnstown, $183,657, S. Gamble Co., Johnstown, $184,877, McClure & Binger, Johnstown, $184,877.

Pa., Ebensburg—Supervs. Susquehanna Twp. opened bids Nov. 15, for 3.25 mi. Susquehanna Twp. Rd. from Emeigh Run to Plattsville, brick on concrete, from Burd Constr. Co., Cresson, $228,632; P. Azzara Co., Cresson, $228,668; Owen & Plummer, Inc., Otto Bldg., Johnstown, $233,778. Noted Nov. 9.

Florida—State Hy. Dept., Tallahassee, clearing and surfacing (1) 10 mi. road from Pensacola to Roberts, Federal Aid Project 34, Escambia Co. (2) 11.6 mi. road from Lake City to Wellborn, State Project 504, Columbia and Suwannee Counties (3) 7.76 mi. road from Vero to Wabasso, Federal Aid Project 36, St. Lucie Co., (a) bituminous macadam (b) sheet asphalt (c) plain cement concrete (d) bituminous concrete, from J. F. Morgan Paving Co., Jacksonville (street address not available), (1a) $375,734 (1b) $370,454 (2a) $265,611 (2b) $279,494 (2d) $249,006 (3a) $301,880 (3b) $310,490; C. H. Turner, Pensacola, (1c) $250,808; S. S. Fulghum, Pensacola, (1c) $270,265; W. D. Winchell & Co., 337 Siebert St., Columbus, O., (1c) $287,136; McDougald Constr. Co., Atlanta, Ga., (street address not available), (2a) $249,891; Barber-Fortin Co., Gainesville, (2a) $260,643 (2b) $272,552 (2d) $239,887 (3b) $276,198; Maule Paving Co., Ojus, (3a) $240,221. Noted Nov. 2 and 9.

Tex., Pearsall—Frio Co. grading, gravel surfacing and topping with 1½ in. bituminous macadam (1) 17.2 mi. Meridian Highway from here north to Meridian Co. line, 18 ft., engrs. est. $283,279, (2) 17.81 mi. Meridian Highway between here and La Salle Co. line, 18 ft., engrs. est. $316,415 incl. engineering and contingencies, from Smith Bros., Crockett, (1) $207,310 (2) $239,941; Uvalde Rock Asphalt Co., Swearingen Bldg., San Antonio, (1) $208,032, (2) $232,147; Womach Constr. Co., Sherman, (1) $212,293, (2) $245,586. Noted Nov. 2.

Colorado—State Hy. Dept., Denver, concrete paving 4.185 mi. Denver-Colorado Springs Rd., Federal Aid Project 116-A, El Paso Co., 18 ft., from Standard Eng. & Constr. Co., 518 E. & C Bldg., Denver, $177,823; J. F. Roberts Constr. Co., Tramway Bldg., Denver, $183,703; Colorado Bridge & Constr. Co., 601 Gas & Electric Bldg., Denver, $190,072. Engrs. est. $231,394. Noted Nov. 2.

Wash., Seattle—Opened bids Nov. 10, paving Taylor Ave. et al, engrs. est. $33,806, (2) Alki Ave., engrs. est. $119,831, (a) concrete, (b) concrete and sandstone, from J. L. Smith, Pioneer Bldg., (1a) $32,769 (1b) $35,659 (2) $112, 948; G. T. Warren, 402 30th Ave. S., (1a)$32,858 (1b) $34,099; Coluccio & Erickson, 1642 Lane St., (1a) $32,985; Fiorito Bros., 3950 6th Ave., N. W., (2) $112,309; R. G. Stevenson, 1327 Northlake Ave., (2) $113,598. Noted Sept. 28.

Calif., Bakersfield—Improving California Ave., (1) 4,933 cu.yd. excav. (2) 2,258 cu.yd. fill (3) 121,628 ft. subgrade (4) 121,628 sq.ft. 1½ in. warrenite bitulithic on 4 in. asphaltic concrete (5) 9,250 ft. headers (6) 2,344 ft. concrete curb (7) 8,826 ft. concrete gutter, from Federal Constr. Co., Call Bldg., San Francisco, (1) $0.90 (2) $1.60 (3) $0.04 (4) $0.234 (5) $0.14 (6) $0.60 (7) $0.30; California Road and Street Impvt. Co., Bank of Italy Bldg., Fresno, (1) $1.60 (2) $1 (3) $0.05 (4) $0.24 (5) $0.20 (6) $0.65 (7) $0.29; Thompson Bros., G and Divisadero Sts., Fresno, (1) $1.60 (2) $1.50 (3) $0.045 (4) $0.235 (5) $0.15 (6) $0.65 (7) $0.28. Noted Sept. 28.

Calif., Los Angeles—Improving 16th St. between Crenshaw Blvd. and Arlington Ave., 174,358 sq.ft. grading, 174,358 sq.ft. asphalt pavement, 23,590 sq.ft. concrete pavement, 5,796 lin.ft. concrete curb, 27,261 sq.ft. cement walks, 7,201 sq.ft. concrete gutter, etc., from G. R. Curtis, 2440 East 26th St., $114,417; Fairchild-Gilmore-Wilton Co., 1060 South Bway., $116,594.

Calif., Santa Rosa—Supervs. Sonoma Co., grading and surfacing 13.35 mi. Guerneville-Jenner Highway, from W. L. Proctor, Santa Rosa, $118,500; grading and asphalt surfacing 3.05 mi. Petaluma-Sonoma Highway, Sect. B, and 1.79 mi. road from Sonoma to State Highway Rd., Sect. B from M. P. Tracy, Sonoma, $30,147 and $15,967 respectively; 1.04 mi. Dry Creek Rd. and Geyserville-Jimtown Rd. Sect. A, from Mercer-Fraser Co., 1st and G Sts., Eureka, $10,623 and $5,572 respectively. Noted Oct. 26.

Calif., Stockton—Supervs. San Joaquin Co., paving with oil macadam (1) 2½ mi. Locust Ave., Rd. Dist. Impvt. 4 (2) Netter Rd., Impvt. Dist. 6, from Irey & Holden, Lodi, (1) $26,087 (2) $10,086; C. Moreing & Sons, Commercial and Savings Bank Bldg., (1) $26,380 (2) $10,824; Blumenkranz & Vernon, Stockton, (1) $31,700 (2) $12,816. Noted Oct. 26.

CONTRACTS AWARDED

Massachusetts—State Bd. of Pub. Wks., State House, Boston, paving 8 mi. highway, 16 ft., between Otis and Sandisfield, 225,280 sq.yd. bituminous macadam, to Lane Constr. Co., 37 Colony St., Meriden, Conn., $307,415. Engrs. est. $350,000. Noted Oct. 26.

Mass., Ashburnham — Town and State, paving 4,221 ft. road, 20 ft., bituminous macadam, here, to Lane Constr. Co., 37 Colony St., Meriden, Conn., $31,502. Noted Nov. 9.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., repaving 27th and 30th Sts., sheet asphalt, to M. Del Balso, 660 East 221st St., $31,740 and $21,021, respectively, Mulberry and Mott Sts., granite block, to P. Cramer, 114 East 52nd St., $2,966 and $9,381, respectively; grading Chittenden Ave. and grading, curbing and flagging Pinehurst Ave., to Sicilian Asphalt Paving Co., 41 Park Row, $17,416 and $20,915 respectively. Noted Nov. 16.

N. Y., Syracuse—Bd. Contr. & Supply, paving Coleridge and Shuart Aves., to F. J. Baker, University Blk., $42,493 and $30,514 respectively; Highland Ave. and Jasper St., to G. B. Dickinson, Union Bldg., $26,912 and $22,429 respectively; Merriman Ave., East Castle and Kellogg Sts., to J. H. Gallup, Union Bldg., $18,620, $19,141 and $29,743, respectively; Teall and South Crouse Aves., to C. T. Hookaway, Bastable Bldg., $24,105 and $22,730, respectively. Noted Oct. 26.

N. J., Hopatcong—Bd. Freeholders Sussex Co., Newton, grading Lakeside Blvd., here, to Smith Bros. & Co., Hackettstown, $17,032. Noted Oct. 19.

Pennsylvania—State Hy. Dept., Harrisburg, 20,088 ft. Route 333, York Co. and 22,806 ft. Routes 250 and 233, York Co., to Kumer & Graber, Shamokin, $215,365 and $261,549 respectively; 1,921 ft. Application 1958, Jefferson Co., to W. C. Quick, Brookville, $43,511; 24,077 ft. Route 226, Application 1523, Lehigh Co., to Juniata Co., 410 Empire Bldg., Phila., $169,633. Noted Oct. 26.

West Virginia—State Hy. Dept., Charleston, grading 11 mi. Grantsville-Arnoldsburg Rd., Project 3076 B, Calhoun Co., 58,650 lin.ft. clearing, 170,000 cu.yd. unclassified and 3,860 cu.yd. dry excav., 5,795 sta. yd. overhaul, 875 cu.yd. concrete, 10,500 lb. reinforcing, 1,125 cu.yd. coment rubble masonry, 4,242 lin.ft. 15 to 18 in. rein.con. pipe, etc., to Hardman & McKown, Spencer, $169,876; 5.7 mi. Summersville-Gilboa Rd., Project 3047, Nicholas Co., 30,100 lin. ft. clearing, 53,000 cu.yd. unclassified, 250 cu.yd. wet, 600 cu.yd. dry and 500 cu.yd. borrow excav., 214 cu.yd. concrete, 19,800 lb. reinforcing, 1,200 cu.yd. cement rubble masonry, 1,350 lin.ft. 18 in. vitr. clay pipe (double strength), to Lookout Constr. Co., Victor, $61,066; 12 mi. Elizabeth-Spencer Rd., Project 3067, Wirt Co., 58,425 lin.ft. clearing, 240,000 cu.yd. unclassified, 300 cu. yd. wet and 3,200 cu.yd. dry excav., 7,156 sta. yd. overhaul, 1,625 cu.yd. concrete, 10,000 lb. reinforcing, 925 cu.yd. cement rubble masonry, 4,732 lin.ft. 15 to 24 in. rein.-con. pipe, 1,372 lin.ft. 15 in. corrugated metal pipe, 16,675 lin.ft. timber piling, etc., to Ebersbach Constr. Co., Pomeroy, O., $230,789; 6 mi. Buckhannon-Randolph Rd., Project 3154, Upshur Co., 31,680 lin.ft. clearing, 70,000 cu.yd. unclassified, 1,014 cu.yd. dry and 1,140 cu.yd. borrow excav., 3,000 sta.yd. overhaul, 500 cu.yd. concrete, 10,573 lb. reinforcing, 1,710 lin.ft. 12 to 36 in. rein.-con. pipe, to W. H. Rhodes, Elkins, 63,812, 10 mi. Glenville-Normantown Rd., Project 3111, Gilmer Co., 53,446 lin.ft. clearing, 195,000 cu.yd. unclassified, 218 cu.yd. wet, 2,620 cu.yd. dry and 13,450 cu.yd. borrow excav., 3,510 sta. yd. overhaul, 894 cu.yd. concrete, 37,160 lb. reinforcing, 995 cu.yd. cement and 3,975 cu.yd. dry rubble masonry, to Keeley Constr. Co., Clarksburg, $225,569; 4.6 mi. Maysel-King Shoals Rd., Project 3170, Clay Co., 25,000 lin.ft. clearing, 74,750 cu.yd. unclassified, 325 cu.yd. wet, 625 cu.yd. dry and 10,150 cu.yd. borrow excav., 207 cu.yd. concrete, 26,200 lb. reinforcing, 1,095 cu.yd. cement rubble masonry, 1,450 lin.ft. 18 in. vitr. clay pipe (double strength), to W. C. Markle, Clay, $64,781; 4 mi. road from end of Project 1067 to Raleigh Co. line, Project 3054, Summers Co., 23,960 lin.ft. clearing, 51,200 cu.yd. unclassified, 130 cu.yd. wet, 160 cu.yd. dry and 4,700 cu.yd. borrow excav., 374 cu.yd. concrete, 6,060 lb. reinforcing, 1,650 lin.ft. 18 in. vitr. clay pipe (double strength), to P. M. Price, Hinton, $52,080; 4.23 mi. Buckeye-Millpoint Rd., Project 3051, Pocahontas Co., 22,350 lin.ft. clearing, 30,000 cu.yd. unclassified, 110 cu. yd. wet, 430 cu.yd. dry and 200 cu.yd. borrow excav., 68 cu.yd. concrete, 5,000 lb. reinforcing, 1,075 cu.yd. cement rubble masonry, 1,550 lin.ft. 18 in. vitr. clay pipe (double strength), to F. Echols, Marlinton.

Streets and Roads (Continued)

$38,983; 11 mi. Pt. Mountain-Randolph Co. line Rd., Project 3021 B, Webster Co., 58,566 lin.ft. clearing, 112,000 cu.yd. unclassified, 350 cu.yd. dry and 2,500 cu.yd. borrow excav., 1,000 sta.yd. overhaul, 33 cu.yd. concrete, 2,160 lb. reinforcing, 840 cu.yd. cement rubble masonry, 3,280 cu.yd. dry rubble masonry, to Mace Constr. Co., Webster Springs, $90,645; 4.17 mi. Iroquois-Amigo Rd., Projects 3062 and 3133, Wyoming and Raleigh Counties, 22,040 lin.ft. clearing, 73,700 cu.yd. unclassified, 770 cu.yd. dry and 15,000 cu.yd. borrow excav., 38,000 sta.yd. overhaul, 570 cu.yd. concrete, 7,050 lb. reinforcing, 550 cu.yd. cement rubble masonry, 2,626 lin.ft. 18 to 24 in. vitr. clay pipe (single strength), etc., to G. F. Franklin & Co., Pocahontas, Va., $83,784; 4 mi. Ramage-Madison Rd., Project 3151, Boone Co., 20,650 lin.ft. clearing, 58,700 cu.yd. unclassified, 170 cu.yd. wet, 600 cu.yd. dry and 1,000 cu.yd. borrow excav., 105 cu.yd. concrete, 9,230 lb. reinforcing, 930 cu.yd. cement rubble masonry, 1,050 lin.ft. 18 in. vitr. clay pipe (double strength), to Sterling Constr. Co., Akron, O. (street address not available) $50,125; 1.7 mi. Racine-Peytona Rd., Project 3152, Boone Co., 8,800 lin. ft. clearing, 30,000 cu.yd. unclassified, 110 cu.yd. wet, 265 cu.yd. dry and 200 cu.yd. borrow excav., 75 cu.yd. concrete, 7,150 lb. reinforcing, 550 cu.yd. cement rubble masonry, etc., to Nash, Cain & Turmin, Day and Night Bank Bldg., Huntington $30,808; 9 mi. Echo-Fleming Rd., Project 3061, Wayne Co., 46,800 lin.ft. clearing, 140,000 cu.yd. unclassified, 100 cu.yd. wet and 2,400 cu.yd. dry excav., 14,700 sta. yd. overhaul, 3,380 cu.yd. concrete, 45,000 lb. reinforcing, 3,700 lin.ft. 18 in. vitr. clay pipe (single strength), etc., to Hatfield Constr. Co., 418½ 10th St., Huntington, $151,800; grading 8.6 mi. Junction-Hardy Co. line Rd., Project 3012, Hampshire Co., to L. J. Chandler, Virgilina, Va., $100,308; grading and gravel surfacing 9 mi. Pt. Pleasant-Clifton Rd., Project 3057, Mason Co., 46,500 lin.ft. clearing, 48,000 cu.yd. unclassified, 200 cu.yd. wet, 800 cu.yd. dry and 1,000 cu.yd. borrow excav., 555 cu. yd. concrete, 10,000 lb, reinforcing, 1,000 cu.yd. cement rubble masonry, 1,750 lin.ft. 18 to 24 in. rein.-con. pipe, 700 sq.yd. cement concrete gutter, 500 cu.yd. loose stone, 500 cu.yd. stone subbase course, 21,000 cu.yd. gravel surfacing, etc., to J. E. Doyle, 432 8th Ave., Huntington, $93,840; 7.53 mi. Ridgeley-Alaska Rd., Project 3107, Mineral Co., 39,710 lin.ft. clearing, 50,130 cu.yd. unclassified, 810 cu.yd. dry and 5,540 cu.yd. borrow excav., 3,000 sta.yd. overhaul, 540 cu.yd. concrete, 7,510 lb. reinforcing, 1,490 lin.ft. 15 to 24 in. rein.-con. pipe, 8,000 cu.yd. gravel surfacing, to L. J. Chandler Co., Virgilina, Va., $65,147; 5.5 mi. Henderson-Couch Rd., Project 3138, Mason Co., 28,500 lin.ft. clearing, 50,000 cu. yd. unclassified, 750 cu.yd. dry and 12,500 cu.yd. borrow excav., 35,000 sta.yd. overhaul, 850 cu.yd. concrete, 6,900 lb. reinforcing, 1,240 lin.ft. 18 to 24 in. rein.-con. pipe, 250 cu.yd. stone subbase course, 500 cu.yd. loose stone, 12,700 cu.yd. gravel surfacing, etc., to Coleman Bros., Ashton, $86,224; grading and paving with waterbound macadam 2.4 mi. Petersburg-Hardy Co. line Rd., Project 3149, Grant Co., 12,625 lin. ft. clearing, 16,325 cu.yd. unclassified and 360 cu.yd. dry excav., 350 sta.yd. overhaul, 155 cu.yd. concrete, 2,020 lb. reinforcing, 310 cu.yd. dry rubble masonry, 530 lin.ft. 15 to 24 in. rein.-con. pipe, 120 cu.yd. loose stone, 1,775 cu.yd. stone subbase course, 3,150 cu.yd. broken stone base course, 22,450 sq.yd. waterbound macadam surface, to L. J. Chandler, Virgilina, Va., $57,213; 4.24 mi. Martinsburg-Hedgesville Rd., Project 3028, Berkeley Co., 22,400 lin.ft. clearing, 29,200 cu.yd. unclassified, 400 cu.yd. dry and 600 cu.yd. borrow excav., 2,350 sta.yd. overhaul, 210 cu.yd. concrete, 1,640 lb. reinforcing, 1,234 lin.ft. 15 to 18 in. rein.-con. pipe, 120 cu.yd. loose stone, 4,450 cu.yd. stone subbase course, 5,550 cu.yd. broken stone base course, 40,000 sq.yd. waterbound macadam surface, to Bester-Long Co., Hagerstown, Md., $89,974; grading and paving with bituminous macadam, oiled, 4.2 mi. Shady-Springs-Flat Top Rd., Project 123, Raleigh Co., 22,200 lin.ft. clearing, 60,800 cu.yd. unclassified, 205 cu.yd. wet, 650 cu.yd. dry and 500 cu.yd. borrow excav., 650 cu.yd. concrete, 8,350 lb. reinforcing, 1,000 lin.ft. 18 in. vitr. clay pipe(single strength), 10,125 cu.yd. broken stone base course, 45,525 sq.yd. bituminous macadam surface, 102,500 gal. bituminous material for penetration macadam, etc., to J. E. Dougher & Sons, Union, $156,947; grading and paving with bituminous macadam 0.6 mi. Simmons-Freeman Rd., Project 3060 A, Mercer Co., 3,000 lin.ft. clearing, 1,800 cu.yd. unclassified, 110 cu.yd. dry and 500 cu.yd. borrow excav., 70 cu.yd. concrete, 340 lin.ft. 15 to 18 in. vitr. clay pipe (single strength), 100 cu.yd. stone subbase course, 900 cu.yd. broken stone base course, 5,400 sq.yd. bituminous macadam surface, 12,000 gal. bituminous material for penetration macadam, etc., to G. T. Franklin Co., Pocahontas, Va., $18,590. Noted Nov. 2.

North Carolina — State Hy Dept., Raleigh, grading and concrete paving 7.52 mi. State Project 901, Buncombe Co., to A. J. Wardrep, Holston Bank Bldg., Knoxville, Tenn., $292,299, 2 mi. State Project 105 A, Beaufort Co., to J. L. McGehee, Tarboro, $71,672, 5.04 mi. State Project 105 B, Beaufort Co. and 4.23 mi. State Project 101, Beaufort Co., to Public Service Production Co., Terminal Bldg., Newark, N. J., $149,365 and $132,266, respectively; grading and asphaltic paving 14.22 mi. State Project 282, Wayne Co. and grading and asphaltic concrete paving 14.53 mi. State Project 220, Duplin Co., to Union Paving Co., 30th and Locust Sts., Phila., Pa., $353,857 and $358,455, respectively; grading 14.07 mi. State Project 133, Gates and Pasquotank Counties, to C. W. Lacy, Wilmington, $91,013; clearing, grading and topsoiling, 10.89 mi. State Project 152, Hyde Co., to O. A. Mann & Co., La Grange, Ga., $70,194. Noted Nov. 2.

Fla., Milton—Comrs. Santa Rosa Co., clearing, grading and surfacing 8.04 mi. State Rd. 1, to Collins & Gillis, Milton, $19,517; 2.008 mi. Jay-Century Rd., to J. M. Hicks & Son, Brewton, Ala., $20,672; constructing Pond Creek and Till Bayou Bridges on State Rd. 1, to Doullut & Williams Co., Inc., Pensacola, $7,475. Noted Nov. 9.

Miss., Cleveland—Paving various streets with asphalt, to Hornaday Constr. Co., Memphis, Tenn., (street addres not available), $52,000.

Tennessee—State Hy. Comn., Nashville, surfacing with 1½ in. rock asphalt on 8 in. hand placed base course Federal Aid Project 37, Campbell Co., and 9.8 mi. road from point near Newport to North Carolina State line, 8 in. hand placed base course, Cocke Co., to H. L. Humbard Constr. Co., Jacksboro Park Knoxville, $136,966 plus 10% for engineering and contingencies, and $228,058, respectively; bridges on above project, to A. Lyons, Roversville, $10,752. Noted Oct. 26.

O., Canton—G. L. Sickafoose, engr. Stark Co., Court House, paving 2 mi. Uniontown-Hartville Rd., 16 ft., monolithic brick, to Urvan Bros. Co., $68,760, engrs. est. $71,000; Waynesburg Rd., from Waynesburg to county line, 16 ft., to Wise Bros., Canton (street address not available), $31,920. Noted Nov. 2.

Michigan—State Hy. Dept., Lansing, grading bridge approaches on 0.557 mi. State Trunk Line Rd. 11-53, Ottawa Co., 54,019 cu.yd. excav., to D. J. Hennessey, Box 506, Grand Rapids, $28,090.

Michigan — State Hy. Dept., Lansing, grading and surfacing 4.355 mi. State Trunk Line Rd. 22-6, Sect. B, Benzie Co., to Pierson & Allswede, Hersey, $27,123. Noted Nov. 9.

Ill., Quincy—To Sternberg-Powell Co., 37 West Van Buren St., Chicago, tarvia paving Monroe St., $46,850, Madison St., $46,612; alley between 3rd and 4th Sts. and Maine and Hampshire Sts., concrete, $1,363.

Ia., Waterloo—Comrs. Black Hawk Co., grading 13.18 mi. Primary Rd. Project 233, from here southeast through La Porte to county line, 137,143 cu.yd. excav., to Phelan & Shirley, 306 South 24th St., Omaha, Neb., $0.234 per cu.yd. Noted Nov. 9.

Kan., Eldorado—Butler Co. grading 6.258 mi. Augusta Gordon Rd. 124, 28 ft., to L. L. Beye, 1019 South Denver St., $28,615; culverts to Wilday & Reagor, Augusta, $14,651. Noted Oct. 19.

Tex., Austin—Travis Co., surfacing 3.2 mi. Highway 20, between here and Manor, 16 ft., 5½ in. crushed stone base, to Travis Co., c/o G. S. Mathews, co. judge Austin, $18,694; 1½ in. bituminous topping, to Haden & Austin, Box 1223, Houston, $15,219. Noted Nov. 9.

Tex., Ft. Worth—Tarrant Co. grading, gravel surfacing, etc., 5.75 mi. Randol Mill Rd., Project 21, 18 ft., grading and surfacing, to Purvis & Lowry, Ft. Worth, $19,443; concrete structures, to Purvis & Johnson, Ft. Worth, $16,283. Noted Nov. 2.

Tex., Georgetown—Williamson Co. surfacing 11.5 mi. Highway 2-C between here and Travis Co. line, 16 ft., 108,317 sq.yd. 1½ in. inverted penetration bituminous topping, using all limestone cover material, to Haden & Austin, Box 1223, Houston, $56,372. Noted Nov. 15.

Tex., Houston—Paving 1 mi. Milam St. from Preston to Polk Sts., 40 ft., bitulithic, to Smith Bros. Constr. Co., Sumpter Bldg., Dallas, $63,466.

Okla., Tulsa—Grading and paving 12,900 ft. Tulsa-Owasso-Collinsville Rd., 18 ft., concrete, to D. A. Burton, 544 South Victor St., $64,968.

Wash., Everett—Snohomish Co., 1½ mi. grading, 1 mi. trestle, and boom guard at Smelt Bay, to Norris Bros., Burlington, $75,000. Engrs. est. $76,000.

Calif., Bakersfield—Improving Oak St., to Federal Constr. Co., Call Bldg., San Francisco, $43,041. Noted Nov. 16.

Calif., Fresno—Fresno Co. paving Ventura Ave., 5 in. asphaltic concrete, to T. A. Hanrahan, 1361 P St., $31,294; Mt. Whitney Ave. from Camden west, 5 in. asphaltic concrete, to California Constr. Co., Mattei Bldg., $51,307; 4.97 mi. Mt. Whitney Ave. through Riverdale, 6 in. asphalt treated gravel, to N. M. Ball, Porterville, $56,098. Noted Oct. 26.

Calif., Fresno—Improving Weldon Ave., to Thompson Bros, G and Divisadero Sts., 75,830 sq.ft. grading at $0.057, 58,165 ft. asphalt $0.219, 6,630 ft. cement walks $0.225, 5,260 ft. concrete gutter $0.35, 1,340 ft. concrete curb $0.65. Noted Nov. 16.

Calif., Gustine—For 1,210 cu.yd. 5 in. concrete pavement, to Frederickson & Shannon, Cory Bldg., Fresno, $29,190. Noted Nov. 16.

Calif., San Diego—San Diego Co. paving 2.2 mi. road from Nestor to Mexican line at Tia Juana, 18 ft., 7,232 sq.yd. concrete, to California Constr. Co., Union Bldg., $52,600.

Que., Montreal—To Duranceau & Duranceau, 152 Hamilton St., 2,000 sq.yd. asphalt pavements on Marguerite Bourgeois St. $11,124, 1,167 sq.yd. concrete sidewalks Hochelaga St. $5,235, 1,120 sq.yd. DeRazilly St. $2,456, 560 sq.yd. Clarke St. $2,228; to Sicily Asphaltum Paving Co., 60 St. Viateur St., 1,270 sq.yd. asphalt pavement, Decastelnau St. $7,184, 2,057 sq.yd. Hanatoux St. $10,891; to F. Lapan, 601 Lacordaire St., 856 sq.yd. concrete sidewalks Hadley St. $4,773.

Industrial Works

PROPOSED WORK

R. I., Providence—Crompton & Knowles Loom Wks., 93 Grand St., Worcester, Mass., soon lets contract 2 story, 50 x 170 ft. plant addition, brick and steel, Harris Ave. $60,000. Private plans.

Conn., Bridgeport — Jenkins Bros., 510 Main St., having plans prepared Lockwood-Green Co., archts. and engrs., 101 Park Ave., New York City, factory, brick, steel and concrete, plain foundation. $250,000.

Conn., Torrington—Union Hardware Co., Mignon Ave., plans 3 story addition to plant, brick and steel. $50,000. Architect not announced.

N. Y., Buffalo—Island Warehouse Co., Ganson St., plans 10 story, 9 x 100 x 268 ft., flour mill, fireproof construction. $500,000. Architect not announced.

N. Y., Ithaca—New York Gas & Electric Corp., 123 South Cayuga St., plans $650,000 bond issue for extensions and improvements to plant and lines. S. J. Magee, pres.

N. Y., Lackawanna (Buffalo P. O.)—Lackawanna Steel Co. plans additions to present mills, also new rail and steel mills, furnaces and various shops, rein.-con., brick and steel, concrete pile and wood pile foundations, Hamburg Turnpike. To exceed $15,000,000. W. A. James, c/o owner, ch. engr.

N. Y., Rochester—Rochester Gas & Electric Corp., Clinton Ave. N., plans new water gas plant, to have daily capacity of 4,000,000-5,000,000 cu.ft., Platt St. on west side of Genesee River. To exceed $40,000. J. Haftnkamp, supt.

N. Y., Tonawanda — Tonawanda Power Co. Sweeney Bldg. plans rein.-con. brick and steel power plant Webster St. $150,000.

Pa., Bethlehem—Jurtz Furniture Co., plans to reconstruct factory building 3, 4 and 5 recently destroyed by fire. $800,000. Architect not announced.

Pa., Erie—Union Storage Co., 819 Commerce Bldg., having revised plans prepared by J. F. Wadsworth, engr., Commerce Bldg., 8 story and basement, 78 x 100 ft. concrete and brick plant.

W. Va. Shinnston—Alley Glass Co. soon takes bids for plant. $250,000. L. Alley, pres. Architect not announced.

N. C., Whiteville—See "Waterworks."

Fla., McIntosh—McIntosh Utilities Inc., plans cold storage and refrigeration plant. $50,000. N. A. Russell, treas. Architect not announced.

Ky., Louisville—Mengel Body Co. having plans prepared by Joseph and Joseph, archts., Francis Bldg., auto body plant, including woodworking shops, dry kilns, assembling, painting and finishing depart-

Industrial Works (Continued)

ments, containing 200,000 sq.ft. floor space, on 30 acre site, 4th and G Sts. $600,000. A. D. Allen, pres.

O., Ashland—J. E. Mathews Produce Co. had plans prepared 3 story, 60 x 75 ft. cold storage plant. L. J. Goodrich, 207 East 4th St., engr.

O., Cleveland — Grabler Mfg. Co., 6565 Bway., had plans prepared by Christian, Schwarzenberg & Gaede, archts., 1900 Euclid Ave., 1 story, 80 x 80 ft. and 3 story, 50 x 80 ft. brick, steel and concrete factories, 6565 Bway. $50,000. W. S. Bayer, secy.

O., Columbus—H. C. Goodman Co., 31 North 4th St., having plans prepared by Richards, McCarty & Bulford, archts., 584 East Broad St., 3 story and basement, 187 x 200 ft., brick and concrete factory, Broad St. $400,000.

O., Dayton—G. W. Shroyer Co., 2nd and Main Sts., plans 2 story, 50 x 200 ft., auto sales and repair shop, brick, North Main St. $60,000. Private plans.

Mich., Kalamazoo—Kalamazoo Paper Box Co. plans 3 story and basement, rein-con. and brick factory, concrete pile foundation, 15,000 sq.ft. floor space, North Pitcher St. $200,000. Architect not selected.

Mich., Manistee—Ruggles & Rademaker, Manistee, had plans prepared by F. W. Perkins, engr., c/o owners, (1st unit), 2 story, 100 x 100 ft. rein.-con. and brick factory. $60,000.

Mich., Petoskey—Petoskey Portland Cement Co., having preliminary plans prepared by J. C. Buckley, engr., 1st Natl. Bank Bldg., Chicago, extending stock house, power plant and factory. $500,000.

Ill., Shelbyville—Voted $100,000 bonds for electric light power plant and distribution system. A. W. Fuller, 1979 Ry. Exch. Bldg., St. Louis, Mo., engr. Noted Oct. 19.

Wis., Manitowoc—Van Lente St. Clair Corp., 405 West Walnut St., Green Bay, plans 2 story, 57 x 110 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, here. $45,000. P. L. Van Lente, mgr. Architect not selected.

Wis., Milwaukee—Cedarburg Dairy Co., c/o H. Berns, 1586 Prospect Ave., having plans prepared by H. J. Esser, archt., 82 Wisconsin St., 1 story and basement, 100 x 150 ft., brick and concrete dairy, plain foundation, 11th St. $75,000.

Wis., Milwaukee—Harley-Davidson Motor Co., 3732 Chestnut St., having plans prepared by Federal Eng. Co., engrs., 444 Milwaukee St., 1 story, 80 x 145 ft., addition to factory, brick and concrete, plain foundation, Chestnut St. $45,000.

Minn., St. Paul—Hamm Realty Co., 681 East Minnehaha St., having plans prepared 2 story and basement, 150 x 150 ft., rein.-con., brick and tile, 8th and Sibley Sts. $100,000. Architect not announced.

Mo., St. Louis — Ford Automobile Co., Highland Park, Detroit, Mich., plans 1 story, 300 x 1,500 ft. rein.-con. and steel factory, plain foundation, along Mississippi River, here. Cost, incl. equipment, $5,000,000.

Tex., Dallas—E. M. Thomas of Trinity Constr. Co., engrs., Southwestern Life Bldg., takes bids in January, 2 story, 75 x 140 ft. factory addition, brick, plain foundation, for Consolidated Wafer Co., 2426 South Harwood St. $100,000.

Tex., Ft. Worth—A. F. & A. M. Southside Lodge having plans prepared by J. B. Davies, archt., Hemphill St., 3 story, garage and club rooms, rein.-con. and brick, plain foundation, 5th and Magnolia Sts. $100,000.

Tex., McKinney—Texas Cotton Mills Co. plans to double capacity of present textile mill and industrial housing. $750,000. Engineer not selected.

Tex., Texas City — U. S. Gasoline Co. plans large plant. $250,000. Architect not announced.

Okla., Ardmore—Consumers' Light and Power Co., plans 6,000 ton cold storage house. $100,000. Private plans.

Colo., Denver—Blaney-Murphy Co., Stock Yards, takes bids about Dec. 17, 5 story, packing plant on 48th and Gilpin Sts. $750,000.

Calif., Petaluma—Poultry Producers of Central California, 323 East Washington St., Petaluma, and 700 Front St., San Francisco, rejected bids constructing 110 x 210 ft., hollow tile packing plant. Project postponed indefinitely. Noted Oct. 5.

Calif., San Francisco—Star Garage Co., 150 Turk St., had plans prepared by J. L. Stewart, archt., Claus Spreckels Bldg., 2 story, rein.-con. annex to garage. $60,000.

Calif., San Francisco—Talbot Investment Co., c/o J. E. Krafft & Sons, archts., Phelan Bldg., had plans prepared 2 story and basement, rein.-con., showrooms and warehouse, 8th and Natoma Sts. $100,000. G. H. Tay Co., 2nd and Mission Sts., lessees.

Ont., Acton — Thomson Motor Supplies Ltd., plans to vote on $40,000 bonds Dec. 4, to build factory here.

Ont., Tillsonburg—Wilkie Products Co., 312 Pitts St., plans 1 story, 60 x 200 ft. factory, cement $60,000.

Ont., Tillsonburg—Windsor Tool & Machine Co., Windsor, plans concrete, brick and steel machine shop, here. $40,000. Architect not selected.

BIDS DESIRED

N. Y., Sheepshead Bay (Brooklyn P. O.) —Dec. 1, by W. Mortensen, archt. and engr., 209 West 76th St., New York, brick, steel and rein.-con. plant, Ave. Z and East 17th St., here, for Superior Ice Co., Inc., 50 East 42nd St., New York. $250,000. Noted Oct. 5.

Pa, McKees Rocks—Federal Enameling & Stamping Co., Thompson Ave., will build 3 story, steel factory. Work will be done by separate contract. F. Frimer, 1133 Charles St., engr.

W. Va., Parkersburg—Blackwood Electric Steel Corp. receiving bids for steel for 1 story, 140 x 230 ft., rein.-con., brick and steel factory. Mills, Rhones, Bellman & Nordhoff, 1234 Ohio Bldg., Toledo, O., archts.

Ill., Chicago—Ronneberg, Pierce & Hauber, archts., 10 South La Salle St., receiving bids 1 and 2 story, 75 x 140 ft. laundry, rein. con., brick and steel, Flournoy St. near La Vergne St., for New Way Home Service Corp., c/o architects. $50,000.

Wis., Kenosha—C. O. Augustine, archt., Kenosha, taking bids 1 story, 82 x 125 ft., brick and concrete garage, plain foundation, Milwaukee St., for W. Russell, 603 Milwaukee Ave. $40,000.

Wis., Milwaukee—H. J. Esser, engr. and archt., 82 Wisconsin St., taking bids 4 story and basement, 60 x 210 ft., brick and concrete factory, also 2 story and basement, 60 x 210 ft., steel and timber factory, plain foundations, for Harsh-Chapline Shoe Co., 694 Hanover St.

Wis., Waukesha—Spring City Auto Co., 220 West Main St., taking bids 1 story, 65 x 190 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000. Private plans. Noted Oct. 26.

Wis., Wausau—Oppenhamer & Ober, archts., Wausau, taking bids 2 story, 60 x 60 ft., brick, rein.-con. and steel garage, plain foundation, for Durant Motor Car Co., 208 Washington Ave. $45,000.

CONTRACTS AWARDED

N. H., Manchester—C. H. Macrury, 1042 Elm St., 3 story, 38 ft. high, 50 x 50 ft., garage and repair shop, rein.-con. and brick, plain foundation, Burch and Lowell Sts., to C. A. Golden, 64 Concord St. Archts. est. $50,000.

Mass., Boston — Boston Storage Warehouse Co., Westland Ave., 4 story, 30 x 50 ft. warehouse addition, brick, Huntington Ave. and Bryant St., to Evatt Constr. Co., 161 Devonshire St., $40,000.

Mass., Charlestown (Boston P. O.)—General Baking Co., Bunker Hill St., 2 story and basement, garage, brick and steel, plain foundation, Ferrin St., to C. A. Dodge Co., Erie and Albany Sts., Cambridge. Archts. est. $100,000.

Mass., West Lynn (Lynn P. O.)—General Electric Co. will build Factory 63, 4 story, 122 x 157 ft., brick and concrete, by day labor. $200,000. Private plans. Noted Sept. 14.

Mass., Weymouth (Boston .P. .O.)—Brooks-Skinner Co., will build 2 story, 40 x 130 ft. factory, brick and concrete, by day labor. $40,000. Private plans.

Conn., Bridgeport—Locomobile Co. of America, Inc., 2 Main St., 1 story, 60 x 180 ft., and 40 x 200 ft. additions to plant, brick and steel, plain foundation, to Levering & Garrigues Co., 552 West 23rd St., New York City.

Conn., Hartford—Kaplan & Goldberg, 32 John St., will build 1 story, 90 x 100 ft. garage and service station, brick and steel, plain foundation, John St., by day labor. $40,000. F. C. Walz, 407 Trumbull St., archt.

Conn., Waterbury—Reymond Bros., 400 South Main St., 2 story, 40 x 80 ft. addition to bakery, and 1 story, 56 x 85 ft. addition to garage, both brick, South Main St., to Tracy Bros. Co., 52 Benedict St. Archts. est. $40,000.

N. Y., Brooklyn—C. D. Strang, 105 South Portland St., 5 story, 64 x 115 ft., rein.-con. and brick warehouse addition, concrete footings, Coney Island Ave., to Barney-Ahlers Constr. Co., 110 West 40th St., New York. Archts. est. $250,000. Noted Oct. 26.

N. Y., Rochester—Rochester Taxicab Co., 58-64 Plymouth Ave. N., 2 story, 90 x 200 ft., brick garage and repair shop, to P. G. Houck, 503 Cox Bldg. Archts. est. $125,000.

Pa., Oakmont—Mills, Rhines, Bellman & Nordhoff, archts., 1234 Ohio Bldg., Toledo, O., 2 story and basement, 74 x 94 x 157 x 158 ft. factory addition, here to Hughes-Foulkrod Co., Oliver Bldg., Pittsburgh, for Valve Bag Co. of America, 3444 Summit Ave., Toledo, O. Noted Oct. 19.

Pa., Pittsburgh—Englert Mfg. Co., 2133 East Carson St., 2 story and basement, 68 x 120 ft. factory, South 25th and Jane Sts., to Duquesne Constr. Co., Cypress and Aspen Sts. Archts. est. $75,000. Noted Sept. 7.

Pa., Pittsburgh—F. J. Kress Box Co., 3030 Liberty Ave., 3 story and basement, 70 x 155 ft. brick addition to factory, 2930-38 Liberty Ave., to D. T. Riffle, 1007 Forbes St. Engrs. est. $40,000. Noted Nov. 2.

Pa., Pittsburgh—Neely Nut & Bolt Co., 46 South 22nd St., 1 story, 21 x 120 x 150 x 173 ft. brick and steel plant, South 22nd St., to McClintic-Marshall Co., Oliver Bldg. Noted Oct. 19.

Pa., Ridgeway—Hyde Murphy Co. will build 4 story, 60 x 90 ft. brick addition to factory, by day labor. Private plans.

W. Va., Charleston—Evans Lead Co., Essex Falls, N. J., 1 story, 50 x 180 ft. and 4 story, 50 x 180 ft., plant, steel, here, to Higginbotham & Jones, Constr. Co., Charleston.

O., Akron—General Tire & Rubber Co., 1708 East Market St., 1 story, 40 x 180 ft., and 3 story, 60 x 100 ft., brick and steel factory additions, to H. P. Moran Co., Terminal Bldg. Archts. est. $100,000 Noted Nov. 9.

O., Cleveland—R. W. Kaase Co., 2836 Lorain Ave., 2 story, 68 x 150 ft., brick, steel and concrete bakery, to H. E. Klefman, 4319 Woodbridge Ave. Archts. est. $150,000. Noted June 1.

O., Mansfield—Ideal Electric & Mfg. Co., 153 East 5th St., 1 story, 100 x 150 ft., brick and steel manufacturing plant, 5th St., to Austin Co., 16112 Euclid Ave., Cleveland.

Mich., Highland Park (Detroit P. O.)—Ford Motor Co., 1 story, rein.-con., brick and steel transfer building and loading platforms, plain foundation, Manchaster Ave., to H. G. Christman & Co., 315 Stevens Bldg., Detroit, $400,000.

Mich., Muskegon—Central Paper Co., 3 and 4 story, 90 x 110 ft. warehouse, 3 story, 55 x 300 ft. machine room, 3 story, 42 x 53 ft., 4 story, 46 x 90 ft., 2 story, 45 x 150 ft. buildings, to Markle Cement Co., Muskegon. Archts. est. $200,000. Noted Nov. 9.

Ill., Chicago—Advance Fdry. and Pattern Co., 2734 West 36th St., 1 and 2 story, 55 x 142 ft. factory addition, rein.-con., brick and steel, to Vagtborg Constr. Co., 6843 Merrill Ave. Archts. est. $50,000. Noted Oct. 19.

Ill., Chicago—F. T. Hoyt, c/o A. S. Alschuler, archt., 28 East Jackson Blvd., 3 story, 105 x 175 ft. printing plant, rein.-con., brick and steel, Congress and Laflin Sts., to J. W. Snyder & Co., Ashland and Congress Sts. Archts. est. $250,000. Noted Oct. 19.

Ill., Chicago — Voightmann & Co., 445 West Erie St., 1 story, 280 x 300 ft. factory, rein.-con., brick and steel, 4158 Schubert Ave., to F. H. Stowell Co., 28 North Clinton St. Archts. est. $150,000.

Ill., Marshall—For 1 story, 50 x 80 ft. brick and concrete power house, 2 generators direct connected to Chuse engines, switchboard, 2 boilers, piping, etc., to Chuse Engine and Mfg. Co., 1411 Chemical Bldg., St. Louis, Mo., $52,181. Noted Oct. 19.

Wis., Appleton—Manthey & Puth, Washington and Morrisson Sts., 1 story, 70 x 85 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, College St., to E. Johnston, 847 State St. Archts. est. $40,000.

Wis., Fond du Lac—Gurney Refrigerator Co., 64 South Brooks St., 3 story, 60 x 140 ft., factory and power house, brick, rein.-con. and steel, plain foundation, to Hutter Constr. Co., 128 Western St. Archts. est. $60,000.

Wis., Milwaukee — M. S. Mann, 1219 Holton St., 1 story and basement, 50 x

Industrial Works (Continued)

100 ft., brick and concrete garage, plain foundation, to M. Wachofsky, 539 4th St. Archts. est. $40,000.

Wis., Milwaukee — Milwaukee-Western Fuel Co., 120 Wisconsin St., 1 story, 120 x 140 ft., repair shops, brick and concrete. plain foundation, Clinton St., to Klug & Smith Co., 69 Wisconsin St. Engrs. est. $60,000.

Wis., Milwaukee—Shadboldt & Boyd Iron Co., 129 West Water St., 1 story, 110 x 110 ft., brick and timber warehouse, plain foundation, Dousman St., to Jahns & Knuth, 1915 Chestnut St. Archts. est. $40,000.

Wis., Milwaukee—Wisconsin Ice & Coal Co., 216 West Water St., 1 story and basement, 114 x 120 ft., ice manufacturing plant, brick and concrete, plain foundation, 31st and Galena Sts., to R. L. Reisinger & Co., 464 Oakland Ave. Engrs. est. $60,000.

Wis., Racine—Racine Mfg. Co., 6th and Mead Sts., 2 story, 50 x 120 ft., brick, rein.-con. and steel factory, plain foundation, Mead St., to Nelson & Co., Janes Blk. Archts. est. $50,000.

Wis., Racine—Western Screw & Specialty Co., Ham Ave., 2 story, 50 x 160 ft., brick, rein.-con. and steel factory, plain foundation, to L. V. Constr. Co., 1120 16th St., Milwaukee. Archts. est. $40,000.

Wis., Waupun — Althouse — Wheeler Co. will build 2 story factory, brick, steel and rein.-con., plain foundation, by day labor. $50,000. H. O. Thompson, mgr. Private plans.

Minn., Minneapolis — Northwestern Tire Co., 622 3rd Ave. S., 2 story and basement, 40 x 40 x 120 ft. sales and service station, rein.-con. and laminated wood, Harmon Pl. between 10th and 11th Sts., general contract to J. L. Robinson Co., 511 South 7th St. Total $50,000. Noted Aug. 31.

Calif., San Francisco—General Mfg. Co., Pacific Bldg., 1 story, 140 x 192 ft. factory, concrete, Railroad, Paul and San Bruno Aves., to G. Wagner, 251 Kearny St., $35,000. Noted Nov. 16.

Calif., San Francisco—Goodrich Rubber Co., 401 Mission St., 6 story, 65 x 160 ft., rein.-con. warehouse and loft building, 2nd St., to Clinton Constr. Co., 923 Folsom St., $75,000. Noted Nov. 9.

Calif., San Francisco—Natl. Ice Cream Co., 371 Guerrero St., 2 story, rein.-con. addition to plant, Guerrero St. near 16th St., to Barrett & Hilp, 918 Harrison St., $50,000.

Calif., San Francisco—Simon Bros., 150 Townsend St., 2 story and basement, 36 ft. high, 86 x 250 ft., warehouse, Townsend St., to Barrett & Hilp, 918 Harrison St., $44,000. Noted Oct. 19.

Calif., San Francisco—Simmons Co., 198 Bay St., 3 story, factory and warehouse, rein.-con., Powell and Bay Sts., to Barrett & Hilp, 918 Harrison St., $250,000. Noted Oct. 12.

Que., Hull—Lion Meade Tire Co., 2 story rein.-con. and brick fractory, Wrightville St., to E. Caron & Son, 158 Champlain St. Archts. est. $75,000.

Ont., Niagara Falls — Welland Packing Co. Ltd., factory along Michigan Central R.R. tracks, to Gardner Constr. Co., Niagara Falls, $44,000.

Buildings

PROPOSED WORK

Mass., Boston—High School—City takes bids about Dec. 1, high school, Dunbar Ave. $1,000,000. McLaughlin & Burr, 88 Tremont St., archts. Noted Oct. 19.

Mass., Roxbury (Boston P. O.)—High School—Schoolhouse Dept., City Hall Annex, Boston, plans 3 story, 20 room, brick, Dunreath St. $350,000. H. H. Atwood, 61 Alban St., Dorchester (Boston P. O.), archt.

N. Y., Brooklyn—College—Adelphi College, St. James Pl., had plans prepared by McKim, Mead & White, archts. and engrs., 101 Park Ave., New York, group of buildings, brick, steel and stone, plain foundations, Washington Ave. $1,250,000. First unit will be ready for estimates soon.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, plans P. S. 187, brick, steel and stone, plain foundation, Delamere Pl. near Kings Highway, here. $500,000. C. B. J. Snyder, Flatbush Ave. extension, archt. and engr.

N. Y., Jamestown—Hotel—Hotel Jamestown, plans 9 story, 121 x 165 ft., brick and steel, 3rd and Cherry Sts. $1,225,000. F. O. Anderson, c/o Empire Case Goods Co., 142 Foote Ave., pres. executive com. Architect not selected.

N. Y., New York—Apartment—Ninety-fifth St. Realty Corp., 598 Madison Ave., having plans prepared by J. E. R. Carpenter, archt. and engr., 598 Madison Ave., 9 story, 100 x 100 ft., brick, steel and stone, plain foundation, 95th St. near 5th Ave. $800,000.

N. Y., Niagara Falls — Hotel—P. A. Schoelkopf, c/o Chamber of Commerce, plans hotel. $1,000,000.

N. Y., Niagara Falls—Store and Office—A. M. Atlas, Falls St., plans 38 x 186 ft., Main St. Architect not announced.

N. J., Elizabeth—High School—Bd. Educ. having plans prepared by Kilham, Hopkins & Greeley, archts. and engrs., 9 Park St., Boston, Mass., for high school, Westfield and Cherry Sts. $495,000. A. P. Hughes, 537 Jefferson Ave., secy.

Pa., Clairton—Schools—Voted $550,000 bonds for new schools.

Pa., Duquesne—School—Voted $300,000 bonds for new school.

Pa., Elwood City—School—Bd. Educ. having plans prepared by E. Stotz, archt., Monongahela Bank Bldg., Pittsburgh, 2 story and basement, 87 x 190 ft. rein.-con., brick and stone, Crescent Ave. $220,000.

Pa., Mt. Union—School—Voted $200,000 bonds for new school in 3rd ward.

Pa., Narberth—High School—Voted $165,000 bonds for high school.

Pa., Norristown—High School—Voted $500,000 bonds for high school.

Pa., Phila.—Bank—Northern Natl. Bank, c/o W. H. Bellew, 7th and Dauphin Sts., having plans prepared by P. A. Davis, archt., 1713 Sansom St., 2 story and basement, 50 x 70 ft. brick, steel, stone and granite, plain foundation, 7th and Dauphin Sts. $200,000.

Pa., Pittston—School—Bd. Educ. having plans prepared by J. McGlynn, archt., Wilkes-Barre, for new school. Cost between $175,000 and $200,000.

Pa., Springfield—High School—Voted $200,000 bonds for high school.

Pa., Williamsport—Auditorium and Gymnasium—Dickinson Seminary, c/o B. C. Connor, plans 3 story and basement, 90 x 140 ft., stone, steel and brick gymnasium, $100,000, also plans to build auditorium (2,000 seating capacity), later on, $200,000.

D. C., Wash.—Administration—Garfield Memorial Hospital, 10th St. and Florida Ave., N. W., having plans prepared by Marsh & Peters, archts., 1302 F St., for administration building. $250,000.

D. C., Wash.—Bank—Federal American Natl. Bank plans addition. $500,000. J. Poole, pres. Architect not selected.

D. C., Wash.—Temple—Eastern Star c/o M. E. Keys, secy., Masonic Temple, 13th St. and New York Ave., plans temple, here. $1,000,000. Architect not selected.

W. Va., Charleston—Lodge—H. S. Kyle, archt., Union Bank Bldg., soon takes bids 6 story, 50 x 125 ft., concrete and steel, Dunbar St., for Elkana Lodge, Knights of Pythias. $200,000. Noted May 18.

N. C., Greensboro—Church—First Presbyterian Church plans church. $225,000. A. M. Scales, committeeman. Architect not announced.

Fla., Plant City—Hotel—Plant City Hotel Corp., rejected bids opened Nov. 1, 7 story, 105 x 105 ft., brick and steel. $150,000. Corporation dissolved on account of inability to build with available funds. Noted Oct. 5.

O., Cleveland—Apartment—L. Abrams Co., 525 Engineers Bldg., having plans prepared by D. A. Reamer, archt., 17920 Detroit Ave., Lakewood, 7 story and basement, brick, steel and concrete, Euclid Ave. east of Ford Dr. $500,000. Noted July 6.

O., Cleveland—Apartment—C. B. Grundstein, 14188 Superior Rd., having plans prepared by A. F. Janowitz, archt., Permanent Bldg., 3 story and basement, 100 x 142 ft., brick and timber, North Moreland Blvd. $200,000.

O., Cleveland — Library — Cleveland Pub. Library Bd., Kinney Levan Bldg., having plans prepared by Walker & Weeks, archts., 1900 Euclid Ave., superstructure of 4 story, 200 x 200 ft., steel and concrete, East 3rd St. and Superior Ave. $4,000,000.

O., Cleveland—School—Bd. Educ., East 6th St. and Rockwell Ave., plans 2 story, brick, steel and concrete, Ira and Vandalia Aves. $200,000. W R. McCornack, East 6th St. and Rockwell Ave., archt.

O., Cleveland—Schools—Bd. Educ., East 6th St. and Rockwell Ave., plans 2 story, 12 room addition to school, West 103rd St. and West Blvd., $150,000, 2 story, 3 room additions to Glenville High, Detroit Junior High and Corlett Junior High Schools, $150,000, all brick, steel and concrete. W. R. McCornack, East 6th St. and Rockwell Ave., archt.

O., Cleveland—Schools—Voted $500,000 bonds for 2 story, 22 room, elementary school, East 161st St. and Groveland Ave., also $900,000 bonds for 3 story, 40 room, Junior Commercial School, West 41st St. and Randall Rd., both brick, steel and concrete. W. R. McCornack, East 6th St. and Rockwell Ave., archt.

O., Columbus—Administration—Richard. McCarthy & Bulford, archts., 584 East Broad St., preparing plans and soon take bids 6 story and basement, 150 x 187 ft., brick, steel and concrete, Broad and Belle Sts., for H. C. Goodman Co., 31 North 4th St. $400,000-$500,000. Noted Jan. 26.

O., Dayton—School—Bd. Educ. having plans prepared by Schenck & Williams, archts., Mutual Home Bldg., 1 story and basement, school for crippled children, brick and rein.-con. $150,000. P. C. Ste-son, supt.

O., Dayton—Temple—Dayton Lodge F. & A. M., c/o S. R. Jones, chn. building com., Masonic Temple, plans rein.-con. and brick. $1,500,000. Architect not selected.

O., Lakewood (Cleveland P. O.)—High School—Bd. Educ., Warren Rd., having preliminary plans prepared by C. W. Hopkinson, archt., Rose Bldg., Cleveland, 3 story, 27 room, brick, steel and concrete, Hilliard Rd. near Wager Ave. $300,000.

O., Painesville—Hospital—Lake Co. Hospitial Assn., c/o L. J. Spaulding, clk., voted $200,000 bonds for 3 story, brick, steel and concrete. Architect not selected.

Mich., Ludington — Hospital — Paulina Stearns Memorial Hospital, plans 3 story and basement, rein.-con. and brick, plain foundation. $200,000. Architect not selected.

Ill., Chicago — Apartment — Ludgin & Leviton, archts., 53 West Jackson Blvd., preparing plans 3 story and basement, 143 x 145 ft., rein.-con., brick and steel, Spaulding and Schubert Aves. $350,000. Owner's name withheld.

Ill., Chicago—Club and Office—Covenant Club, c/o W. W. Ahlschlager, archt., 65 East Huron St., having plans prepared 10 story, 80 x 92 ft., rein.-con., brick and steel, Dearborn St. near Madison St. $1,000,000.

Ill., Chicago—Store and Apartment—A. Goldstein, c/o Rissman & Hirschfield, archts., 646 West Randolph St., having plans prepared 3 story and basement, 200 x 200 ft., rein.-con., brick and steel, Madison St. and Central Park. $400,000.

Ill., Wilmette—Church—St. Johns Evangelical Lutheran Church having plans prepared by Loew & Bollenbacker, archts, 108 South La Salle St., Chicago, 1 story and basement, 95 x 105 ft., rein.-con., brick and steel, Wilmette St. and Park Ave. $150,000.

Wis., Green Bay—Hotel—H. O. Wood, promoter, 172 3rd St., Milwaukee, organizing company and plans to build 9 story, 130 x 160 ft., brick and concrete, plain foundation, Adams St. $800,000. Architect not selected.

Wis., Madison—Church, etc.—Presbyterian Synod of Wisconsin, Murray and State Sts., plans 3 story church, incl. auditorium and student club, brick, rein.-con. and stone, plain foundation, Murray St. $150,000. Architect. R. Owens, secy.

Wis., Mayville—High School—Bd. Educ. having plans prepared by Parkinson & Dockendorff, archts., Linker Bldg., La Crosse, 2 story, 112 x 274 ft., brick, rein.-con. and steel, plain foundation. $250,000.

Wis., Oshkosh — School — Bd. Normal School Regents, Capitol, Madison, plans 3 story, 160 x 300 ft., incl. dormitories, class rooms, laboratories, rein.-con., brick and steel, plain foundation. $350,000. Architect not selected.

Wis., River Falls—School—Bd. Normal School Regents, Madison, having plans prepared by A. Peabody, archt., Capitol Bldg., Madison, 3 story, 100 x 210 ft., brick, rein.-con. and steel, plain foundation, here. $265,000.

Wis., Stevens Point—School—Bd. Normal School Regents, Capitol, Madison, plans 3 story, 150 x 250 ft., rein.-con., steel and brick, plain foundation. $300,000. W. J. Kittle, secy. Architect not selected.

Ia., Cedar Falls—Dormitory—State Bd. Educ., State House, Des Moines, having preliminary plans prepared by Proudfoot, Bird & Rawson, archts., 810 Hubbell Bldg., Des Moines, concrete, brick and stone, on campus of State Teachers College, here. $200,000.

Ia., De Witt—School—Bd. Educ. plans 2 story and basement, rein.-con., brick, tile and stone. $150,000. H. Seifert, secy. Architect not announced.

Ia., Waterloo—Y. W. C. A., c/o W. H. Langlas, pres., had plans prepared by M. B. Cleveland, archt., Waterloo, and W. F. Thompson, archt., 342 Madison Ave., New York City, 3 story and basement, with two 2 story wings, rein.-con., brick, tile and stone. $150,000.

Buildings (Continued)

Minn., Bemidji—College—State Bd. of Control, St. Paul, plans 3 story brick addition to main building, $113,000 3 story addition to dormitory $95,000, and heating plant $65,000, at State Teachers College, here. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt.

Minn., Minneapolis—Schools— Bd. Educ. plans to construct schools. $2,500,000. G. F. Womrath, business supt. Bureau of Design, Bd. Educ., 305 City Hall, archts.

Minn., Minneapolis—School and Rectory—Church of the Annunciation, c/o F. Lang, 5101 Nicollet Ave., having plans prepared by Damon, O'Meara & Hills, archts., 1123 Merchants Natl. Bank Bldg., St. Paul, 2 story and basement school, brick, stone and tile, rectory, brick, Lyndale Ave. S. and 50th St. $150.000.

N. D., Fargo—Schools—Bd. Educ. plans two 2 or 3 story and basement, rein.-con., brick and tile. $150,000 up. E. C. Guthrie, secy. Architect not announced.

Mo., St. Louis—Apartment—Guild Investment Co., c/o Weisels-Gerhart, 8th and Chestnut Sts., plans 6 story, 115 x 215 ft., rein.-con., brick and steel, plain foundation, West Pine and Euclid Sts. $500,000. Architect not announced.

Mo., St. Louis—Medical—St. Louis Medical Society, 3531 Pine St., having plans prepared by A. B. Grove, archt., 320 North 4th St., 2 story and basement, 75 x 100 ft., rein.-con., brick and stone, plain foundation, Lindell Blvd. $250,000.

Mo., St. Louis—Office—Travelers Protective Assn. of America, Syndicate Trust Bldg., plans rein.-con., brick and steel, concrete pile foundation. $1,000,00. J. H. Stafford, secy. and treas. Architect and engineer not selected.

Tex., Dallas—Apartment-Hotel—G. Gonzeles, 1227 Lenway St., having plans prepared by J. O. Taft, archt., Dallas, 7 story, concrete, steel, brick and tile, plain foundation, Masten and San Jacinto Sts. $500,000.

Tex., Ft. Worth — Schools — Bd. Educ. plans election in April to vote on $1,500,000 bonds issue for 3 schools. M. H. Moore, supt.

Tex., Laredo—Hotel—G. Little had plans prepared by M. L. Diver, engr., Calcasieu Bldg., San Antonio, and C. H. Page & Bros., archts., Austin Natl. Bank Bldg., Austin, and soon takes bids 5 story (designed for 7 story) rein.-con. and brick. $200,000.

Tex., McKinney—Housing—See "Industrial Works."

Tex., San Antonio—Auditorium—City having preliminary plans prepared by W. E. Simpson & Co., engrs., Natl. Bank Commerce Bldg., and R. H. Cameron, archt., Central Trust Bldg., 2 story, 100 x 215 ft., rein.-con., terra cotta, stone and marble, caisson foundation, Madison Square Park. $500,000. City hopes to raise additional $300,000 to apply on building.

Tex., San Antonio—College—Methodist Episcopal Church South, Nashville, Tenn., having plans prepared by A. B. and R. M. Ayres, archts., 626 Bedell Bldg., 2 story college, incl. mens dormitory, ladies dormitory, laboratory, fine arts, gymnasium, heating plant, presidents home, etc., rein.-con. and stone, Blanco Rd. and city limits. $250,000.

Tex., San Antonio—High School—Pub. School Bd. having plans prepared by W. E. Simpson Co., engrs., Natl. Bank Commerce Bldg., and Phelps & De Wees, archts., Gunter Bldg., 1 story junior high school, incl. cafeteria, rein.-con., brick, tile and stone, caisson foundation, New Braunfels Ave., Cooper and Delmar Sts. $200,000.

Wash., Seattle—Apartment—J. H. Williams, c/o H. H. James, archt. ,Amer. Bank Bldg., having plans prepared 10 story, 60 x 120 ft., rein.-con. and brick, 6th and University Sts. $250,000.

Wash., Spokane—Clubhouse—Knights of Columbus, 605 1st St., having plans prepared by F. P. Rooney, archt., Auditorium Bldg., and takes bids in spring for clubhouse. $200,000.

Wash., Seattle—Institution—St. Vincent's Home for Aged having plans prepared by J. Graham, archt., Smith Bldg., 5 story and basement, 276 x 294 ft., rein.-con. and brick, consisting of 3 distinct but attached units arranged in H form, providing home for aged, also administration quarters for Pacific Coast Provincialate of the Order of Sister of Charity, 35th St. S.W. and West Edmund St. $1,000,000.

Calif., San Francisco — College — State having plans prepared by B. J. Maybeck, archt., Lick Bldg., and G. B. McDougall, state archt., Forum Bldg., Sacramento, group rein.-con. and steel buildings, Haight and Buchanan Sts., here. $500,000. Only portion of funds are available at this time, construction will be governed accordingly.

Que., Montreal—Office—G. H. Walton, 259 St. James St., having plans prepared by Ross & McDonald, archt., Belmont St., 10 story, about 200 ft. wide, St. Catherine St. from Peel St. to Bellevue Apartments.

Ont., Windsor—Bank—Provincial Bank of Canada, 7 Place D'Armes, Montreal, Que., plans 3 branch bank buildings, one here $300,000 and one at Ford and Walkerville, $50,000 each, concrete, brick and steel. Architect not selected.

BIDS DESIRED

N. Y., Binghamton—School—Dec. 20, by Bd. Contr. & Supply, 2 story and basement, 157 x 178 ft., brick, plain foundation, Starr Pl. $375,000. Bartoo & Dickerman, Peoples Trust Bldg., archts. W. E. Weller, City Hall, engr. Noted April 27.

N. Y., Freeport—High School—Dec. 4, by Bd. Educ., brick, steel and stone, plain foundation, Pine St. $600,000. W. Adams, 15 West 38th St., New York, archt. and engr. Noted Oct. 23.

N. Y., New York—Armory—Nov. 27, by Armory Bd., City Hall, reconstructing Squadron A, 95th St. Former bids rejected. Private plans. Noted Nov. 2.

Md., Baltimore—High School—Nov. 29. by Bd. of Awards, Northeastern Junior High School, Clifton Park. W. F. Broening, pres. H. G. Perring, ch. engr. Noted Oct. 12.

O., Cleveland—High School—Dec. 4, by Bd. Educ., East 6th St. and Rockwell Ave., 3 story, brick, steel and concrete, West 46th St. and Hyde Ave. $800,000. W. R. McCornack, East 6th St. and Rockwell Ave., archt.

O., Cleveland—Store and Apartment—M. Price, 441 Eddy Rd., taking bids 3 story and basement, 110 x 112 ft., brick and timber, 129th St. and St. Clair Ave. $150,000. Allen-Osborn Co., Rose Bldg., archts.

O., Cleveland — Store and Office — H. Guenther, 1733 Euclid Ave., taking bids 2 story and basement (designed for 12 story), 50 x 189 ft., brick, steel and concrete, 1510 Euclid Ave. $150,000. W. S. Ferguson Co., 1900 Euclid Ave., archts. and engrs. Noted Sept. 21.

O., Toledo—School—Nov. 27, by Bd. Educ., 2 story and basement, 200 x 275 ft., rein.-con., brick and steel, plain foundation, Sylvania and Jakman Rds. $240,000. E. E. Gee, Toledo (street address not available), archt.

Mich., Detroit—Church—Smith, Hinchman & Grylls, archts., 800 Marquette Bldg., taking bids and opens same about Dec. 1, for 2 story, 60 x 120 ft. concrete, brick and steel, plain foundation, Jefferson Ave., for Jefferson Ave. Presbyterian Church, Rivard and Larned Sts. $350,000. Noted Nov. 2.

Ill., Chicago—Apartment—B. H. Drollinger, 4807 West Madison St., and A. S. Hecht, archt., 155 North Clark St., receiving bids 3 story and basement, 135 x 148 ft., rein.-con., brick and steel, Austin Blvd. and Fulton Sts. $250,000.

Ill., Chicago—Apartment—R. F. France, archt., 155 North Clark St., receiving bids 2 story and basement, 125 x 300 ft., rein.-con., brick and steel, Oakdale St. between Sheffield and Lincoln Sts., for M. T. Morrissey, 140 South Dearborn St. $300,000.

Ill., Chicago—Apartment—P. F. Olsen, archt., 127 North Dearborn St., receiving bids 3 story and basement, 81 x 125 ft., rein.-con., brick and steel, Ainslee and Washentaw Sts. $150,000. Owner's name withheld.

Ill., Chicago—Apartment—B. J. Regnall, 19 South La Salle St., receiving bids 2 story and basement, 100 x 160 ft., rein.-con., brick and steel, Lincoln St. and Foster Ave. $175,000. J. A. Nyden, 190 North State St., archt.

Ill., Chicago — Apartment — Ronneberg, Pierce & Hauber, archts., 10 South La Salle St., receiving bids 3 story, 80 x 155 ft., rein.-con., brick and steel, Ashland and Ainslee Sts. $150,000. Owner's name withheld.

Ill., Chicago—Apartment—J. Weinstein, 3945 West 14th St., receiving bids 3 story, 73 x 180 ft., rein.-con., brick and steel, Washington Blvd. and La Vergne St. $200,000. A. L. Himelblau, 179 West Washington St., archt.

Ill., Chicago—Store and Office—J. F. Mardane, 931 Polk St., receiving bids 2 story, 140 x 150 ft., rein.-con., brick and steel (excluding masonry and carpentry work which will be done by day labor) 5600-12 West Madison St. $250,000. Levy & Klein, 111 West Washington St., archts.

Ill., Park Ridge—Store, Office and Apartment—Barry, Byrne & Ryan, archts., 104 South Michigan Ave., Chicago, receiving bids 2 story and basement, 145 x 200 ft., rein.-con., brick and steel, Prospect Ave., for Home Realty Co., here. $200,000.

Wis., Milwaukee—Apartment—J. Hunholz, 2310 Vliet St., taking bids 6 story and basement, 54 x 104 ft., brick, tile and concrete, plain foundation, Biddle St. $150,000. Private plans.

Ia., Corydon—High School—Dec. 7, by Bd. Educ., 3 story and basement, 67 x 121 ft., rein.-con., brick, tile and stone. $150,000. W. Gordon, 319 Hubbell Bldg., Des Moines, archts.

Minn., Chisholm—High School—Dec. 15, by J. P. Vaughn, supt. of schools, 3 story, 198 x 395 ft., rein.-con., brick and stone, $500,000. German & Jenssen, Exch. Bldg., Duluth, archts. and engrs.

Minn., Duluth—Hotel—Jan. 2, by Duluth Residential Hotel Co., c/o Whitney Wall Co., Torrey Bldg., 10 story and basement, 140 x 160 ft., rein.-con. and brick, Superior St. and 9th Ave. E. $1,000,000, Holstead & Sullivan, 407 Palliadio Bldg., archts. and engrs.

Tex., Houston — Hospital — A. C. Finn, archt. and engr., Foster Bldg., taking bids concrete, steel and brick hospital for G. Herman Estate, Houston. $400,000 for 1st unit, total $1,000,000.

Tex., Memphis—Courthouse—Dec. 4, by W. A. McIntosh, judge Hall Co., 2 story, 72 x 106 ft., rein.-con. and brick. $150,000. C. H. Page & Bros., Austin Natl. Bank Bldg., Austin, archts. Noted Nov. 9.

Tex., San Antonio — Church — Catholic Church receiving bids 1 story, 105 x 200 ft., rein.-con., caisson foundation, Market and St. Marys Sts. $350,000, M. L. Diver, Calcasieu Bldg., engr. F. B. Gaenslen, Bedell Bldg., archt.

Tex., Wichita Falls—College—Dec. 5' by Bd. Educ., Independent School Dist., 2 story, rein.-con. and brick, plain foundation. $150,000. R. C. Jameson, 342 Rosemont Bldg., Dallas, engr. W. B. Ittner, Educ. Bldg., St. Louis, Mo., archt.

Calif., Lodi—School—Dec. 7, by Trustees Lodi Union High School Dist., 2 story science building, 1 story manual training building and 2 story auditorium, brick, steel and concrete. $250,000. Wright & Satterlee and L. S. Stone, Bank of Italy Bldg., Stockton, archts.

BIDS RECEIVED

Mass., Boston—Police Station—Public Buildings Dept., City Hall, opened bids Nov. 14, 10 story, 65 x 90 ft., brick and steel, plain foundation, Milk St., from M. Seretto, 3 Tremont Row, $498,000, J. Slotnick Co., 448 Bway., Chelsea, $526,193 ; J. Bowen Co., 184 Dudley St., Roxbury (Boston P. O.), $543,000. Noted Nov. 9.

N. Y., Attica—High School—Bd. Educ. opened bids Nov. 10, 3 story, 80 x 150 ft., rein.-con. and brick, Prospect St., from Morris & Allen, Prudential Bldg., Buffalo, $259,700 ; Metz Bros., 1295 Fillmore Ave., Buffalo, $282,000 ; Walker Contractors, Buffalo (street address not available). $294,000. Archts. est. $250,000. Noted Oct. 26.

Mich., Detroit—Schools—Bd. Educ., 1354 Bway. Ave., opened bids Nov. 6, 2 story and basement, 28 ft. high, 171 x 191 ft., rein.-con., brick and steel, plain foundation, Palmer Ave., from Martin & Krausman Co., 606 Vinton Bldg., $403,500, M. A. Mahoney, 400 Penobscot Bldg., $416,524, J. Bollin Co., 2032-1st Natl. Bank Bldg., $443,000 ; 2 story and basement, 24 ft. high, 58 x 182 ft. and 67 x 181 ft., rein.-con., brick and steel, plain foundation, Duboise and Waterloo Sts., from F. N. Cooper, 6370 Gratiot Ave., $321,104, A. W. Kutsche & Co., 535 Griswold St., $325,597, Corrick Bros., 507 Owen Bldg., $326,818. Noted Sept. 21 and Oct. 19.

Mo., St. Louis—Schools—Bd. Educ., 9th and Locust Sts., (1) Cyrus P. Waldbridge Grade School, 2 story and basement, 95 x 221 ft., rein.-con. and brick, plain foundation, Lillian and Davidson Ave., (2) Edward H. Long Grade School, 2 story and basement, 95 x 221 ft., rein.-con. and brick, plain foundation, Morganford Rd. and Walsh St., (3) 2 story and basement, 40 x 50 ft. wings to Sumner High School. (a) building complete excluding plumbing, sewering, gas fitting, heating and ventilating apparatus, air washer, heat regulation, electric light wiring and fixtures, clocks, bells, telephone bells and vacuum cleaner, (b) heating and ventilating apparatus, air washer and heat regultaion, to Humes-Deal Co., Century Bldg., (1a) $253,579 (2a) $281,966 ; E. P. Ambler, 2822 LaSalle St., (1b) $35,052 (2b) $35,052 ; Kellerman Contg. Co., Victoria Bldg., (3a) $45,753 ; Bradley Heating Co., 3834 Olive St., (3b) $11,900. Noted Nov. 16.

CONTRACTS AWARDED

Mass., Adams—High School—Town, c/o C. T. Plunkett, 3 story, 120 x 200 ft., Commercial St., to C. H. Cunningham, 23 Central St., Lynn, $350,000. Noted May 11.

Buildings (Continued)

Mass., Boston—Apartment—P. Glazer, Brookledge St., Grove Hill, will build 3 story and basement, 50 x 120 ft., 53 x 70 ft. and 65 x 75 ft., brick and stone, plain foundation, Cheney St., by day labor. $150,000. S. S. Levy, 39 Court St., archt.

Mass., Boston — Apartment — Modern Realty Co., 1185 Commonwealth Ave., will build 6 story, 75 x 200 ft., brick and stone, Commonwealth Ave., by day labor. $500,000. Silverman, Brown & Heenan, 51 Cornhill, archts.

Mass., Boston—Business—Boston Flower Exchange Inc., 1 Winthrop Sq., 2 story and basement, 136 x 200 ft., brick and steel, plain foundation, Tremont St., to L. P. Soule & Son Co., 88 Tremont St. Archts. est. $150,000.

Mass., Williamstown—Dormitory — Williams College, Main St., 3 story, 100 x 220 ft., brick, plain foundation, to P. A. Smedley, Spring St. Archts. est. $200,000.

N. Y., Brooklyn—Bank—South Brooklyn Savings Institute, Atlantic Ave., brick, steel and stone, plain foundation, Court St. and Atlantic Ave., to Rufus H. Brown, 356 Pearl St. Archts. est. $500,000. Noted May 25.

N. Y., Brooklyn — Hospital — Methodist Episcopal Hospital, 6th St., 100 x 145 ft., brick, steel and stone addition, plain foundation, to W. Kennedy Constr. Co., 215 Montague St. Archts. est. $450,000. Noted Sept. 21.

N. Y., New York—Hotel—Hotel Roosevelt, c/o G. B. Post Sons, archts. and engrs., 101 Park Ave., 18 story, 215 x 215 ft., brick, steel and stone, plain foundation, Madison Ave. and 45th St., to Thompson-Starrett Co., 49 Wall St. Archts. est. $6,000,000. Noted Sept. 14.

N. J., Asbury Park—Bank—Asbury Park Trust Co., 601 Mattison Ave., brick, steel and stone, plain foundation, to Sobray-Whitcomb, 105 West 40th St., New York City. Archts. est. $150,000.

N. J., Plainfield—Hospital—Muhlesburg Hospital, brick, steel and stone addition, plain foundation, to L. V. Tallamy, 211 North Ave., Archts. est. $500,000. Noted Nov. 9.

Pa., Pittsburgh—School—Bd. Educ., Fulton Bldg., general contract 2 story and basement, 63 x 92 x 206 x 229 ft. addition to Beechwood School, brick, steel and limestone, Rockland Ave., to Williams & Haas, Empire Bldg. Total est. $450,000. Noted Nov. 16.

W. Va., Charleston—Store—Coyle Richardson Co., Capitol and Lee Sts., 4 story, mezzanine and basement, 98 x 110 ft., Lee and Dickinson Sts., to Higginbotham & Jones, Charleston, $185,000. Noted Nov. 2.

O., Cleveland — Commercial and Office — Medical Centre Co., c/o L. Abrams, 525 Engineers Bldg., 11 story, 110 x 165 ft., brick, steel and concrete, 1001 Huron Rd., to Hearn Constr. Co., Euclid-46th St. Market Bldg. Archts. est. $600,000.

Ill., Chicago—Apartment—C. Begler, 154 West Randolph St., 3 story, 68 x 90 ft., rein.-con., brick and steel, 1619-27 Farwell Ave., to J. Traff, 3948 North Robey St. Archts. est. $165,000.

Ill., Chicago — Apartment — J. J. Fairweather, 108 South La Salle St., 3 story, 108 x 185 ft., rein.-con., brick and steel, Junior Terrace and North Ashland Ave,. to A. T. Herlin, 6117 Evans Ave. Archts. est. $300,000. Noted Sept. 14.

Ill., Chicago—Apartment—J. J. Laughlin, 7531 Cottage Grove Ave., 3 story, 112 x 113 ft., rein.-con., brick and steel, 7248-58 Bennett Ave., to A. T. Herlin, 6117 Evans Ave. Archts. est. $200,000.

Ill., Chicago—Apartment—Peterson & Eck, 220 East 69th St., 3 story, 110 x 120 ft., rein.-con., brick and steel, 6742-50 East End Ave. to Turnquist Bros. Constr. Co., 217 East 69th Pl. Archts. est. $200,000.

Ill., Chicago—Apartment—W. H. Pruyn, archt., 122 South Michigan Blvd., 3 story and basement, 60 x 177 ft., rein.-con., brick and steel, West End and Lotus Ave., to Olson & Johnson, 4411 North Kedzie Ave. Archts. est. $150,000. Owner's name withheld. Noted Oct. 5.

Ill., Chicago—Apartment—G. K. Spoor, 908 Argyle St., 14 story, 90 x 137 ft., rein.-con., brick and steel, 822-40 Argyle St., to Paschen Bros., 111 West Washington St. Archts. est. $1,500,000.

Ill., Chicago—Apartment—J. Weinstein, 3620 Lexington Ave., will build 3 story and basement, 51 x 169 ft., rein.-con., brick and steel, 5001 West Washington St., by day labor. Archts. est. $150,000. A. L. Himelblau, 179 West Washington St., archt.

Ill., Chicago — Community House — St. Lukes Evangelical Church of Englewood, 62nd and Green Sts., 2 story, rein.-con., brick and steel, to Heidel & Beck, 6235 South Michigan Ave. Archts. est. $150,000.

Ill., Chicago—Hospital—Research & Educational Hospital of Illinois, Lincoln, Wood and Taylor Sts., 4 story, 62 x 107 ft., rein.-con., brick and steel addition, to C. A. Moses Constr. Co., 133 West Washington St. Archts. est. $500,000.

Ill., Chicago—Hotel—B. H. Rosen, c/o Dubin & Eisenberg, archts., 14 West Washington St., 3 story, 60 x 148 ft., rein.-con., brick and steel, 528-530 Brompton Ave., to Gamm Bros. Constr. Co., 1618 South Hamlin Ave. Archts. est. $200,000.

Ill., Chicago—Office and Store—Library Bureau, 1250 North Homan Ave., 7 story, 45 x 190 ft., rein.-con., brick and steel, 214-16 West Monroe St., to E. L. Archibald, Co., 111 West Washington St. Archts. est. $250,000. Noted Nov. 2.

Ill., Chicago—Store and Office—L. Hech, 1038 Belmont Ave., 2 story and basement, 65 x 220 ft., rein.-con., brick and steel, Agatice St. and Milwaukee Ave., to Behrens Constr. Co., 2149 Talman Ave. Archts. est. $200,000.

Ill., Chicago—School—Bd. Educ., 650 South Clark St., 3 story, 105 x 199 ft., rein.-con., brick and steel addition, 120th and Parnell Sts., to F. Burke Co., 35 South Dearborn St. Archts. est. $325,000.

Ill., Rockford—Apartment—W. J. Vander Meer, archt., 214 Mead Bldg., 5 story, 60 x 87 ft., rein.-con., brick and steel, Park Ave., to Nelson & Gustafson, Rockford, (street address not available). Archts. est. $150,000. Owner's name withheld.

Wis., Oshkosh—School—School Bd., 2 story, brick, tile and concrete, plain foundation, to L. F. Schroeder Co., 13 East 1st St., Fond du Lac, $156,121. Noted Nov. 9.

Ia., Dubuque — Convent — Sisters of St. Francis, St. Mary's Convent, 69 Emmett St., 4 story and basement, 56 x 170 x 288 ft., rein.-con., brick, tile and stone, general contract to P. Steenberg Constr. Co., 535 Endicott Bldg., St. Paul, Minn., $305,111. Noted Nov. 9.

Minn., Duluth—Jail—St. Louis Co., general contract, 4 story and basement, 49 x 132 ft., rein.-con. and stone, 2nd St. and 6th Ave., W., to Jacobson Bros., Columbia Bldg., $429,700. Archts. est. $500,000. Noted Oct. 5.

Neb., Omaha—High School—Bd. Educ., City Hall, 3 story, 174 x 369 ft., rein.-con., brick and steel, Ames Ave., to P. Kiewitzs Sons, 754 Omaha Natl. Bank Bldg., $623,000. Noted Nov. 2.

S. D., Rapid City — High School — Bd. Educ., 3 story and basement, 53 x 138 ft. rein.-con., brick, stone and tile, general contract to O. H. Olson, Rapid City, $116,800. Noted Oct. 19.

Mont., Butte — Lodge — Masonic Temple Assn., general contract 3 story and basement, 90 x 100 ft. addition, rein.-con., brick, tile and stone, to A. Broadland, Butte. Cost complete about $300,000.

Mo., St. Louis—Office—Famous Players Motion Picture Corp., c/o N. Frank, Arcade Bldg., 12 story, 120 x 130 ft., rein.-con., brick, stone and steel, Grand Blvd., to Black Masonry & Contg. Co., Ry. Exch. Bldg. Archts. est. $800,000. Noted Oct. 19.

Tex., Dallas—Apartment Hotel—Kean & Crawford Constr. Co., Slaughter Bldg., will build 3 story and basement brick and stucco, Gaston and Peak Sts., by day labor. $150,000. F. U. Woerner, Sumpter Bldg., archt. and engr.

Calif., Fresno—Office and Bank—Pacific Southwest Trust and Savings Bank, 10 or 15 story, fireproof construction, Mariposa and J Sts., to R. F. Felchlin Co., Bank of Italy Bldg., $750,000 or $1,000,000.

Calif., San Francisco—Apartment—Crosswings Community Apartments, c/o H. H. Gutterson, archt., 278 Post St., 9 story, basement and sub-basement, rein.-con. and steel, Sacramento and Mason Sts., to Clinton Constr. Co., 923 Folsom St., $1,000,000. Construction will start in spring. Noted Nov. 2.

Ont., Windsor—School—School Comn., 15 room addition to Wyandotte St. School, to S. E. Dinsmore Co., Royal Bank Bldg., $270,000.

Federal Government Work

PROPOSED WORK

Mass., South Boston (Boston P. O.)—Disposal Plant—Spec. 4758—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans ship sewage disposal system, here.

N. Y., Chelsea—Buildings—Treas. Dept., Wash., D. C., plans 12 buildings, complete, incl. mechanical equipment, for U. S. Veterans Hospital, here.

N. Y., Tupper Lake—Hospital—Spec. 4718—Bureau Yards & Docks, Navy Dept., Wash., D. C., soon receives new bids for U. S. Veterans Hospital, here, Part 1, general construction of buildings exclusive of plumbing, heating and lighting work, Part 2, plumbing inside buildings; Part 3 inside heating and outside steam distribution; Part 4, inside electric lighting and outside electric distribution; Part 5 boiler house equipment. The above was previously advertised under the following Specification Nos. 4710-4718-4719-4725. Noted Oct. 19 and Nov. 2.

Pa., Phila.—Fuel Oil—U. S. Engineer, 815 Witherspoon Bldg., plans to purchase fuel oil.

Md., Annapolis—Natatorium—Spec. 4754—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans natatorium, here.

W. Va., Huntington—Lock Operating Machinery, etc.—U. S. Engineer, Huntington, plans lock operating machinery, etc., for Dam 30, Ohio River.

Wash., American Lake—Hospital—Quartermaster General, Munitions Bldg., Wash., D. C., soon receives bids for U. S. Veterans Hospital at Camp Lewis, here. Noted Sept. 28.

Wash., Puget Sound—Cranes—Spec. 4755—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to purchase electric elevator cranes, here.

Calif., San Diego—Telephone Cables, etc.—Spec. 4757—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans telephone conduit cables and terminals, here. Bid will be opened at local yard.

BIDS DESIRED

N. Y., New York—Dredging—Dec. 13, at office U. S. Engineer, 2nd Dist., dredging in Raritan River, 35,000 cu.yd. Noted Nov. 2.

Pa., Phila.—Breakwater—Dec. 21, by Supt. Lighthouses, Phila., breakwater at Harbor of Refuge Light Station, Delaware Bay, Del.; adv. this issue.

Pa., Pittsburgh—Lock Gates.—Dec. 20, at office U. S. Engineer, Pittsburgh, steel lock gates for Lock 1, Allegheny River. Noted Nov. 16; adv. this issue.

Del., Wilmington — Excavating, etc.—Dec. 20, at office U. S. Engineer, Wilmington, excavating cut-offs in St. Jones and Mispillion Rivers; adv. this issue.

W. Va., Huntington—Maneuver Boat—Dec. 15, at office of U. S. Engineer, Huntington, for steel hull maneuver boat, etc.; adv. this issue.

Wis., Milwaukee—Barges—Dec. 20, at office U. S. Engineer, Milwaukee, for steel barges; adv. this issue.

Wash., Puget Sound—Pier Extension—Spec. 4707—Dec. 20, by Bureau Yards & Docks, Navy Dept., Wash., D. C., extension to Pier 4, here Noted Sept. 28.

Calif., Livermore — Buildings, Electrical Work, etc.—Dec. 18, by Director, U. S. Veterans' Bureau, Arlington Bldg., Wash., D. C., construction 29 buildings, electrical, plumbing, heating and ventilating work, refrigerating machinery, laundry and kitchen equipment in U. S. Veterans' Hospital, here. C. R. Forbes, dir.; adv. this issue.

Calif., Mare Island—Riprapping Dike—Spec. 4700—Dec. 20 by Bureau Yards & Docks, Navy Dept., Wash., D. C., riprapping Dike 12, here. Noted Aug. 17.

Calif., Oakland—Changes—Dec. 11, by Treas. Dept., Wash., D. C., changes at side entrance, U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Calif., San Diego—Repairs—Spec. 4751—Dec. 20 by Bureau Yards & Docks, Navy Dept., Wash., D. C., repairs to coaling wharf, here. Noted Nov. 16.

BIDS RECEIVED

O., Chillicothe—Hospital—Quartermaster General, Munitions Bldg., Wash., D. C., opened bids Nov. 14, for U. S. Veterans' Hospital, here (1) work complete, from G. A. Fuller, Munsey Bldg., Wash., D. C., (1) $1,497,000 (2) $240,000 (3) $70,000 (4) $68,000 (5) $67,000 (6) $87,000 (7) $73,000 (8) $66,000 (9) $48,000 (10) $49,000 (11) $30,000 (12) $32,000 (13) $18,000 (14) $19,000 (15) $13,000 (16) $84,000 (17) $22,000 (18) $12,000 (20) $8,000 (21) $6,000 (22) add $10,000 (23) $12,000 (24) $5,000 (25) $18,000 (26) $3,500 (27) $8,800 (28) unit prices (a) $1.25 (b) $9 (c) $23 (d) $73 (e) $110 (f) $50 (g) $1.50 (h) $2.50 (i) $1.90 (j) $0.25; (395 days); Danis-Hunt Constr. Co., 907 Schwind Bldg., Dayton (1) $1.575,000 (2) $249,000 (3) $70,090 (4) $66,000 (5) $70,000 (6) $92,000 (7) $70,000 (8) $87,000 (9) $49,000 (10) $47,500 (11) $32,500 (12) $35,800 (13) $20,000 (14) $17,500 (15) $13,800 (16) $88,000 (17) $18,500 (18) $16,000 (19) add $1,200 (20) $10,000 (21) $6,980 (22) $19,700 (23) $8,000 (25) $17,000 (26) $7,500 (27) $9,500 (28) unit prices (a) $1 (b) $10 (c) $20 (d) $60 (e) $90 (f) common $45, face $50, hollow $40 (g) $1.50 (h) $3 (i) $2.50 (j) $0.20 (400 days); E. H. Latham, 60 East Broad St., Columbus, (1) $1,568,177 (2) $299,892 (3) $87,402 (4) $80,384 (5) $87,300

Federal Government Work (Continued)
(6) $107,715 (7) $85,664 (8) $94,172 (9) $60,005 (10) $59,687 (11) $42,921 (12) $42,398 (13) $24,606 (14) $24,606 (15) $16,902 (16) $102,024 (17) $23,072 (18) $18,404 (19) deduct $500 (21) $9,419 (22) add $8,687 (23) $14,000 (25) $15,125 (26) $2,000 (27) $6,000 (28) unit prices (a) $1.75 (b) $20 (c) $25 (d) $70 (e) $100 (f) $50 (g) $0.25 (h) $2.50 (i) $2.25 (j) $2.50 (456 days). Noted Oct. 12.

Okla., Shawnee—Post Office—Treas. Dept., Wash., D. C., for U. S. Post Office, here, from A. W. Lundberg, 5564-A Page Ave., St. Louis, Mo., limestone $93,226; sandstone $94,500; C. E. Goodhand, McCook, Neb., limestone $98,019; W. D. Lovell, 1415 8th St., Southeast, Minneapolis, Minn., limestone $99,945. Noted Oct. 26.

Utah, Vernal—Post Office—Treas. Dept., Wash., D. C., for U. S. Post Office, complete incl. mechanical equipment, here, from Western Eng. & Contg. Co., 512 Templeton Bldg., Salt Lake City, $47,500; Johnson Constr. Co., Fargo, N. D., $49,990. Noted Oct. 26

CONTRACTS AWARDED

R. I., Providence—Dredging—U. S. Engineer, maintenance dredging in Milford Harbor, Conn., 41,200 cu.yd., to J. S. Packard Dredging Co., 1004 Turks Head Bldg., $10,424. Noted Nov. 9.

N. Y., Buffalo—Dump Scows—U. S. Engineer, three 400 cu.yd. steel dump scows, to Penn Bridge Co., Beaver Falls, Pa., $92,120. Noted Oct. 12.

Pa., Phila.—Embankment and Riprap—U. S. Engineer, 815 Witherspoon Bldg., embankment and riprap in Delaware River at Artificial Island, to Canal Constr. Co., Inc., North Amer. Bldg., $66,000. Noted Aug. 24.

La., New Orleans—Mattresses—U. S. Engineer, 329 Custom House, furnishing and sinking 9,334 sq.yd. brush mattresses at mouth of Mississippi River, to R. S. Levy & Co., Venice, $13,854.

Calif., San Diego—Alterations—Spec. 4734—Bureau Yards & Docks, Navy Dept., Wash., D. C., alterations to Quarters C, Naval Base, Naval Training Depot, here, to J. D. Cornell and C. R. Rauch, 614 G Ave., National City, $1,425 (45 days). Noted Oct. 12.

Miscellaneous

PROPOSED WORK

Underground Station—Boston, Mass.—Boston Elevated Ry. Co., 108 Massachusetts Ave., had preliminary plans prepared, underground station, rein.-con., in Cambridge-Dorchester tunnel, Cambridge and Charles Sts. $600,000. Engineer not announced.

Gas Wells—Dunkirk, N. Y.—Republic Light, Heat & Power Co., Ellicott Sq., Buffalo, plans drilling 20 wells here. $200,000.

Gas and Electric Lines—Ithaca, N. Y.—See "Industrial Works."

Subway—Duboistown, Pa.—Pennsylvania R.R., town council and Lycoming Boro. plan 200 ft. subway connecting road and new Newberry-Duboistown bridge, to avoid grade crossing over Pennsylvania R.R. tracks. $40,000. A. C. Shand, Broad St. Sta., Phila., ch. engr. L. Mussina, Williamsport, engr.

Recreation Center—Johnstown, Pa.—City had plans prepared for recreation center incl. concrete bridge 50 ft. long over Stoney Creek, steel grandstand, concrete and steel bleachers, grounds enclosed with brick and terra cotta wall, swimming pool under grandstand. $75,000. G. E. Wild, Johnstown, archt.

Transmission Line—Sharon, Pa.—Shenango Valley Electric Light Co., 63 West State St., plans 6.5 mi. extension to lines and service from here to Orangeville, O.

Seawall and White Way—Bradentown, Fla.—Having surveys made seawall with white way on top. Election soon to vote on $100,000 bonds. Kirley & Myler, Bradentown, engrs.

Gas Maines—St. Petersburg, Fla.—Dec. 5, to vote on $50,000 bonds extending gas mains. E. C. Garvin, St. Petersburg, engr.

Seawall—New Orleans, La.—New Orleans Levee Bd., New Court House Bldg., plans 26,000 ft. seawall from West End to Seabright, reclaiming 48,475,000 sq.ft. of ground, of which 26,000,000 sq.ft. will be devoted to public use, 4,495,000 sq.ft. for streets and sidewalks, leaving 17,981,000 sq.ft. for suburban development, incl. 70,200 cu.yd. rein.-con. $1,400,000, 560,000 ft. creosoted piling, $252,000, lumber $175,000, 750,000 lb. iron and hardware $22,500 and 16,262,500 cu.yd. hydraulic fill $975,000.

Lighting System—Cleveland, O.—Plans installing whiteway lighting systems in St. Clair Ave. from East 79th to East 110th Sts., $50,000, East 150th St. from St. Clair to Massie Aves., $23,000, Superior Ave. from Ansel Rd. to East 125th St., $48,600, East 105th St. from Park Lane to Adams Ave., $51,000, Euclid Ave. from East 90th St. to University Circle and East 105th St. from Cedar Ave. to Park Lane, $44,000, Lorain Ave. from West 58th to West 117th Sts., $89,600. G. Beckwith, City Hall, engr.

Transmission Line—Orangeville, O.—See "Sharon, Pa."

Electric Lighting System — Shorewood (Milwaukee P. O.), Wis.—Voted $75,000 bonds to install electric lighting system throughout village. T. B. Olsen, clk. Engineer not selected.

Grain Elevator—Iowa City, Ia.—O. H. Carpenter, archt., 120½ East Washington St., preparing plans for grain elevator. Machinery catalogues wanted. Owners name withheld.

Road Oil and Road Signs—St. Paul, Minn.—Ramsey Co. plans to purchase road oil for 1923 $18,000; road signs $7,000. R. R. Godfrey, Court House, co. surv.

Transmission Line—Childress, Tex.—Texas Central Power Co. plans transmission line from here to Clarendon. $100,000. Engineer not announced.

Golf Course—Dallas, Tex.—Making plans 18 hole municipal golf course on McKinney and Haskell Aves., and Houston & Texas Central R.R. G. D. Fairtrace, city engr.

White Way—Dallas, Tex.—Making plans and takes bids in December white way at Oak Cliff. $25,000. G. D. Fairtrace, city engr.

Pipe Line—Depew, Okla.—Skelly Oil Co., Unity Bldg., Tulsa, plans 11 mi. pipe line in and around Depew. $25,000.

Transmission Line, etc.—Casa Grande, Ariz.—Electrical Dist. 1 making plans 25 mi. 45,000 volt transmission line, 90 mi. 11,000 volt and about 100 mi. laterals, also 1 substation. $200,000. F. C. Templeton, dir. S. J. Norman, Casa Grande, engr.

Stadium, etc.—Spokane, Wash.—Park Bd. approved preliminary plans for stadium at Down River Park, consisting of regulation football and baseball fields, track, grandstand, etc., 22,000 seating capacity and can be increased to 30,000, about 30,000 cu.yd. earth excav., etc. $75,000. A. Butler, city engr.

Stadium—Berkeley, Calif.—University of California takes bids in about month, stadium, oval shape, 750 ft. long, 575 ft. wide, coliseum design, single deck, 75,000 seating capacity, 10,000 cu.yd. concrete, 300,000 cu.yd. earthwork, 40,000 cu.yd. fill. Complete system of roads will be constructed around same. $1,100,000. G. Buckingham, 530 Bush St., San Francisco, designer. Baker & Carpenter, 58 Sutter St., San Francisco, consult. engrs. J. G. Howard, 1st Natl. Bank Bldg., San Francisco, university archt.

Quay Wall and Pier—Oakland, Calif.—Having plans prepared constructing rein.-con. quay wall and pier on western waterfront. Plan to vote on $1,000,000 bonds for project. R. Beebee, city harbor engr.

Gas Mains—Montreal, Que.—Montreal Light, Heat & Power Co., Craig St. W., plans 90 ft. 4 in. c.i. pipe in DeGaspe St., 452 ft. 4 in. c.i. pipe in Marlowe Ave., 746 ft. 4 in. c.i. pipe in Old Orchard Ave., 180 ft. 4 in. c.i. pipe in Percival Ave., 410 ft. 4 in. c.i. pipe in Marlowe Ave., 210 ft. 6 in. c.i. pipe in Oxford Ave., 105 ft. 2 in. c.i. pipe in Gagnon Ave., total $3,962, 9,700 ft. 20 in. c.i. pipe in Sta A, Elm Ave., $48,136, 2,640 ft. 12 in. c.i. pipe in Davidson St. from Rouen to St. Catherine Sts., $9,347, 540 ft. 8 in. c.i. pipe in Davidson St. from St. Catherine to Notre Dame Sts. $1,550, 3,720 ft. 12 in c.i. pipe in Bennett Ave. $24,969. E. S. Stanton, supt. gas distribution.

Grain Elevator—Goderich, Ont.—Goderich Elevator & Transit Co., 85 Horton St., London, having plans prepared rein.-con. grain elevator, along harbor, here, 1,000,000 bu. capacity. $250,000. Election in January to vote on bylaw. Private plans.

Memorial Tower—Toronto, Ont.—University of Toronto soon takes bids for war memorial tower to connect Hart House with main university building, stone on concrete foundation. $175,000. Spoatt & Rolph, North St., archts.

Park—Toronto, Ont.—Plans to drain and fill Smalls Pond, top it and fix it up for park, 150,000 cu.yd. dry earth fill, etc. $87,500. R. C. Harris, city engr.

BIDS DESIRED

Refined Asphalt, etc.—Brooklyn, N. Y.—Nov. 29, by E. Riegelmann, boro pres., Boro Hall, furnishing and delivering 60,000 gal. refined asphalt in liquid form, 700 cu.yd. binder stone, 3,000 cu.yd. asphalt sand, 600 net ton limestone or other suitable inorganic dust, 2,000 cu.yd. paving sand, 3,500 bbl. Portland cement, 3,300 cu.yd. 1½ in. gravel or 3,300 cu.yd. 1½ in. broken stone.

Crane—Blawnox, Pa.—Blawnox Co. taking bids one 10 ton crane.

Creosote Oil—Phila., Pa.—Dec. 1, by M. Smith, purch. agt. Pennsylvania R.R. 17th and Filbert Sts., 1,000,000 gal creosote oil, grades 1, 2, 3, 4 and 6, delivery into tanks at Greenwich, Phila.

Cranes—Pittsburgh, Pa.—Pittsburg Bolt & Screw Co., Preble Ave., taking bids one 3 ton and one 5 ton crane.

Fire Alarm, etc.—Richmond, Va.—Nov. 27, by Dir. Pub. Safety, Room [illegible]6, City Hall, complete fire alarm and police signal outfit.

Electrical Distribution System, etc.—Ridgeway, S. C.—Dec. 4, constructing electrical distribution system, 13,200 volt transmission line from here to Winnsboro with substations; water distribution system including 1½, 6 and 8 in. pipe, valves, hydrants, etc.; sanitary sewerage system, two 8 in. wells, one 60,000 gal. steel tank mounted on 100 ft. tower with alternate bid one 75,000 gal. tank mounted on 100 ft. tower. $50,000-$60,000. Ryan Eng. Co., Arcade Bldg., Columbia, engrs.

Pipe—Atlanta, Ga.—Nov. 29, by State Highway Dept., 3,692 lin.ft. 15-24 in. pipe in 10, 12 and 16 ft. lengths, one end reinforced with concrete bands, prices to be f.o.b. cars Gainesville, for Federal Aid Project 317, in Lumpkin Co. W. R. Neel, highway engr.

Steam Shovel — Tampa Fla. — E. W. Parker, Curry Bldg., in market 1 complete steam shovel for grading operations.

Shovel—Arkansas City, Kan.—Arkansas City Sand Co., Home Natl. Bank Bldg., is receiving bids 1 yd. revolving shovel. N.C. Dunn, purch. agt.

Landscape Work, etc.—Redwood City, Calif.—Dec. 4, by E. M. Nash, clk. San Mateo Co., laying out lawns, shrubbery, etc., furnishing and installing kitchen equipment, constructing walks, driveways, water supply tanks, piping and also incinerator for new county hospital. W. H. Toepke, Call Bldg., San Francisco, archt.

Steam Shovel—Ville Marie, Ont.—Angus & Taylor, taking bids for steam shovel.

BIDS RECEIVED

Asphalt Wearing Surface Sand—New York, N. Y.—J. Miller, pres. Manhattan Boro, Municipal Bldg., opened bids Nov. 15, furnishing and delivering 2,000 cu.yd. asphalt wearing surface sand, from C. W. Crane, 17 Battery Pl., $2,080; J. T. Cunningham, $2,200. Noted Nov. 9.

Foundation — Cleveland, O. — Cleveland Pub. Library Bd., Kinney Levan Bldg., opened bids Nov. 8, plain foundation for 4 story, 200 x 200 ft., concrete and steel library, East 3rd St. and Superior Ave., from Kelley-Demarest Co., Prospect-4th Bldg., $89,900; J. Gill & Son, Citizens Bldg., $97,500; J. J. Cassidy, Baltic Rd., $109,600. Noted Oct. 26.

Stone—Olympia, Wash.—C. V. Savage, secy. State Capitol, opened bids Oct. 30 furnishing Wilkerson stone for Legislative Building (facing to roof, not incl. dome or columns), from Walker Cut Stone Co., 1008 Puyallup St., Tacoma, $200,000. Noted Oct. 19.

CONTRACTS AWARDED

Sea Walls—Gloucester, Mass.—Dept. Pub. Wks., State House, Boston, 1,008 ft. granite faced concrete seawall, 47 ft. concrete seawall, 76 ft. granite seawall, here, to Bay State Dredging Co., 62 Condor St., East Boston (Boston P. O.), $54,630. Noted Nov. 16.

Broken Trap Rock Stone, etc. — New York, N. Y.—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., furnishing and delivering 4,000 cu.yd. broken trap rock stone and 2,000 cu.yd. broken trap rock stone screenings, to P. J. Kearns Contg. Co., 2306 Creston Ave., $2.93 per cu.yd. Noted Nov. 9.

Column Foundations—New York, N. Y.—Transit Comn., 49 Lafayette St., column foundations for part of Rapid Transit R.R., Flushing Route, to Gustin Morris Co., Creek St. and Anabel Pl., Long Island City, $91,000. Noted Nov. 16.

Spillway Gates—Turlock, Calif.—Dirs. Turlock Irrigation Dist., furnishing, fabricating and delivering spillway gates for Don Pedro Dam, Schedules 1 and 2, to Union Constr. & Drydock Co., Key Route Basin, Oakland; Schedules 3 and 5, to Stockton Iron Wks., Lindsay and Harrison Sts., Stockton; Schedule 4, to Joshua Hendy Iron Wks., 75 Fremont St., San Francisco. Noted Nov. 16.

Piers—Kincardine, Ont.—Dept. Pub. Wks., Ottawa, rebuilding piers, stone and cement work, here, to Keys Bros., Kincardine. Engrs. est. $26,000.

Dock—Vancouver, B. C.—Canadian Pacific Ry., Seymour St., new dock, 800 ft. long, 333 ft. wide, timber on creosoted piles or concrete slab on concrete piles, (7,000,000 ft.), to S. E. Junkins & Co., 837 Hastings St. W. $2,000,000.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Nov. 27.

Road Work

Gainesville, Fla.

Sealed proposals addressed to the Board of Trustees, Special Road and Bridge District No. 1, Alachua County, Florida, will be received by the Board at its office in the Alachua County Court House in Gainesville, Fla., until 11:00 o'clock a.m., Monday, November 27, 1922, for surface treatment on the following roads: Gainesville Archer Road, approximately 80,000 square yards scarifying and reshaping old rock base, approximately 80,000 square yards surface treatment; Gainesville Fairbanks Waldo Road, approximately 150,000 square yards surface treatment.

Specifications and proposal forms may be secured at the office of the District Engineer, Room 7, Baird Bldg., Gainesville, Fla., at five dollars ($5.00) per set. Each bid must be accompanied with a certified check on an Alachua County Bank, or proposal bond executed by a reputable bonding company authorized to do business in the state of Florida, in the amount of 5 per cent of the contract price, made payable to the Chairman of the Board of Bond Trustees.

The Board reserves the right to reject any or all bids, or to award the work in one or more contracts.

W. R. THOMAS,
Chairman.
ALVA B. GROSS,
District Engineer.

Bids: Nov. 28.

State Road Work

Hartford, Conn.

Sealed proposals will be received by the State Highway Commissioner, 12 Washington Street, Hartford, Conn., until 2 p.m., Tuesday, November 28, 1922, for the following sections of state work, in accordance with plans and specifications on file in the office of the State Highway Commissioner and at the following places:

Town of Franklin: About 4,350 lin.ft. of waterbound macadam pavement on the Lebanon Road. Plans and specifications at the Town Clerk's office and at the office of A. W. Bushell, Division Engineer, Thayer Bldg., Norwich, Conn.

Town of Hamden: About 8,270 lin.ft. of reinforced cement concrete on State Street. (Note: Cement and reinforcing steel for this contract will be furnished by the State.) Plans and specifications at the Town Hall and at the office of E. C. Welden, Division Engineer, Chamber of Commerce Bldg., New Haven, Conn.

Town of Cornwall: About 3,900 lin.ft. of 7-in. native stone macadam on the Cornwall Hollow Road. Plans and specifications at the Town Clerk's office and at the office of D. C. Loewe, Division Engineer, Winsted, Conn.

All bids must be accompanied by a surety company bond or a certified check not less than one-third of the cost of the work. The State Highway Commissioner reserves the right to reject any and all bids.

Dated at Hartford, Conn., November 16, 1922.

C. J. BENNETT,
State Highway Commissioner,
12 Washington Street,
Hartford, Conn.

OFFICIAL PROPOSALS

Bids: Dec. 11.

Pumping Station Equipment

CONTRACT NO. 5

Monroe, Mich.

Sealed proposals will be received by the City Clerk of Monroe up to 7:30 o'clock p.m., Eastern Standard Time of the 11th day of December, 1922, for the furnishing and installing of the following pumping station equipment in the City Water Works.

One 3 m.g.d. steam pumping engine.
One steam turbine-driven electrical generator.
Two 150 hp. water tube boilers.
Two boiler feed pumps.
One feed water heater.
High pressure steam piping.
Smoke breeching.
One hand-power traveling crane.
One platform scale.
Two 1 m.g.d. motor-driven centrifugal pumps.
One 2 m.g.d. motor-driven centrifugal pump.
One sump pump.
Two coal trucks.
One switchboard.
Painting all machinery and piping.

The specifications under which the work is to be done may be examined at the office of the City Clerk, Monroe, Michigan, or at the office of Hoad, Decker, Shoecraft and Drury, Consulting Engineers, Ann Arbor, Michigan, and copies of the same may be obtained by making a deposit of five dollars, which will be refunded upon their return in good condition or their use in a submitted proposal.

A certified check in an amount of three thousand dollars ($3,000.00) will be required with each proposal.

The right to accept any proposal, to reject any or all proposals, and to waive defects in proposals is reserved by the city.

JAS. H. GILMORE, Mayor.
F. M. KRESSBACH, City Clerk.
HOAD, DECKER, SHOECRAFT
AND DRURY,
Consulting Engineers,
Ann Arbor, Michigan.

Bids: Dec. 4.

Street Paving and Draining

Earlington, Ky.

Sealed proposals will be received up to 2 o'clock p.m., December 4, 1922, by the Mayor of the city of Erlington, Ky., for the paving and draining the several streets in the city of Earlington, Ky., with warrenite bitulithic pavement or vitrified brick pavement on a rolled stone base, the type to be selected by the City Council after the bids have been opened and compared.

Estimated Quantities.—Earth excavation, 23,570 cu.yd.; paving surface, 46,300 sq. yd.; crushed stone, 13,840 cu.yd.; curb and gutter, 22,870 lin.ft.; storm sewers, 12-in. to 42-in., 4,776 lin.ft.; manholes, 23; inlets, 62; concrete, 1:2½:5, 162.44 cu.yd.; 1:2:4, 84.02 cu.yd.; 1:2:3, 1.27 cu.yd.; reinforcing steel, 10,215 lb. These quantities subject to modification.

The City Council reserves the right to reject any or all bids. Each bid must be accompanied by a certified check for $250, payable to the Mayor of the city of Earlington, Ky.

Plans and specifications on file at the office of R. C. Giffin, Civil and Mining Engineer, Madisonville, Ky., and may be inpected there or a copy may be obtained upon deposit of $15, which deposit will be returned upon the return of the plans in good condition.

(Signed) C. B. JOHNSON, M. D.,
Mayor.

OFFICIAL PROPOSALS

Bids: Dec. 6.

Bridge

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the Reconstruction of Grand Avenue Bridge, No. N-14, over Sunset Lake; consisting of three forty foot spans and thirty foot roadway, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey, on December 6th, 1922, at 11.00 a.m.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BYRANT B. NEWCOMB, Director.
Attest: CHAS. E. COLE, Clerk.
Freehold, N. J., November 8th, 1922.

Bids: Dec. 1.

Cast Iron Pipe and Castings

San Juan, Porto Rico.

Sealed proposals for the furnishing of about 20,020 tons of cast iron pipe and of 250 tons of special castings, or its equivalent in steel pipe and specials, delivered at San Juan, Porto Rico, for the City of San Juan, will be received in the office of the Commissioner of Public Service until December 1, 1922, at 10 a.m.

All plans, specifications, instruction to bidders, blanks, forms for proposals and all other information may be obtained at the office of the City Commissioner of Public Works at San Juan, Porto Rico.

The right is reserved to reject any and all bids.

MARTIN TRAVIESO,
Commissioner of Public Service.

Bids: Dec. 8.

Bridge Superstructure, Machinery and Electrical Equipment

Seattle, Wash.

Sealed proposals will be received by the Board of Public Works of the City of Seattle, up to 10 o'clock a.m., Friday December 8, 1922, in room 234, County-City Building, for the fabrication and erection of the Super-structure, Machinery and Electrical Equipment of a Steel Bascule Bridge and two Side Spans over the West Waterway at West Spokane Street, under authority of Ordinance No. 43397.

The structure will comprise a double-leaf bascule span 288 feet center to center of trunions, 2 approach spans each about 140 feet long and a steel girder span about 136 feet long. The width of the bascule span will be 45 feet center to center of trusses and of the side spans 52 feet center to center of trusses, and of the girder span about 40 feet.

No proposal will be considered except as same is made strictly in conformity with the advertisement therefor and upon the forms of proposals furnished by the Board of Public Works, bound together with the specifications, general clauses and form of contract which must be submitted unbroken and unaltered in every particular.

This improvement shall be made in accordance with the respective plans and specifications now on file in the offices of the Secretary of the Board of Public Works and the City Engineers, respectively, and in acordance with plans prepared by the Strauss Bascule Bridge Company, which will also be available at the above offices. Bidders must make proposals on both the City of Seattle plans and the Strauss Bascule Bridge Company's plans.

The successful bidder will be required to file with the City Comptroller a bond in the sum specified in the specifications.

Each bid must be accompanied by money, a satisfactory surety company bid bond approved by the Mayor and City Comptroller as to sufficiency and the Corporation Counsel as to form, or a certified check payable to the order of the City Comptroller of the City of Seattle for a sum not less than five (5) per cent of the total amount of bid, and no bid will be considered unless so accompanied.

A deposit of Twenty-five Dollars ($25.00) will be required for each set of plans and specifications, which will be returned upon return of the plans in good order.

Special attention of bidders is called to the State Law and City Charter regarding the number of hours constituting a day's work, minimum wage scale, American citizenship and heads of families.

The Board of Public Works reserves the right to reject any or all bids.

By order of the Board of Public Works.

C. B. BAGLEY,
Secretary.

First publication June 20, 1922.

Bids: Dec. 12.

Motor Driven Water Works Pumps

Wheeling, W. Va.

Sealed proposals for the design, construction, erection and putting in operation of three (3) low service and three (3) high service motor driven, centrifugal pumping engines in units of 10, 15 and 20 million gallons, will be received by the city of Wheeling, W. Va., until 12 o'clock noon, Eastern Standard Time, on the 12th day of December, 1922, and will then be opened and read publicly.

Official proposal blanks, instructions to bidders, specifications, form of contract and bond may be seen at the office of the City Clerk, Wheeling, W. Va., or two (2) copies of each may be obtained by bona fide bidders upon application to The J. N. Chester Engineers, Pittsburgh, Pa., or to the city of Wheeling, W. Va., upon deposit of twenty-five dollars ($25.00), which amount will be refunded to bidders on receipt of a bona fide bid or upon the return of both copies in good order.

The right is reserved to reject any or all bids.

C. H. DOWLER,
City Manager.

Attest:
W. M. EVANS,
City Clerk.

Bids: Nov. 29.

Filtration Plant and Reservoir

San Juan, Porto Rico.

Sealed proposals for the furnishing of all labor and material for the construction of a 8,000,000 gals. filtration plant and a 10,500,000 gals. filtered water concrete reservoir for the City of San Juan will be received in the office of the Commissioner of Public Service until November 29, 1922, at 10 A.M.

All plans, specifications, instruction to bidders, blanks, forms for proposals and all other information may be obtained at the office of the City Commissioner of Public Works at San Juan, Porto Rico.

The right is reserved to reject any and all bids.

MARTIN TRAVIESO,
Commissioner of Public Service.

A Bonding Company's Suggestion to Official Proposal Advertisers

"A large part of our contract bond business is submitted to us by wire, and I am a constant reader of the Official Proposals in order to find out the size and nature of the work that is referred to in the bond application. Very frequently I am unable to get any clear idea of what the advertisers are asking bids on, and of course the prospective bidder or contractor is also at a loss to know what kind of a job is being advertised.

"Traveling expenses are heavy at the present time, and contractors pay out considerable sums during the course of a year in investigating prospective contracts. This of course is a large charge that the owners eventually pay, and anything that will reduce the general overhead of contract work will eventually be to the advantage of the owner.

"One way to reduce this overhead is to word the advertisement so that the contractor sitting in his office will know whether or not he should investigate and prepare a bid on the proposed work."

Bids: Dec. 11.

Labor-Material Percentage Contract

New Orleans, La.

Sealed proposals will be received at the Sewerage and Water Board, Room 401, No. 526 Carondelet Street, New Orleans, La., up to 12 o'clock noon of Monday, December 11th, 1922, on Labor-Material Percentage Contract for year 1923.

Specifications and blank forms of proposal may be obtained at the office of the Board.

The right is reserved to reject any or all bids.

October 12th, 1922.

A. G. MOFFAT,
Secretary.

GEO. G. EARL,
General Superintendent.

Bids: Dec. 12.

Engines and Boilers

Wheeling, W. Va.

Sealed proposals for the design, construction, erection, putting in operation and testing of two (2) engine driven centrifugal low service pumping engines; one turbine driven centrifugal high service pumping engine, three (3) 350 hp. boilers with stokers and the dismantling, moving and re-erecting of the existing Allis-Chalmers pumping engine will be received by the city of Wheeling, W. Va., until 12 o'clock noon, Eastern Standard Time, on the 12th day of December, 1922, and will then be opened and read publicly.

Official proposal blanks, instructions to bidders, specifications, form of contract and bond may be seen at the office of the City Clerk, Wheeling, W. Va., or two (2) copies of each may be obtained by bona fide bidders upon application to The J. N. Chester Engineers, Pittsburgh, Pa., or to the city of Wheeling, W. Va., upon deposit of twenty-five dollars ($25.00), which amount will be refunded to bidders on receipt of a bona fide bid or upon the return of both copies in good order.

The right is reserved to reject any or all bids.

C. H. DOWLER,
City Manager.

Attest:
W. M. EVANS,
City Clerk.

Bids: Dec. 18.

Refuse Incinerator

Allentown, Pa.

Sealed proposals will be received by the undersigned at his office, Room 301, City Hall until 9:30 o'clock A.M., Monday, December 18, 1922, for the construction of a Refuse Incinerator.

The work to be done consists of the furnishing, installing, and testing ready for operation, on foundations to be constructed by the City of Allentown a refuse incinerator with all appurtenances, of a capacity of 70 tons per 24 hours. The City of Allentown will construct under separate contracts the building, foundations for incinerator and appurtenances and chimney from plans submitted by the successful bidder.

All proposals must be made upon forms provided therefor and accompanied by a certified check for the sum of Five Thousand ($5,000.00) Dollars.

Specification and forms may be obtained at the office of the City Engineer, City Hall, Allentown, Pennsylvania, upon depositing the sum of Fifty ($50.00) Dollars which amount will be returned upon the return of the specifications.

The City of Allentown reserves the right to reject any or all bids.

M. W. GROSS,
Mayor.

H. F. BASCOM,
City Engineer.

Bids: Nov. 25.

Reservoir Dam

Bluefield, W. Va.

Sealed proposals or bids for the construction of a clay or earthern dam, containing about 40,000 cubic yards of material, to be sluiced into place, will be received at the office of the Bluefield Water Works & Improvement Company, at Bluefield, West Virginia, until three o'clock p.m. on the 25th day of November, 1922, when they will be publicly opened and read. All proposals shall be enclosed in an envelope furnished by the above styled company and shall be accompanied by a certified check on some national bank, in the sum of five (5%) per cent of the amount of the proposed bid. The contractor to whom the award is made will be required to furnish surety company bond in the sum of thirty-five (35%) per cent of the amount of the contract, within thirty days after official notice of the award of contract and in accordance with the terms of the specifications. The right is reserved to reject any or all bids. Drawings, specifications and blank forms of proposals may be consulted at the office of company, 601 Princeton Avenue, Bluefield, West Virginia, or they will be forwarded by mail upon request if $4 accompanies the order. This amount will be refunded upon return of the Plans and Specifications in reasonably good order.

BLUEFIELD WATER WORKS &
IMPROVEMENT COMPANY
WM. McCARTHY, Superintendent.

November 8th, 1922.

Bids: Nov. 29.

Delaware River Bridge Main Towers

Contract No. 6

Philadelphia, Pa.

Sealed proposals for the construction of the two Main Towers of the bridge over the Delaware River connecting the City of Philadelphia, Pa., and the City of Camden, N. J., will be received by the Delaware River Bridge Joint Commission at Room 806, Widener Building, Philadelphia, Pa., until 3:00 o'clock P.M. Eastern Standard Time, November 29, 1922, when they will be publicly opened and read. The contract will be awarded, or all bids rejected, within fourteen days after the bids are opened. The right is reserved to reject any or all bids.

The two piers on which the towers are to be erected are located in the Delaware River near the pier head lines on the Pennsylvania and New Jersey sides of the river at points approximately opposite to Race Street in Philadelphia and Pearl Street in Camden. The work will include the furnishing, fabricating, painting and erecting of the two steel towers complete, with top saddle castings, as shown in the contract drawings, ready to receive the cables. The work comprises approximately 9,500 tons of steelwork, and must be completed within a period of fifteen months.

Bids must be made upon the blank proposal form, which, together with specifications, bond and contract form, and contract drawings, may be obtained at the office of the Joint Commission upon deposit of $25, which deposit will be refunded upon the receipt of bid or upon their return in good condition.

Each proposal must be accompanied by a certified check for seventy-five thousand dollars, drawn upon a national or state bank or trust company having an office either in Philadelphia or Camden, and payable to the Delaware River Bridge Joint Commission, and sureties' consent must be shown. The bidder or bidders to whom the concract is awarded will be required to give bond in the sum of fifty per cent of the amount of the concract.

WILLIAM C. SPROUL, Chairman,
JOSEPH K. COSTELLO, Secretary,
DELAWARE RIVER BRIDGE JOINT COMMISSION

Bids: Dec. 5.

Gate-Valves and Hydrants Contract 213

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Center and Chambers streets, New York City, until 11 a.m., Eastern Standard time, on Tuesday, December 5, 1922, for Contract 213, for furnishing and delivering gate-valves and hydrants for the Mt. Prospect, Park Slope, Fort Hamilton and Clove conduits and Narrows Siphon No. 2 of the Catskill aqueduct, all as set forth in the specifications. All deliveries shall be made, with all transportation charges prepaid, at designated storage yards within the limits of the City of New York.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, etc., can be obtained at the office of the Secretary at the above address. by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer at the above address.

GEORGE J. GILLESPIE.
President,
JAMES P. SINNOTT,
PHILIP F. DONOHUE,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: Nov. 27.

Pumps and Chain Drive

Saranac Lake, N. Y.

Sealed bids will be received by the Sewer and Water Board of the Village of Saranac Lake, N. Y., until 8:00 o'clock p.m., on Monday, November 27, 1922, for furnishing two 3,000,000 gallon horizontal double-acting duplex plunger type pumps and also, at the same time, bids for furnishing a chain drive equipment for each pump, separate bids will be received for the pumps and the chain drive.

Forms of proposal, contract and specifications will be furnished upon application to S. A. Miller, Clerk of the Sewer and Water Board, or to John L. Collins, Engineer.

A certified check to the amount of $1,500.00, drawn payable to S. A. Miller, Clerk, must accompany the bids for pumps and to the amount of $50.00 with the bids for chain drive.

The Board reserves the right to reject any or all bids.

S. A. MILLER,
Clerk of the Board.
JOHN L. COLLINS,
Consulting Engineer.

Contractors Everywhere Read These Advertisements

to see where bids are desired on contracts suited to their available plant and organization. The suggestion is therefore made to advertisers that they word their advertisements so that the contractor will get a good idea of the size and kind of work to be let, and perhaps the plant needed. This should result in an increased number of desirable bidders.

Bids: Nov. 27.

Water Works and Sewerage Improvements

Kings Mountain, N. C.

Sealed proposals will be received by the Board of Commissioners of the town of Kings Mountain, North Carolina, until 12 o'clock M., Monday, November 27, 1922, for making water works and sewerage improvements.

The work includes: Construction of a 500,000-gallon reinforced concrete reservoir; small pumping station of reinforced concrete and brickwork; reinforced concrete sewage sedimentation tank; furnishing and laying two (2) miles of water mains six (6) to fourteen (14) inches in diameter, with accessories; building two (2) miles of sewers, and furnishing eight (8) inch and ten (10) inch sewer pipe.

The principal quantities involved are:

900 cu.yd. of earth excavation for structures.
170 cu.yd. of 1-1½-3 concrete.
255 cu.yd. 1-2-4 concrete.
47,000 lb. reinforcing steel.
2,100 lin.ft. fourteen (14) inch water mains.
6,470 lin.ft. twelve (12) inch water mains.
460 lin.ft. ten (10) inch water mains.
2,700 lin.ft. six (6) inch water mains.
6,200 lin.ft. eight (8) inch sewer mains.
1,650 lin.ft. ten (10) inch sewer mains.
40 valves and hydrants.

Plans will be on file and may be seen at the office of the Town Clerk, Kings Mountain, N. C., and at the office of The Ludlow Engineers, Winston-Salem, N. C., after November 10, 1922.

For the convenience of prospective bidders, the engineers will furnish copies of the plans upon application accompanied by a check for $10 to cover the cost, or separate prints will be furnished at $1 each.

Each bid must be accompanied by a certified check in the sum of $2,500, or 5 per cent of the amount of partial bids.

Proposals will be opened publicly with the usual rights reserved.

W. H. McGINNISS, Mayor.
GEO. E. LOVELL, Sec. and Treas.
THE LUDLOW ENGINEERS,
Winston-Salem, N. C.,
J. L. Ludlow, Consulting Engineer.

Bids: Dec 5.

Bridge

Cape May, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Cape May for the construction of a bridge across Grassy Sound Channel, including Strauss Bascule Draw Span, Cresoted Timber Trestle and Abutments with Graveled Approaches on Sand Fill, on the line of the North Wildwood to Burleigh Road in Middle Township, Cape May County, N. J., and opened and read in public at Cape May Court House, Cape May County, N. J., on Tuesday, December 5th, 1922, at 12 o'clock noon.

Drawings, specifications and forms of bid, contracts and bond for the proposed work, prepared by R. Fendall Smith, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at Marmora, Cape May County, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings, by the Engineer on proper notice, and a deposit of $25.00, which will be refunded upon the return of the Plans and Specifications in good condition.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of Bridge and road on the outside, addressed to The Board of Chosen Freeholders of the County of Cape May, N. J., and must be accompanied by a Certificate from a Surety Company and a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of The Board of Chosen Freeholders, of the County of Cape May, N.J.

IRVING FITCH, Clerk.
Sea Isle City, N. J.

Bids: Nov. 28.

Highway Work

Montpelier, Vt.

Sealed Bids will be received by the office of the Commissioner of Highways, Montpelier, Vermont, until 2 p.m. November 28, 1922, and then publicly opened and read. for the construction of 1.16 miles of bituminous macadam road in Highgate, Vermont; and 4.78 miles of gravel road in Danville, Vermont.

Plans and specifications for each of the above may be seen at the office of the State Engineer at Montpelier, Vermont. Plans and specifications for the Highgate Project may be seen at the residence of Mr. Rupert A. Phelps, Highgate Springs, Vermont, and for the Danville Project at the Town Clerk's Office, Danville, Vermont.

Bidders should satisfy themselves before bidding as to the character of the work and the obstacles to be encountered. The estimated quantities are not guaranteed, but are given as a basis for the comparison of bids.

A certified check for $1,500 on the Highgate Project and $4,000 on the Danville Project, payable to the State Highway Board, must accompany each bid.

The right is reserved to reject any or all bids.

By Order of the State Highway Board.

THURMAN W. DIX,
Commissioner of Highways.
Dated Nov. 6, 1922.

CONTRACT BONDS
¶Mere chance may put a man in a prominent position, but it never held him there. ¶Chance or guesswork had no part in placing Swart Service in a self-created class. ¶Service that really serves placed it and holds it there.
HARMON V. SWART
92 William Street, New York
Contract Bonds Compensation Insurance

U. S. GOVERNMENT

SEALED PROPOSALS will be received by the Director, U. S. Veterans' Bureau, Arlington Building, Washington, D. C., until 11 o'clock a.m., December 18, 1922, and then and there publicly opened for the construction (exclusive of mechanical equipment) of 29 reinforced concrete buildings of the U. S. Veterans' Hospital at Livermore, California. Drawings and specifications may be obtained upon application to the office of Matthew O'Brien, Architect, No. 68 Post Street, San Francisco, California. Deposit of a certified check or postal money order for $250, payable to Matthew O'Brien, is required as security for the safe return of the drawings and specifications. C. R. Forbes. Director, U. S. Veterans' Bureau, November 18, 1922.

SEALED PROPOSALS will be received by the Director, U. S. Veterans' Bureau, Arlington Building, Washington, D. C., until 11 o'clock a.m., December 18, 1922, and then and there publicly opened for electrical work in connection with 29 buildings at U. S. Veterans' Hospital at Livermore, California. Drawings and specifications may be obtained upon application to the office of Matthew O'Brien, Architect, No. 68 Post Street, San Francisco, California. Deposit of a certified check or postal money order for $250, payable to Matthew O'Brien, is required as security for the safe return of the drawings and specifications. C. R. Forbes, Director, U. S. Veterans' Bureau, November 18, 1922.

SEALED PROPOSALS will be received by the Director, U. S. Veterans' Bureau, Arlington Building, Washington, D. C., until 11 o'clock a.m., December 18, 1922, and then and there publicly opened, for plumbing, heating and ventilating work in connection with 29 buildings of the U. S. Veterans' Hospital at Livermore, California. Drawings and specifications may be obtained upon application to the office of Matthem O'Brien, Architect, No. 68 Post Street, San Francisco, California. Deposit of a certified check or postal money order for $250, payable to Matthew O'Brien, is required as security for the safe return of the drawings and specifications. C. R. Forbes, Director, U. S. Veterans' Bureau, November 18, 1922.

SEALED PROPOSALS will be received by the Director, U. S. Veterans' Bureau, Arlington Building, Washington, D. C., until 11 o'clock a.m., December 18, 1922, and then and there publicly opened, for refrigerating machinery in the U. S. Veterans' Hospital at Livermore, California. Drawings and specifications may be obtained upon application to the office of Matthew O'Brien, Architect, No. 68 Post Street, San Francisco, California. Deposit of a certified check or postal money order for $50, payable to Matthew O'Brien, is required as security for the safe return of the drawings and specifications. C. R. Forbes, Director, U. S. Veterans' Bureau, November 18, 1922.

SEALED PROPOSALS will be received by the Director, U. S. Veterans' Bureau, Arlington Building, Washington, D. C., until 11 o'clock a.m., December 18, 1922, and then and there publicly opened for laundry equipment in the U. S. Veterans' Hospital at Livermore, California. Drawings and specifications may be obtained upon application to the office of Matthew O'Brien, Architect, No. 68 Post Street, San Francisco, California. Deposit of a certified check or postal money order for $50, payable to Matthew O'Brien, is required as security for the safe return of the drawings and specifications. C. R. Forbes, Director, U. S. Veterans' Bureau, November 18, 1922.

SEALED PROPOSALS will be received by the Director, U. S. Veterans' Bureau, Arlington Building, Washington, D. C., until 11o'clock a.m., December 18, 1922, and then and there publicly opened, for kitchen equipment in the U. S. Veterans' Hospital at Livermore, California. Drawings and specifications may be obtained upon application to the office of Matthew O'Brien, Architect, No. 68 Post St., San Francisco, California. Deposit of a certified check or postal money order for $50, payable to Matthew O'Brien, is required as security for the safe return of the drawings and specifications. C. R. Forbes, Director, U. S. Veterans' Bureau, November 18, 1922.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, PITTSBURGH, PA. Sealed proposals for constructing and delivering one steel dipper dredge hull afloat at Pittsburgh, Pa., will be received at this office until 12 noon (Eastern time), December 1, 1922, and then opened. Information on application.

U. S. ENGINEER OFFICE, PITTSBURGH, PA. Sealed proposals will be received here until 12 noon (Eastern time), November 25, 1922, and then opened, for furnishing and delivering three steel deck barges. Further information on application.

U. S. ENGINEER OFFICE, MILWAUKEE, WIS., Oct. 25, 1922. Sealed proposals will be received here until 2 p.m., Nov. 27, 1922, and then opened, for the construction of one dipper dredge hull and house. Further information on application.

PROPOSALS FOR BOILERS.—Office, Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Dec. 2, 1922, and then opened, for furnishing boilers for hydraulic grader No. H.G. 2-1-1-2-23. Further information on application.

PROPOSALS FOR STEEL BARGES.—Office, Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Dec. 2, 1922, and then opened, for furnishing six steel barges. Further information on application.

PROPOSALS FOR MACHINERY FOR HYDRAULIC GRADER.—Office, Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn.—Sealed proposals will be received here until 11 a.m., Dec. 2, 1922, and then opened, for furnishing turbines, pumps, feed-water heater, boiler-feed pumps, and electric-light plant. Further information on application.

U. S. ENGINEER OFFICE, ROCK ISLAND, ILL., Nov. 10, 1922. Sealed proposals will be received here until 10 a.m., December 11, 1922, and then opened, for construction and delivery of ten (10) 100 ft. x 30 ft. x 6 ft. steel barges, complete as specified. Further information on application.

SEALED PROPOSALS will be received and publicly opened by the Director of the U. S. Veterans Bureau in the office of the Quartermaster General, 2306 Munitions Building, Washington, D. C., at 11 a.m., December 12, 1922, for the construction of a Neuro-Psychiatric Hospital at Knoxville, Iowa for the Veterans Bureau. Work will include the construction of fifteen buildings of reinforced concrete and brick, complete with water, lighting, heating, and sewer systems, roads and walks. Plans and specifications may be obtained after November 14, 1922 from the Quartermaster General, 2312 Munition Building, Washington, D. C., upon deposit of $100. One set of plans and specifications will be on exhibition at each of the following stations: Constructing Quartermasters at 30 Whitehall Street, New York City and Scott Field, Belleville, Illinois; also Quartermaster Supply Officers at 1819 West Pershing Road, Chicago, Illinois and Second and Arsenal Streets, St. Louis, Mo.

U. S. ENGINEER OFFICE, JACKSONVILLE, FLA.—Sealed proposals will be received here until 12 m., Nov. 27, 1922, and then opened, for dredging in Key West Harbor, Fla. Further information on application.

PROPOSALS FOR NINE STEEL BARGES.—Office Mississippi River Commission, Third District, P. O. Box 404, Vicksburg, Miss. Sealed proposals will be received here until 11 a.m. December 14, 1922, and then opened, for furnishing nine steel barges. Further information on application.

UNITED STATES ENGINEER OFFICE, DETRIOT, MICH.—Sealed proposals will be received here until 11 a.m., December 15, 1922, and then opened, for dredging and rock excavation in Livingstone Channel, Detroit River, Mich. Further information on application.

U. S. GOVERNMENT

UNITED STATES ENGINEER OFFICE, NORFOLK, VA. Sealed proposals will be received here until 12 M., December 4, 1922, and then opened, for constructing two power houses, with wells, fuel tanks, railroad tracks, etc., Fort Story, Cape Henry, Va. Further information on application.

U. S. ENGINEER OFFICE, HUNTINGTON, W. VA., November 15, 1922. Sealed proposals will be received here until 11 a.m. (Eastern Time), December 15, 1922, and then opened, for furnishing and delivering steel hull maneuver boat, etc., for Dam No. 30, Ohio River. Further information on application.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., November 14, 1922. SEALED PROPOSALS will be received and opened in this office at 3 p.m., Dec. 11, 1922, for furnishing the materials and labor required for changes at Side Entrance at the U. S. Post Office, Oakland, Calif. Drawings and specifications may be obtained from the Custodian, or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, MILWAUKEE, WIS. Sealed proposals will be received here until 2 p.m., Dec. 20, 1922, and then opened for constructing and delivering steel barges. Further information on application.

U. S. ENGINEER OFFICE, PITTSBURGH, PA. Sealed proposals will be received here until 12 noon (Eastern Time), December 20, 1922, and then opened for furnishing and delivering steel lock gates for Lock No. 1, Allegheny River. Further information on application.

U. S. ENGINEER OFFICE, WILMINGTON, DEL. Sealed proposals will be received here until 11 a.m., December 20, 1922, and then opened for excavating cutoffs in St. Jones and Mispillion Rivers, Del. Further information on application.

SEALED PROPOSALS will be opened by the Supt. of Lighthouses, Philadelphia, Pa., 2 p.m., Dec. 21, 1922, for building stone and reinforced concrete breakwater at Harbor of Refuge Light Station, Delaware Bay, Del. Information on application.

Many contractors depend entirely upon the

OFFICIAL PROPOSAL COLUMNS

of

EngineeringNews-Record

for Opportunities to bid.

They might not see your announcements if printed elsewhere.

You undoubtedly want their bids on your contracts. Make sure of them on your next contract.

The cost is only 40 cents a line per issue.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Dec. 4	Victoria, Tex.	Nov. 23
Dec. 5	Ponca City, Okla. Adv. Nov. 30.	Nov. 23
Dec. 5	Detroit, Mich.	Nov. 30
Dec. 5	Long Island City, N. Y.	Nov. 30
Dec. 5	Merced, Calif.	Nov. 30
Dec. 11	Monroe, Mich. Adv. Nov. 23 and 30.	Nov. 23
Dec. 11	Monroe, Mich. Adv. Nov. 30. ,	Nov. 30
Dec. 12	Wheeling, W. Va. Adv. Nov. 16 to 30.	Nov. 16
Dec. 19	Houma, La.	Nov. 23
Dec. 19	Brooklyn, N. Y. Adv. Nov. 30.	Nov. 30
Feb. 1	Spokane, Wash.	Nov. 16

SEWERS

Dec. 6	Hamilton, Ont.	Nov. 30
Dec. 7	Athol, Mass.	Nov. 16
Dec. 8	New York, N. Y.	Nov. 30
Dec. 11	New Orleans, La. Adv. Oct. 12 to Nov. 30.	Oct. 12
Dec. 15	Harlinger, Tex.	Nov. 30

WASTE DISPOSAL

Dec. 18	Allentown, Pa. Adv. Nov. 23 and 30.	Nov. 23
Dec. 29	Portland, Ore. Adv. Nov. 30.	Nov. 30

BRIDGES

Dec. 5	Cape May, N. J. Adv. Nov. 16 to 30.	Nov. 16
Dec. 5	Alabama	Nov. 16
Dec. 5	Jefferson, Tex.	Nov. 23
Dec. 5	Dubuque, Ia.	Nov. 30
Dec. 6	Freehold, N. J. Adv. Nov. 16 to 30.	Nov. 16
Dec. 8	Seattle, Wash.	Nov. 16
Dec. 9	Missouri	Nov. 30
Dec. 11	Yankton, S. D. Adv. Nov. 30.	Nov. 30
Dec. 11	Spokane, Wash.	Nov. 30
Dec. 12	Brunswick, Ga.	Nov. 9
Dec. 12	Alabama	Nov. 16
Dec. 12	Mt. Ayr, Ia.	Nov. 30
Dec. 12	Nashville, N. C.	Nov. 30
Dec. 14	Hamburg, N. Y. Adv. Nov. 30.	Nov. 30
Dec. 16	Missouri	Nov. 30
Dec. 19	West Virginia	Nov. 30
Jan. 23	Spokane, Wash	Sept. 21
Sept. 1, 1923,	Sydney, New South Wales, Australia	Aug. 3

DAMS

Jan. 5	Bluefield, W. Va. Adv. Nov. 30.	Nov. 30

RAILWAYS

Dec. 4	Ontario	Nov. 23

EXCAVATION, DRAINAGE, IRRIGATION

Dec. 5	Merced, Calif.	Nov. 30

STREETS AND ROADS

Bids Close		See Eng. News-Record
Dec. 4	Earlington, Ky. Adv. Nov. 23 and 30.	Nov. 23
Dec. 4	Chatham, Va.	Nov. 23
Dec. 4	San Diego, Calif.	Nov. 23
Dec. 4	Homestead, Fla.	Nov. 30
Dec. 4	Dade City, Fla.	Nov. 30
Dec. 4	Colorado	Nov. 30
Dec. 4	Dallas, Tex.	Nov. 30
Dec. 5	Albert Lea, Minn.	Nov. 9
Dec. 5	Alabama	Nov. 16
Dec. 5	Stockton, Calif.	Nov. 23
Dec. 5	Ridgeland, S. C.	Nov. 23
Dec. 5	Canton, S. D.	Nov. 23
Dec. 5	Jefferson, Tex.	Nov. 23
Dec. 5	Michigan	Nov. 23
Dec. 5	Elkins, W. Va.	Nov. 30
Dec. 5	Michigan	Nov. 30
Dec. 5	Dubuque, Ia.	Nov. 30
Dec. 6	Camden, S. C.	Nov. 23
Dec. 6	San Francisco, Calif.	Nov. 30
Dec. 6	North Carolina	Nov. 30
Dec. 6	Maplewood, Mo.	Nov. 30
Dec. 6	Clayton, Mo.	Nov. 30
Dec. 7	Aiken, S. C.	Nov. 23
Dec. 7	Michigan	Nov. 23
Dec. 7	Lisbon, Ia.	Nov. 30
Dec. 7	Beaumont, Tex.	Nov. 30
Dec. 8	Pecos, Tex.	Nov. 23
Dec. 8	Duluth, Minn.	Nov. 30
Dec. 8	Missouri	Nov. 30
Dec. 8	St. George, N. Y	Nov. 30
Dec. 11	California	Nov. 23
Dec. 12	Alabama	Nov. 16
Dec. 12	St. Louis, Mo.	Nov. 23
Dec. 12	Mt. Ayr, Ia.	Nov. 30
Dec. 13	Corsicana, Tex.	Nov. 30
Dec. 14	Virginia Adv. Nov. 30.	Nov. 30
Dec. 14	North Carolina Adv. Nov. 30.	Nov. 30
Dec. 15	Columbus, Kan.	Nov. 30
Dec. 15	Tennessee	Nov. 30
Dec. 16	Mound City, Kan.	Nov. 23
Dec. 16	Quebec	Nov. 23
Dec. 19	Topeka, Kan.	Nov. 23
Dec. 19	New York Adv. Nov. 30.	Nov. 30
Dec. 19	West Virginia	Nov. 30
Dec. 22	Spokane, Wash.	Nov. 2
Dec. 22	Eldorado, Kan.	Nov. 23
Dec. 22	Duluth, Minn.	Nov. 30
Dec. 23	Mound City, Tex.	Nov. 30
Dec. 28	Mobile, Ala. Adv. Nov. 30.	Nov. 30
Dec. 30	Quebec	Nov. 23
Dec. 30	Quebec	Nov. 2
Dec. 30	Quebec	Nov. 9
Dec. 30	Quebec	Nov. 16
Dec. 30	Quebec	Nov. 30
Jan. 7	Duluth, Minn.	Sept. 28

INDUSTRIAL WORK

Dec. 9	Pittsburgh, Pa.	Nov. 16

BUILDINGS

Dec. 1	Dayton, O.	Nov. 30
Dec. 4	Cleveland, O.	Nov. 23
Dec. 4	Freeport, N. Y.	Nov. 23
Dec. 4	Memphis, Tex.	Nov. 23
Dec. 5	Wichita Falls, Tex.	Nov. 23
Dec. 5	San Antonio, Tex.	Nov. 30
Dec. 7	Corydon, Ia.	Nov. 23
Dec. 7	Lodi, Calif.	Nov. 23
Dec. 7	Phila., Pa.	Nov. 30
Dec. 8	Morristown, Tenn.	Nov. 30
Dec. 9	Port Washington, N. Y	Nov. 16
Dec. 9	Jacksonville, Fla.	Nov. 30
Dec. 12	Amarillo, Tex.	Nov. 30
Dec. 14	Allentown, Pa.	Nov. 16
Dec. 15	Chisholm, Minn.	Nov. 23
Dec. 18	Bakersfield, Calif.	Nov. 16
Dec. 18	Santa Barbara, Calif.	Nov. 30
Dec. 20	Binghamton, N. Y.	Nov. 23
Dec. 21	Hancock, Mich.	Nov. 30
Dec. 22	McCombs, O.	Nov. 30
Dec. 28	Kenosha, Wis.	Nov. 30
Jan. 2	Olean, N. Y.	Nov. 9
Jan. 2	Duluth, Minn.	Nov. 23
Mar. 23	Shreveport, La.	Nov. 9

FEDERAL GOVERNMENT WORK

Dec. 1	Steel Hull — Pittsburgh, Pa. Adv. Nov. 9 to 30.	Nov. 9
Dec. 4	Extension, etc. — Altoona, Pa.	Nov. 16
Dec. 4	Power Houses—Cape Henry, Va.	Nov. 9
Dec. 6	Repairs—Phila., Pa.	Nov. 16
Dec. 6	Pumping Units — Boise, Idaho	Oct. 19
Dec. 7	Dwellings—Huntington, W. Va.	Nov. 16
Dec. 11	Barges—Rock Island, Ill. Adv. Nov. 16 to 30.	Nov. 16
Dec. 11	Changes—Oakland, Calif.	Nov. 23
Dec. 12	Hospital—Knoxville, Ia. Adv. Nov. 16 to 30.	Nov. 16
Dec. 13	Dredging—New York, N. Y.	Nov. 23
Dec. 14	Garage, etc.—San Diego, Calif.	Nov. 16
Dec. 14	Barges—Vicksburg, Miss. Adv. Nov. 16 to 30.	Nov. 16
Dec. 15	Dredging—Detroit, Mich. Adv. Nov. 16 to 30.	Nov. 16
Dec. 15	Maneuver Boat—Huntington, W. Va. Adv. Nov. 23 and 30.	Nov. 23
Dec. 18	Buildings, Electrical Work, etc. —Livermore, Calif. Adv. Nov. 23 and 30.	Nov. 23
Dec. 20	Barges—Milwaukee, Wis.	Nov. 23
Dec. 20	Lock Gates — Pittsburgh, Pa. Adv. Nov. 23 and 30.	Nov. 23
Dec. 20	Excavating Cut-offs—Wilmington, Del. Adv. Nov. 23 and 30.	Nov. 23
Dec. 20	Repairs—San Diego, Calif.	Nov. 23
Dec. 20	Pier Extension—Puget Sound, Wash.	Nov. 23
Dec. 20	Riprapping Dike—Mare Island, Calif.	Nov. 23
Dec. 20	Quarters, etc. — El Paso, Tex. Adv. Nov. 30.	Nov. 30
Dec. 21	Breakwater—Phila., Pa. Adv. Nov. 23 and 30.	Nov. 23
Dec. 26	Barge—Wilmington, N. C. Adv. Nov. 30.	Nov. 30
Jan. 3	Piers—Pearl Harbor, H. T.	Nov. 16

MISCELLANEOUS

Dec. 4	Landscape Work—Redwood City, Calif.	Nov. 23
Dec. 4	Electrical Distribution System —Ridgway, S. C.	Nov. 23
Dec. 4	Electric Light Standards — Buffalo, N. Y.	Nov. 30
Dec. 5	Gate Valves, etc.—New York, N. Y.	Nov. 16
Dec. 5	Excavator and Tractor — Ft. Pierce, Fla.	Nov. 30
Dec. 5	Lumber—Bedford, Ia.	Nov. 30
Dec. 6	—Traveling Crane—San Francisco, Calif.	Nov. 16
Dec. 6	Piling and Lumber—Indianola, Ia.	Nov. 30
Dec. 6	Road Machinery—Illinois Adv. Nov. 30.	Nov. 30
Dec. 7	Gas Distribution System — Alexandria, La.	Nov. 30
Dec. 7	Shed—New Orleans, La.	Nov. 30
Dec. 7	Creosoted Piles—New Orleans, La.	Nov. 30
Dec. 8	Coarse Aggregate—New York, N. Y.	Nov. 30
Dec. 13	Wall—Delaware Adv. Nov. 30.	Nov. 30
Dec. 14	Wharf—New Orleans, La. Adv. Nov. 30.	Nov. 30
Dec. 18	Coal Handling Plant — Melbourne, Victoria, Australia	Sept. 21
Dec. 27	Dock Wall—Buffalo, N. Y. Adv. Nov. 30.	Nov. 30
Jan. 1	Transmission Line—Spokane, Wash.	Nov. 9

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y. Floral Park—Bd. Village Trustees retained C. E. Marshall, civil engr., Hempstead, to prepare plans for water system, incl. pumping plant and standpipe.

N. J., Gloucester City—Soon takes bids new pumping station and filtration plant. $80,000. Remington & Vosbury, 6th and Market Sts., Camden, engrs.

N. C., Hickory—City plans new water supply incl. 20 mi. gravity pipe line, to serve Hickory, West Hickory and Highland. P. Robinson, mayor.

Miss., Magee—See "Industrial Works."

La., Lecompte—Plans to vote on $40,000 bonds for waterworks and electric light extensions. Swanson-McGraw, United Fruit Bldg., New Orleans, counsult. engrs.

Ill., Lena — Making plans improving waterworks, incl. more economical pumping equipment. $15,000. J. N. Gates, clk. W. G. Kirchoffer, Dean Bldg., Madison, Wis., engr.

Wis., Woodville—Making plans complete waterworks system. $150,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, Minn., engrs.

Waterworks (Continued)

Ia., Van Horne—Making plans municipal waterworks. $35,000. H. R. Green, Cedar Rapids Savings Bank Bldg., Cedar Rapids, engr.

Kan., Quinter—Having plans prepared for new waterworks system. $40,000 bonds voted. Ruckel Eng. Co., Hutchinson, engrs.

Tex., Canton—Voted $50,000 bond issue for waterworks improvements and electric light plant. O'Neill Eng. Co., Dallas, engrs.

Tex., Dallas—City Comn. takes bids middle of January, two 2,000,000 gal. water towers, concrete or steel, one at Belmont other at Junius Heights. $40,000 each. G. D. Fairtrace, city engr.

Tex., Dallas — City Comn. takes bids about January 1 for 1 mi. 20 in. main in East Dallas. $100,000. G. D. Fairtrace, city engr.

Tex., Leonard—Dec. 12, to vote on $15,600 bond isue for new mains. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Tex., McLean—Attorney Generals Dept., Austin, approved $30,000 bond issue for light and power, and $39,000 bond issue for waterworks improvements. Address Mayor. Noted July 6.

Tex., Wylie—Voted $50,000 bond issue for waterworks improvement. Address G. W. Housewright, mayor. Noted Nov. 2.

Okla., Tyrone — Had plans prepared waterworks improvements incl. plants and mains. $70,000. Ruckel Eng. Co., Interurban Bldg., Hutchinson, Kan., engrs. Noted Oct. 12.

N. M., Albuquerque—Rejected bids, rein.-con. reservoir, $75,000 bonds voted. Work will be done by day labor. Noted Oct. 5.

Ore., Portland—L. S. Kaiser, supt. waterworks, City Hall, receives bids next year for North and South Portland pumping system $20,000, Sandy River control system $3,000, Vernon standpipe and house $35,000, Myrtle Park system $8,000, Fulton and Burlington system $3,000, repairs to present system $209,350.

Calif., Modesto—City plans to purchase 240 ton c.i. pipe for water system. G. Freitas, city engr.

BIDS DESIRED

N. Y., Long Island City—Dec. 5, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Astoria, Schurz and Sigel Aves., Frye, 23rd, 24th and 25th Sts. 2nd Ward.

N. Y., Brooklyn—Dec. 19, by Bd. Water Supply, Municipal Bldg., New York, constructing Mt. Prospect conduit a portion of city conduits of Catskill aqueduct from Shaft 24 of city tunnel in Ft. Greene Park, along Cumberland St., Lafayette, Washington and Flatbush Aves., to Clarkson Ave., here. G. J. Gillespie, pres.; adv. this issue.

Mich., Detroit—Dec. 5, by Secretary Bd. Water Comrs., 176 East Jefferson Ave., watermain crossing at Fort St. and River Rouge, incl. 430 ft. 24 or 26 in. c.i. or steel pipe. $15,000. T. A. Leisen, Waterworks Park, engr.

Mich., Monroe—Dec. 11, by F. M. Kressbach, city clk., coagulation basin, consisting of underground rein.-con. substructure with brick superstructure. Hoad, Decker, Shoecraft & Drury, Ann Arbor, consult. engrs.; adv. this issue.

Calif., Merced—Dec. 5, by W. D. Wagner, secy. Merced Irrigation Dist., furnishing f.o.b. factory, 4 pumps direct connected to 4 electric motors with motor control equipment, etc., 2 for Booster Plant No. 2, and 2 for Booster Plant No. 3, of Lake Yosemite-Le Grand highline canal. R. C. Starr, ch. engr.

BIDS RECEIVED

Calif., Fair Oaks—Fair Oaks Irrigation Dist., furnishing riveted steel pipe, (1) 1,400 ft. 4 in. pipe (2) 4,300 ft. 12 in. (3) 4,200 ft. 10 in. (4) 1,100 ft. 9 in. (5) 9,100 ft. 8 in. (6) 1,100 ft. in. (7) 3,800 ft. 6 in. and (8) 4,300 ft. 4 in., from Montague Pipe & Steel Co., Hobart Bldg., San Francisco, (1) $1,931 (2) $3,894 (3) $3,281 (4) $752 (5) $5,783 (6) $551 (7) $1,669 (8) $1,351; Pacific Pipe Co., 201 Howard St., San Francisco, (1) $1,931 (2) $3,894 (3) $3281 (4) $752 (5) $5,783 (6) $551 (7) $1,669 (8) $1,351; Western Pipe & Steel Co., of California, 444 Market St., San Francisco, (1) $1,694 (2) $3483 (3) $2940 (4) $709 (5) $4,641 (6) $506 (7) $1,596 (8) $1,375. Noted Nov. 9.

CONTRACTS AWARDED

Me., Auburn—Bd. Water Comrs., electric pumping plant, 1 story, 28 x 62 ft., brick and rein.-con., to Portland Constr. Co., 52 Exchange St., Portland. $16,500.

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Ditmars Ave., 1st Ward, and Griffith St., 2nd Ward, etc., to F. Paino, 572 1st St. Brooklyn. $7,762 and $5,808 respectively, Noted Nov. 23.

O., Cleveland — Steel frame for Fairmount pumping station, 1 story, Fairmount Rd., to Forest City Steel & Iron Co., 1500 West 110th St., $135,037. Total cost $1,000,000. Foundation work is underway by Hunkin-Conkey Constr. Co. Century Bldg.

Ill. Aurora—Drilling artesian well, 2,300 ft. deep, 12 in. at bottom, to S. B. Geiger, Old Colony Bldg., Chicago, $29,960.

Wis., Waupaca—Emergency pumping unit incl. centrifugal pump and motor, to Hayton Pump & Blower Co., 575 2nd Ave., Appleton. Noted Nov. 2.

Wash., Tacoma—Furnishing c.i. mains for South J and K Sts., to Amer. Cast Iron Pipe Co., c/o R. C. Polk, Perkins Bldg., $46,120. Engrs. est. $47,000. Noted April 13.

Sewers

PROPOSED WORK

N. Y., Glens Falls—Revising plans for 2 sewage pumping stations and sewer pipe. $120,000. J. Meyer, City Hall, city engr.

Pa., Berwick—Plans new sewers. $80,000. A. Potter, c/o Town Council, consult engr.

Fla., Tallahassee — See "Streets and Roads."

Mich., Royal Oak — Plans main trunk sewer, incl. 5,000 ft. 12 in. and 3,150 ft. 24 in. vitr. pipe. $35,000. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engrs.

Ia., North English — Takes bids in January for sewerage system and disposal plant. $40,000. H. R. Green, 634 Cedar Rapids Savings Bank Bldg., Cedar Rapids, engr. Noted Feb. 23.

Ia., Ossian—Making plans and takes bids about Feb. 1 for sewerage system and disposal plant. $50,000. H. R. Green, Co., 634 Cedar Rapids Savings Bank Bldg., Cedar Rapids, engr.

SEWER—HAMMOND, IND.

Bids were opened by city for constructing main district sewer on North Side (A) United Constr. Co., Hammond (awarded contract); (B) Illinois Impvt. & Constr. Co. The unit bids were as follows:

Reinforced-Concrete Pipe	Average Cut	A	B
1,792 lin.ft. 84-in.	21 ft.......	$54.97	$53.00
2,378 lin.ft. 78-in.	20 ft.......	46.97	50.00
667 lin.ft. 78-in.	19.4 ft.....	44.96	55.00
2,368 lin.ft. 72-in.	19.6 ft.....	45.96	50.00
1,950 lin.ft. 66-in.	19.1 ft.....	43.95	40.00
2,674 lin.ft. 60-in.	16.2 ft.....	33.98	39.00
1,480 lin.ft. 30-in.	13.23 ft....	....	15.00
1,820 lin.ft. 24-in.	9.94 ft. V.P.	12.00	12.00
1,285 lin.ft. 36-in.	14 ft.......	17.45	18.00
1,311 lin.ft. 30-in.	12.4 ft.....	14.97	15.00
2,674 lin.ft. 48-in.	16.9 ft.....	29.96	22.00
660 lin.ft. 36-in.	13.9 ft.....	17.95	18.00
1,316 lin.ft. 30-in.	12.52 ft....	16.00	15.00
1,027 lin.ft. 24-in.	11.2 ft.....	12.50	12.00
648 lin.ft. 24-in.	11.8 ft.....	12.50	12.00
218 lin.ft. 36-in.	13.8 ft.....	21.44	18.00
963 lin.ft. 43-in.	14.1 ft.....	22.43	22.00
660 lin.ft. 42-in.	12 ft.......	19.84	20.00
621 lin.ft. 36-in.	12.7 ft.....	18.46	18.00
673 lin.ft. 36-in.	14.1 ft.....	20.47	18.00
731 lin.ft. 30-in.	13.1 ft.	18.96	15.00
Extended totals including house drains..............		$846,597	$856,684

Minn., South St. Paul—City voted $100,000 bonds for sewer extensions in various streets. J. R. Stevenson, city clk.

Kan., Pittsburg—Had plans prepared for sewers and sewage disposal plant. $125,000 bonds voted. Black & Veatch, 701 Mutual Blk., Kansas City, Mo., engrs. Noted Oct. 26.

Tex., Houston—Plans sanitary sewer in Castle, Court and Turner Sts. $65,000. J. C. McVea, city engr.

Tex., Leonard — Dec. 12, to vote on $35,000 bond issue for disposal plant and sewers. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Tex., Necona—Dec. 19, to vote on $50,000 bond issue for sewage disposal plant and sewers. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

BIDS DESIRED

N. Y., New York—Dec. 8, by J. Miller, pres. Manhattan Boro, Municipal Bldg., 4 ft. circular wooden barrel sewer under Contr. 2 for making certain changes to outlet sewer in Roosevelt St. in connection with proposed improvement under Manhattan end of Brooklyn Bridge.

Tex., Harlingen—Dec. 15, by City Council, concrete storm sewers in various streets $52,000. Will take bids later for sewage disposal plant, $20,000. A. Tamm, city engr.

Cal., San Diego—See "Miscellaneous."

Ont., Hamilton—Dec. 6, by G. C. Copley, chn. Bd. Control, 2,480 lin.ft. sewer in King and McKittreick Sts., 1,170 ft 6 ft. 3 in. x 5 ft. 6 in., and 1,310 ft. 5 ft. 6 in. x 5 ft. 6 in., brick or concrete. $60,000. E. R. Gray, city engr.

BIDS RECEIVED

O., Akron—W. F. Peters, dir. Pur. Serv opened bids Nov. 20, sewers in (1) Little Cuyahoga River Interceptor Contr. 3, 5,505 ft. (a) segmental block or (b) brick pipe, engrs. est. $200,000 (2) Little Cuyahoga River Interceptor, Contr. 4, 6,500 ft. (a) segmental block or (b) brick pipe, engrs. est. $165,000, from W. P. Gibbons Contg. Co., Cleveland (street address not available) (1a) $229,091 (1b) $200,801; T. E. McShaffrey Constr. Co., 170 South Forge St., (1a) $234,297 (1b) $235,897 (2a) $190,464 (2b) $190,709; Stevens & McKeon, Cleveland (street address not available) (2a) $165,758 (2b) $159,786; G. Wade, Cincinnati, (street address not available) (2b) $164,512.

Mich., Detroit—Opened bids building vtr. crock sewers as follows: (1) Relief Arm Sewer in Harper Ave. (2) Lateral 3695 (3) Lateral 3758 (4) Lateral 3759 (5) Lateral 3762 (6) Lateral 3767 (7) Lateral 3768 (8) Lateral 3769 (9) Lateral 3770 (10) Lateral 3771 (11) Lateral 3778 (12) Lateral 3779 (13) Lateral 3780 (14) Lateral 3781 (15) Lateral 3783 (16) Lateral 3784 (17) Lateral 3785 (18) Lateral 3786, from Western Constr. Co., 1208 Ford Bldg., (1) $7,239 (2) $2,820 (6) $4,428 (7) $4,732 (8) $8,707 (9) $11,989 (10) $5,135 (13) $2,456 (14) $2,738 (15) $5,286 (16) $1,692 (17) $4,530; W. Blanck & Co., 823 Ford Bldg., (1) $8,625 (2) $2,972 (3) $8,200 (4) $9,027 (5) $10,693 (6) $4,742 (7) $5,139 (8) $9,334 (9) $12,617 (10) $6,100 (11) $7,164 (13) $2,360 (14) 2,789 (15) $6,077 (17) $4,261 (18) $10,740; T. D. Nolan, 22 Highland Ave., (1) $9,990 (3) $7,900 (4) $9,200 (5) $10,000; A. Rossi, 5307 Pennsylvania Ave., (2) $4,2000 (12) $4,273 (16) $2,029; J. F. Gentile, 920 Rowena Ave. (5) $11,482; G. Ponterilli, Wolverine Hotel, (6) $4,947 (7) $5,180 (9) $12,959; Coolsaet Bros., 400 Penobscot Bldg., (8) $9,870; Detroit Drainage Constr. Co., Penobscot Bldg., (11) $7,462; Lennane & McIlvenna 1205 Book Bldg., (11) $7,500 (13) $2,600; Cappello & Fattore, 2151 Hale St., (12 $4,258; J. Zuccola, Detroit (street address not available) (12) $4,113; J. Rossi, 4148 Seneca Ave., (14) $3,500, (18) $16,597; Martin & Krausman, Vinton Bldg., (16) $2,200.

Ia, Des Moines—For 150 ft. 48 in. rein.-con. sewer, 6 counterports and 5 arch panels, from J. Horrabin Constr. Co., 1422 Walnut St., $24,600; Koss Constr. Co., 2818 5th St., $28,333; F. E. Marsh Co., Masonic Temple $28,900.

CONTRACTS AWARDED

Conn., New Haven—Sewers in Chapel St and Yale Ave., to Dwyer & Mannix, 355 Shelton Ave., $105,596.

O., Akron—Theodore St. trunk sewer, 900 ft. 42 in. brick, on piling and slab foundation, to T. E. McShaffrey Constr. Co., 170 South Forge St., $35,000.

N. M., Albuquerque—For sewage disposal plant, to French-Harvey-Peabody, Sante Fe, (street address not available). $57,984. Noted Oct. 5.

Waste Disposal

PROPOSED WORK

W. Va., Morgantown—Plans incinerating plant. $25,000. A. A. Hall, city mgr.

BIDS DESIRED

Ore., Portland—Dec. 29, at office City Purchasing Agent, for garbage incinerator. O. Laurgaard, city engr.; adv. this issue. Noted Nov. 23.

SEWAGE DISPOSAL PLANT, ETC.—LUBBOCK, TEX.

Following are lowest three bids opened Nov. 3, by P. Spencer, Mayor, for sewage disposal plant, sewers, and water mains, (A) Janes Constr. Co., Southwestern Life Bldg., Dallas, (awarded contract); (B) Pittsburgh-Des Moines Steel Co., Dallas; (C) Municipal Excavating Co., Oklahoma City, Okla. The unit bids were as follows:

Item 1—Water Pipe	A	B	C
43,200 lin.ft. 6-in. c.i. pipe	$1.42	$1.40	$1.42
9,940 lin.ft. 8-in. c.i. pipe	1.82	1.95	1.95
27 lin.ft. 6-in. valves	35.62	35.00	30.00
22 lin.ft. 8-in. valves	48.84	50.00	43.00
129 lin.ft. hydrants	66.93	60.00	62.00
1,000 cu.yd. rock excavation	3.00	2.00	4.00
Sub-totals	$93,701	$91,648	$94,481
Item 2—Sewers			
6-in. pipe			
40,499 lin.ft. 0-6	$0.45	$0.53	$0.52
15,596 lin.ft. 6-8	.52	.63	.55
3,760 lin.ft. 8-10	.59	.85	.62
140 lin.ft. 10-12	.75	1.10	.68
8-in. pipe			
20,630 lin.ft. 0-6	.62	.73	.68
3,925 lin.ft. 6-8	.69	.85	.72
4,850 lin.ft. 8-10	.76	1.06	.79
700 lin.ft. 10-12	.92	1.30	.85
10-in. pipe			
180 lin.ft. 0-6	.81	.98	.89
1,230 lin.ft. 6-8	.88	1.11	.93
700 lin.ft. 8-10	.95	1.33	1.00
2,520 lin.ft. 10-12	1.11	1.58	1.06
4,000 lin.ft. 12-14	1.27	1.75	1.30
1,890 lin.ft. 14-16	1.43	2.00	1.40
146 manholes	60.00	65.00	60.00
100 extra depth manholes	6.00	7.00	7.00
2,000 cu.yd. rock excavation	3.00	2.00	4.00
Sub-totals	$76,320	$90,511	$83,325
Disposal Plant No. 1			
1,000 manhours	$0.50	$0.37½	$0.40
500 teamhours	.75	.75	.80
500 concrete forms	.20	.35	.40
20 cu.yd. class IV concrete	16.00	17.50	25.00
4 M ft. b.m. timber in foundations	50.00	55.00	50.00
1,000 cu.yd. ditch excavations	.50	1.00	.50
Sub-totals	$44,345	$43,220	$52,200
Extended grand totals	$214,366	$225,380	$230,007

Bridges

PROPOSED WORK

O., Hamilton—Voted $30,000 bonds for rebuilding bridge over Indian Creek on Venice Rd.

O., Painesville—Preparing plans 420 ft. concrete arch and girder bridge over Grand River, Lake Co. near here. $155,000. C. C. Hadden, Court House, engr. W. P. Brown, 750 Prospect Ave., Cleveland, consult engr.

Ill., Sterling—Whiteside Co. rejected bids for 1,032 ft. rein.-con. arch bridge on 1st Ave. over Rock River, 28 ft. roadway, two 7 ft. sidewalks. Noted Nov. 9.

Wis., Racine—Having preliminary plans prepared for 186 ft. rein.-con. and steel bridge on 4th St., 80 ft. draw span, 40 ft. roadway, two 10 ft. walks. $50,000. J. W. Beaugrand, City Hall, engr

S. D., Hot Springs—Fall River Co. plans 450 ft. timber and steel bridge with three 94 ft. spans, concrete abutments, over Cheyenne River. $25,000. W. F. Fitzgerald, aud.

B. C., Prince George—Provincial Government, Victoria, having plans prepared and takes bids in spring, timber truss bridge and approaches 200 ft. long with approaches, over Willow River. $25,000. P. Philip, Dept. Pub. Wks., Victoria, engr.

BIDS DESIRED

N. Y., Hamburg—Dec. 14, by Joint Town Bd. of Hamburg and Evans at office of J. E. Leach, town clk. of Hamburg, 180 ft. steel truss span bridge, 24 ft. roadway, over Eighteen Mile Creek on Lake Shore State Highway. G. C. Diehl, 577 Ellicott Sq., Buffalo, co. engr.; adv. this issue.

Virginia—See "Streets and Roads".

West Virginia—Dec. 19, by State Rd. Comn., Charleston, constructing bridge 856, across Spruce Fork River, Project 3059, Logan Co., 130 ft. steel through truss superstructure, concrete or Ashlar masonry substructure, $25,000, J. N. Smith, Logan, engr.; Bridge 811, across Twelve Pole Creek, Project 3061, Wayne Co., 120 ft. steel through truss superstructure, concrete or Ashlar masonry substructure. $25,000. H. O. Wiles, Ceredo, enrg. Separate bids on substructures and superstructures.

N. C., Nashville — Dec. 12 by Comrs. Nash Co., 10 small bridges and 2 culverts, 650 cu.yd. concrete, 30,000 lb. reinforcing and 150,000 lb. structural steel etc. $26,000. M. V. Barnhill, Rocky Mount, chn.

Tennessee—See "Streets and Roads."

Ia., Dubuque—Dec. 5, by Supervs. Dubuque Co., for 58 box culverts and extensions, and one 80 ft. pony truss, $41,300. Iowa Hy. Comn., Ames, engrs.

Ia., Mt. Ayr—Dec. 12, by Supervs. Ringgold Co., furnishing material and constructing 49 box culverts, 5 extensions, 1 I-beam and 1 pony truss bridge, 50,900 lb. steel, 116,845 lb. reinforcing, 1781.6 cu.yd. rein.-con. etc. $45,500. Iowa Hy. Comn., Ames, engrs.

S. D., Yankton—Dec. 11, by Meridian Hy. Bridge Co., furnishing and delivering, erecting jointly or separately 3,700 ton of steel for superstructure of bridge over Missouri River, here. Harrington, Howard & Ash, 1012 Baltimore Ave., Kansas City, Mo., consult. engrs.; adv. this issue.

Missouri—Dec. 9, by State Hy. Dept. at div. office Hermann, one 200 ft. and three 95 ft. steel truss two 35 ft. I-beam and 3 deck plate girder spans, 1 concrete abutment, 4 rein.-con. pile bents, 5 rein.-con. piers, 20 ft. roadway, over Gasconade River on road near Mt. Sterling from Jefferson City to St. Louis, Federal Aid Project 219, Gasconade Co. Waddell & Son, 800 Graphic Arts Bldg., Kansas City, consult. enrgs. Noted Oct. 26.

Missouri—Dec. 16, by State Hy. Dept. at div. offices Fayette and Marshall, one 224 ft., one 344 ft., two 316 ft. and one 248 ft. steel truss, one 36 ft. and thirty-five 20 ft. spans, 6 rein.-con. piers from 87 to 112 ft. high, over Missouri River near Glasgow, Howard and Saline Counties. F. W. Adgate, Rookery Bldg., Chicago, consult. engr.

Wash., Spokane—Dec. 11, by Spokane Co., 422 ft. concrete bridge consisting one 150 ft. and two 80 ft. spandrel arches with 40 ft. concrete girder approaches at each end, 24 ft. clear roadway, over Spokane River. H. S. Baker, co. engr.

CONTRACTS AWARDED

N. Y., Niagara Falls — Michigan Central R.R., Passenger Terminal Sta., Detroit, Mich., 640 ft. double track cantilever bridge to replace present bridge over Niagara Gorge, to Amer. Bridge Co., Widener Bldg., Phila. Engrs. est. $3,000,000. Construction is being held up on account of difficulties in securing necessary permits.

N. J., Dover—State Hy. Dept., Trenton, repairing bridge over Barnegat Bay from Seaside Heights to Island Heights, here, to L. J. Seiling, Red Bank, $83,718. Noted Nov. 2.

N. J., Washingtons Crossing (Taylorsville, Pa., P. O.)—Joint Comn. for Elimination of Toll Bridges over Delaware River between New Jersey and Pennsylvania, State House, Trenton, repairing bridge over Delaware River, here, to Dover Boiler Wks., Dover, $28,824. Noted Oct. 19.

Mich., Leoni (R. D. Grass Lake)—State Highway Dept., Lansing, Bridge 380701, two span girder, 118 ft. long, over Michigan Central R.R. tracks, concrete foundation, to Fargo Eng. Co., Jackson; furnishing steel to McClintic-Marshall Co., Oliver Bldg., Pittsburgh. Michigan Central R.R. will construct concrete deck and upperwork. Total est. $150,000. Noted Oct. 5.

Ia., Greenfield—Supervs. Adair Co., to F. W. Kempe, Greenfield, 23 box culverts $16,000, concrete figures $20.28 per cu.yd.; Des Moines Eng. and Constr. Co., 418 Polk Bldg., Des Moines, one 80 x 24 ft. deck truss bridge, $12,690, concrete figures $25.12. Engrs. est. $31,307. Noted Nov. 23.

Ia., Waterloo—Blackhawk Co., 27 culverts and extensions, 1 I-beam and 1 pony truss bridge, to C. W. Pedersen, Northwood, $25,000. Engrs, est. $26,435.

Tex., Corsicana—See "Streets and Roads."

Tex., Lufkin—See "Streets and Roads."

Que., Vaudreuil—Provincial Government, at office J. L. Boulanger, deputy minister of highways, Quebec, superstructure of bridge from here to Ile Perrot, to Dominion Bridge Co. Ltd., Lachine, $124,798, balance of work to Dufresne Constr. Co., Montreal, $135,140. Noted Oct. 19.

Dams

PROPOSED WORK

Ark., Cotter—See "Industrial Works."

BIDS DESIRED

W. Va., Bluefield—Jan. 5 (change of date), by Bluefield Water Works & Impvt. Co., constructing clay or earthen dam. W. McCarthy, supt.; adv. this issue. Noted Nov. 16.

Railways

PROPOSED WORK

Idaho—Oregon Short Line R.R. Co. preparing plans and takes bids in about 3 months for standard gauge line from Orchard to Perkins. $3,180,550. R. L. Huntley, 3344 Harnery Ave., Omaha, Neb., ch. engr.

Excavation, Drainage, Irrigation

PROPOSED WORK

N. C., Washington—Bd. Drainage Comrs., Little Swift Creek D.D., Beaufort Co. D.D. 10, will sell $185,000 bonds for drainage work. G. Green, New Bern, chn.

Wis., Green Bay—Brown Co. Farm Drainage Bd. plans to form two districts: Farm Drainage 3 includes 8 mi. open ditch aggregating 140,000 cu.yd.; Farm Drainage 4 includes 5 mi. open ditch 9,600 ft. 6-15 in. tile drain. $50,000. F. Desnoyes, secy.

Wis., Watertown—Jefferson Co. Farm Drainage Bd., Jefferson, plans 4 mi. open ditch incl. 52,000 cu.yd. excav., 8,800 ft. 8-15 in. tile. $25,000. J. W. Puerner, Jefferson, secy.

Mo., Maryville—Nodoway Co. had plans prepared for 7½ mi. open ditch in Skidmore-Maitland D. D., 390,000 cu.yd. excav. $40,175. W. B. Hazen, 53 Commercial Bldg., St. Joseph, engr.

Mo., Trenton—Grundy Co. had plans prepared for 11.35 mi. open ditch in Brimson D. D., 974,640 cu.yd. excav. $100,000. W. B. Hazen, 53 Commercial Bldg., St. Joseph, engr.

Ark., Riverdale—Directors D. D. 7, Poinsett Co. (Harrisburg), takes bids about middle of December concrete drainage culvert with 8 barrels each 6½ ft. wide, 8½ ft. high, 750 ft. long, 2,800 lin.ft. Wakefield sheet piling, 9,000 cu.yd. concrete, 230 ton reinforcing steel. Pride & Fairley, Blytheville dist. engrs. Elliott & Harman Eng. Co., 1420 Bank of Commerce and Trust Co. Bldg., Memphis, Tenn., consult. engrs.

Nev., Minden—Carson Valley Irrigation Dist. having preliminary investigation made for storage reservoirs, canals and structures for irrigating 40,000 acres. $500,000. L. H. Taylor & Co., 309 State Life Bldg., Reno, engrs.

Excavation, Drainage and Irrigation (Continued)

Ore., Prineville—Powell Butte Irrigation Dist. voted $1,050,000 bonds for irrigation project between Powell Butte and Prineville, Crook Co., incl. reservoir 54,000 acre ft. capacity, 38,000 gross and 13,000 irrigable acres. No contracts will be let until reservoir is tested and proved feasible. J. E. Myers, Prineville, secy. J. O. Baar, 26 East 28th St., Portland, engr.

BIDS DESIRED

Calif., Merced—Dec. 5, by Dirs. Merced Irrigation Dist., drilling and lining not more than 30 drainage wells. Bidder to state number of wells he will drill in time specified and number of rigs he will employ, although minimum number of wells bid on, shall not be less than 15. R. C. Starr, ch. engr.

Calif., Merced—See "Waterworks."

Streets and Roads

PROPOSED WORK

Massachusetts—State Hy. Dept., Boston, having surveys made road from Williamstown to State line, connecting with Albany, N. Y. F. W. Hodgden, Dept. Pub. Wks., Boston, ch. engr.

Pa., Beaver—Plans $100,000 bond issue for new paving and repaving.

Pa., Erie—Plans extending 22nd, 23rd, 24th and 25th Sts. $50,360. F. G. Lynch, city engr.

Pa., Meadville—Crawford Co. plans paving 8.69 mi. Hydetown-Centreville Rd., macadam. $350,000. Engineer not announced.

Pa., Scranton—Plans paving Wayne Ave. $25,000; Monsey Ave. $27,217; Delaware, Marion and New York Sts., South Hyde Park, South Lincoln, South Rebecca and South Garfield Aves., cost to exceed $50,000; Oram Blvd., Pettebonne and Vine Sts., to exceed $30,000. Various types of pavement will be considered. W. Lafontaine, dir. pub. wks.

Md., Towson—Baltimore Co. voted $2,000,000 bonds extending and improving road system. S. Green, co. engr.

W. Va., Philippi — Union Dist., Barbour Co., voted $200,000 bonds for permanent highways.

Ga., Blakely—Early Co. had plans prepared paving 0.63 mi. Blakely-Colquitt Rd., Federal Aid Project 16, 6,674 sq.yd. 6 in. plain concrete. In addition city council will award to successful bidder 8,956 sq. yd. plain concrete pavement and 6,956 lin. ft. concrete curb and gutter. E. J. Smith, Williamson Bldg., Thomasville, engr.

Fla., Bradentown—Plans election to vote on $25,000 bonds constructing Main St., 24 ft. Kirley & Myler, Bradentown, engr.

Fla., De Land—Volusia Co. election Dec. 19, to vote on $170,000 bonds paving with rock, tarvia dressing, 17 mi. Dixie Highway through Oak Hill to Brevard Co. line; $80,000 bonds 8 mi. Dixie Highway from Shiloh Rd. to southern county line and Coronado Rd.; $50,000 bonds 5 mi. Dixie Highway from Rose Bay to Brevard Co. line; bonds for 30 mi. Dixie Highway from New Smyrna to Osteen Ferry Rd., all 15 ft. wide. R. Bishop, chn. Bd. Co. Comrs.

Fla., Tallahassee—Voted $125,000 bonds paving various streets, $12,000 for sewer extensions, and $8,000 repairing septic tanks.

Fla., Tavares—Lake Co. election Dec. 12, to created Special Road and Bridges Districts and vote on $225,000 bonds constructing 15 mi. road from Marion Co. line to Leesburg; $75,000 bonds 5 mi. road from Leesburg to Silver Lake Estates; $60,000 bonds 4 mi. road from Leesburg west to Sumter Co. line; $45,000 bonds 3 mi. road from Silver Lake Estates to Dead River Bridge; $30,000 bonds 2 mi. road from Euclid Ave. to Helena River; $90,000 bonds 6 mi. road from Silver Lake Estates along Rd. 2, to east line of district. Engineer not named, but probably G. E. Heller, Tavares.

Ky., Owenton—Owen Co. election Dec. 23, to vote on $200,000 bonds constructing roads, incl. roads from Owenton to Stamping Grounds and Frankfort.

Mich., Detroit — Having plans prepared paving with 3½ in. sheet asphalt on concrete, 2,600 sq.yd. Wager Ave. from Savery to McQuade Sts., 26 ft., $13,340; 2,100 sq.yd. Eastlawn Ave. from Charlevoix to Mack Aves., 26 ft., $11,490; 11,500 sq.yd Tireman Ave. from Livernois Ave. to Detroit Terminal R.R., 30 ft., $58,600; 8,000 sq.yd. Glendale Ave. from Linwood to Dexter Aves., 26 ft., $40,150; 1,600 sq.yd. Moyes St. from Burton to Martin Sts., 26 ft., $8,690, 3,800 sq.yd. Dodge St. from Hamtramck (branch of Detroit) to Mt. Elliott Ave., 26 ft., $19,250, 950 sq.yd. Linsdale Ave. from Colfax to Epworth Sts., 26 ft., $4,940, 1,800 sq.yd. Glinnan Ave. from Fort to Lafayette Sts., 16 ft., $8,780; 2,600 sq.yd. Fleming Ave. from Six Mile Rd. to Stender Ave., 26 ft., $13,300; 2,200 sq.yd. Quincy Ave. from Hazelwood Ave. to Joy Rd., 26 ft., $11,390; 700 sq.yd. Gibson Ave. from Tuscola to Selden Aves., 18 ft., $3,600; 4,300 sq.yd. Casper Ave. from St. Stephens to Michigan Aves. 20 ft., $21,760; 1,100 sq.yd. Hussar St. from Dragoon to Artillery Sts., 26 ft., $5,830; 3,000 sq.yd. Nardin Ave. from Bordeau to Burlingame Aves., 26 ft., $15,130; 3,000 sq.yd. Burton Ave. from Michigan to Pelouze Sts., 26 ft., $16,320. J. W. Reid, city engr.

South Dakota—State Hy. Dept., Pierre, plans grading and graveling 10 mi. Federal Aid Project 122, 70,000 cu.yd. excav., Deuel Co. $59,763. F. D. Hudgina, state engr.

N. D., Minnewaukon—Benson Co. plans grading 6 mi. road from Ramsey Co. line along south side of Court Lake to Ft. Totten. $30,000. G. A. Gilbertson, co. aud.

Ia., La Porte City—Making plans and takes bids about Jan. 15, paving various streets. $150,000. H. R. Green, Cedar Rapids Savings Bank Bldg., Cedar Rapids, engr.

Tex., Anson—Making plans paving various streets with brick. $100,000. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Tex., Ballinger—Runnels Co. making plans graveling and grading 15 mi. Coleman Ballinger Rd., Highway 7A. $80,000. U. Stephens, Ballinger, engr.

Tex., Beaumont — Jefferson Co. making plans grading and concrete surfacing 7.4 mi. State Highway 40 from here to Hardin Co. line, 16 ft., incl., 274 cu.yd. concrete, 25,000 cu.yd. earth excav., 70,643 sq.yd. 6 in. concrete pavement 19,292 lb. reinforcing. $254,088. A. C. Love, co. engr.

Tex., Center—Shelby Co. making plans grading and gravel surfacing 22 mi. State Highway 35 from Joaquin to Timpson, 16 ft., 40,000 cu.yd. roadway and 50,000 cu. yd. borrow excav., 600 cu.yd. concrete, 46,500 cu.yd. gravel etc. $185,224. J. H. Dillon, co. engr.

Tex., Corsicana — Navarro Co. making plans grading and gravel surfacing 7.7 mi. Corsicana Waco Rd., 18 ft. $80,000. McClendon & Purnell, Corsicana, engrs.

Tex., Dallas—Making plans paving 1 mi. Cadiz St. from Houston & Texas Central R.R. tracks to Ervay St. 40 ft., bitulithic or Uvalde rock asphalt. G. D. Fairtrace, city engr.

Tex., Garland—Making plans paving Pub. Sq., bituminous type. Cost to exceed $25,000. Nagle, Witt Rollins Co., Court House, Dallas, engrs.

Tex., Groesbeck—Limestone Co. plans improving 4 mi. Mexia Kosse Rd., 16 ft., crushed rock macadam. $28,800. F. P. Holt, Groesbeck, engr.

Tex., Houston—Soon lets contract gravel surfacing 55 streets. $200,000. J. C. McVey, city engr.

Tex., Jasper—Jasper Co. making plans grading and gravel surfacing 11 mi. State Highway 8, from Buna to Hardin Colline, 16 ft., 110,000 cu.yd. earth and 1,000 cu. yd. structural excav., 800 cu.yd. concrete, 23,100 cu.yd. gravel surfacing, 80,000 lb. reinforcing. $163,138. C. P. Hunter, co. engr.

Tex., Nacogdoches — Nacogdoches Co. plans election before Jan. 1, to vote on $775,000 bond issue for highway improvements. L. Acker, co. engr.

Tex., San Antonio—Had plans prepared paving, widening and straightening South Flores St. between Dolorosa and Nueva Sts. $300,000. D. D. Harrigan, Moore Bldg., engr.

Calif., Oakland—Had plans prepared improving 104th Ave. between East 12th and Sunnyside Aves., 117,759 sq.ft. grading, 361 lin.ft. concrete curb, 1,719 sq.ft. concrete gutter, 84,815 sq.ft. oil macadam pavement, 11,815 sq.ft. concrete walks, etc. W. W. Harmon, city engr.

Calif., San Diego—Had plans prepared improving Horton Ave., Laurel, Curlew, Union, Brant, Kalmia and 3rd Sts., 281,189 sq.ft. 1½ in. asphaltic concrete on 4 in. cement concrete, 285 lin.ft. concrete curb, 2,189 sq.ft. asphalt surfacing for gutters, etc. F. A. Rhodes, city engr.

Quebec—M. Nectkar, ch. engr. Dept. Rds., Quebec, preparing plans graveling roads in following towns and parishes: 3.15 mi. Templeton W., 1.45 mi. Templeton, 3.78 mi. Templeton E., 2.34 mi. Angers, 2.53 mi. St. Ange-Gardien, 3.65 mi. Masson, 2.66 mi. Buckingham S., 5.38 mi. Lochaber W., 1.1 mi. Thurso, 4.45 mi. Gore, 1.42 mi. Papineauville, 2.55 mi. St. Angelique, 3.51 mi. Bon-Secours, 11.1 mi. Grennele, 11.05 mi. Chatham.

Que., Montreal—Plans asphalt pavements on 809 ft. Soulanges St., 33 ft., $7,871, 3,850 ft. St. Charles St., 30 ft., $36,720 1524 ft. Rozel St. from Hibernia to Charlevoix Sts. 33 ft., $14,625, concrete sidewalks on 85 ft. Beaumont St., 5 ft., $431. H. A. Tetreault, ch. pub. wks.

Ont., Elora — Plans paving Main St., probably concrete. $50,000. A. Farrelly, chn. com.

Ont., Lucknow—Plans concrete paving ½ mi. Station Rd. $40,000. A. Johnston, chn. com.

British Columbia — Provincial Government, Victoria, plans hardsurfacing 8 mi. Scott Rd. from New Westminster to Ladner, concrete or bituminous macadam. $200,000. Provincial Government to appropriate ½ of cost, balance to be appropriated by Delta and Surry Municipalities. P. Philip, Dept. Pub. Wks., Victoria, engr.

BIDS DESIRED

New York—Dec. 19, by H. S. Sisson, comr. State Hy. Dept., Albany, improving highways in Albany, Cattaraugus, Monroe, Ontario, Otsego, Steuben and Suffolk Counties; reconstructing highways in Montgomery, Niagara, Steuben, Suffolk and Tioga Counties. J. C. Finch, secy.; adv. this issue.

N. Y., St. George — Dec. 8, by J. A. Lynch, pres. Richmond Boro, Boro Hall, paving from end of Richmond Turnpike at linoleum factory gate to Carteret Ferry. Former bids rejected. Noted Nov. 16.

Pa., Uniontown—Fayette Co. taking bids 2.1 mi. Rush Run Rd., 16 ft. wide, 4,800 ft. 6 in. rein.-con. with curb and 6,288 ft. 4 in. macadam surface on 11 in. Telford. Union Eng. & Constr. Co., 510 Union Trust Bldg., engrs.

Virginia—Dec. 14, at office State Hy. Comn., Richmond, (1) Project F-169-B, Route 3, (a) 9.95 mi. road from Blue Ridge Church to Tinkers Creek, Botetourt Co., (b) 7 bridges over streams on above road; (2) Project F-186-A, Route 12, 6.28 mi. road from Sandy River west in Pittsylvania Co.; (3) Project S-205, Route 1, (a) 9.91 mi. road from Fredericksburg to Spotsylvania Court House, Spotsylvania Co., (b) 2 bridges near Fredericksburg; (4) Project S-215, Route 13, (a) bridge over Appomattox Ri[illegible], Prince Edward Co., (b) approaches to above bridge. G. P. Coleman, Richmond, highway comr.; adv. this issue.

West Virginia—Dec. 19, by State Rd. Comn., Charleston, grading 5 mi. Union Rock Camp Rd., Project 3045, Monroe Co., $100,000, J. D. Syndenstricker, Union, engr.; 6 mi. Gilbot-Drennen Rd., Project 3047 B, Nicholas Co., $121,000, County Engr. Summersville; 6 mi. Frost-Sunset Rd., Project 2182 A, Pocahontas Co., $119,000, F. Echols, Marlinton, engr.; 6 mi. Shady Springs-Summers Rd., Project 3102, Raleigh Co., $120,000, County Engr., Beckley; 5.5 mi. Marrowbone-Crum Rd., Project 3188, Wayne Co., $100,000, H. O. Wiles Ceredo, engr.; 8.3 mi. Gassaway-Frametown Rd., Project 3157, Braxton Co., $200,000, R. M. Cavendish, Sutton, engr.; 8.2 mi. Northwestern Turnpike, Project 3160, Doddridge Co., $200,000, L. L. Gibson, West Union, engr.; 3 mi. Dull Creek-King Shoals Rd. Project 3170 B, Clay Co., $60,000, County Engr., Clay; 8 mi. Claysville-Grant Co. line Rd., Project 122 A, Mineral Co., $200,000, County Engr., Keyser; 7 mi. Petersburg-Franklin Rd., Project 3014, Pendleton Co., County Engr., Franklin; 12 mi. Valley Head-Webster Rd., Project 3033, Randolph Co., $250,000, E. G. Elliott, Elkins, engr.; grading and paving with water bound macadam surface 7 mi. Charlestown-Kearneysville Rd. Project 3026, Jefferson Co., $190,000, J. K. Hendricks, Charleston, engr.; grading and gravel surfacing 3 mi. Project 3078 A, Pleasants Co., $78,000, County Engr. St. Marys; 3 mi. River Run-New Martinsville Rd., Project 3082, Wetzel Co., W. H. Ramp, New Martinsville, engr.; all 18 ft. wide.

W. Va., Elkins—Dec. 5, by Comrs. Randolph Co., grading and bituminous macadam paving 1 mi. Harper-Log Lick Rd., 12 ft. $25,000. E. G. Elliott, Elkins, engr.

North Carolina—Dec. 6, by State Hy. Comn., Raleigh, grading and paving 7.93 mi. Project 659, Mecklenburg Co., 38,200 cu.yd. excav., 1,932 ft. 15-30 in. concrete pipe, 100 cu.yd. Class B and 220 cu.yd. Class A concrete, 83,740 sq.yd. concrete or asphaltic paving, etc. $253,000. C. M. Upham, state highway engr.

Streets and Roads (Continued)

North Carolina—Dec. 14, by State Hy. Comn., Raleigh, grading Project 201, Carteret Co.; constructing bridges on Project 138 B, Northampton Co.; Project 256, Lenoir Co. C. M. Upham, state highway engr.; adv. this issue.

Fla., Dade City—Dec. 4, by Comrs. Pasco Co., paving 32 mi. road east and west from here to Gulf, various types. $500,000. J. W. Turner, Lakewood, engr.

Fla., Homestead — Dec. 4, 50,000 sq.ft. sidewalk, 1,405 lin.ft. gutter, 291 lin.ft. curb. $25,000. B. M. Duncan, Homestead, engr.

Ala., Mobile—Dec. 28, by Bd. Comrs. resurfacing 45,868 sq.yd. various streets. W. Smith, city engrs.; adv. this issue.

Tennessee—Dec. 15, by State Dept. Hy., Nashville, improving 5.75 mi. road between Gallatin and point 1 mi. east of Avondale, Federal Aid Project 63, Sumner Co., 18 ft., 14,406 cu.yd. common and 2,778 cu.yd. borrow excav., 10,952 sq.yd. scarifying old macadam, 62,512 sq.yd. 9½ in. hand placed base course "D," alternate bids on 6 in. 8 in. 6 in. plain cement concrete pavement, 2 in. rock asphalt surface and 2 in. bituminous concrete surface on 9½ in. standard hand placed base "D"; 2.85 mi. road between city limits of Knoxville and point 1½ mi. west of Bearden, Federal Aid Project 41, Knox Co., 18 ft., 24,520 cu.yd. common excav., 29,609 sq.yd. 9½ in. hand placed coarse stone base "D," 21,029 sq.yd. 1½ in. rock asphalt surface, alternate bids on 2 in. rock asphalt surface 2 in. bituminous concrete B, both on 9½ in. hand placed base "D" and 6 in. 8 in. 6 in. plain cement concrete pavement, also two 18 ft. span bridge on above project; 9.53 mi. road between Humboldt and Trenton, Federal Aid Project 86, Gibson Co., 16 ft., 102,222 cu.yd. common and 1,170 cu.yd. dry excav., 89,433 sq. yd. 2½ in. bituminous macadam surface course, 92,228 sq.yd. hand placed base course "C" alternate bids for plain cement concrete pavement 6 in. 8 in. 6 in., and 1½ in. rock asphalt, on 9½ in. standard hand placed base "D," bridge over 20 ft. span located Sta. 236-65, one 36 ft. span; 692 ft. bridge over Elk River, Federal Aid Project 25, Giles Co., located at Sta. 762-47, to have twenty 26 ft. 6 in. rein.-con. spans and one 160 ft. steel truss. D. S. McComb, Nashville, ch. engr.

Michigan—Dec. 5, by State Hy. Dept., Lansing, grading and surfacing 5.08 mi. State Trunk Line Rd. 48-8, Machinac Co., 25,387 cu.yd. excav. and 47,673 sq.yd. waterbound macadam. F. F. Rogers, state highway comr.

Ia., Dubuque—Dec. 5, by Supervs. Dubuque Co., grading 18,239 mi. primary road from southeast of Rickardsville to Clayton Co. line, 209,700 cu.yd. earth and 41,944 cu.yd. rock excav., 82,905 ft. of 6 in., 5,520 ft. 8 in. and 1,090 ft. 10 in. tile drain, etc.

Ia., Lisbon—Dec. 7, paving 21,000 yd. various streets, 10,750 ft. curb and gutter. $73,000. C. R. Runkle, clk. H. R. Green, 634 Cedar Rapids Savings Bank Bldg., Cedar Rapids, engr.

Ia., Mt. Ayr—Dec. 12, by Supervs. Ringgold Co., grading 11.87 mi. primary road west, north and east of Kellerton and Union Co. line, south toward here. Iowa Hy. Comn., Ames, engrs.

Minn., Duluth—Dec. 8, by F. W. Borgen, aud. St. Louis Co., subgrading 11,500 ft. Becks Rd., 24 ft., between Gary St. and State Rd. 2, Co. Job N5,2222, concrete and brick culverts. $40,000. R. W. Acton, Courthouse, engr.

Minn., Duluth—Dec. 22, by F. W. Borgen, aud. St. Louis Co., graveling 25 mi. road from Tower to Ely, 24 ft. $60,000. Former bids rejected. R. W. Acton, Courthouse, co. engr. Noted Oct. 26.

Kan., Columbus — Dec. 15, by Comrs. Cherokee Co., paving 4.634 mi. Spring Valley Rd., Sects. A and B, Federal Aid Project 142, 18 ft., concrete. L. Noftzeger, co. engr. Noted Nov. 16.

Kan., Mound City—Dec. 23, (change of date) by Comrs. Linn Co. grading, etc., 10.473 mi. La Cygne-Pleasanton-Prescott Rd., Project 109 C, 27 ft., $55,000; 7.28 mi. La Cygne Pleasanton-Prescott Rd., Project 146 A, 30 ft., $75,000. Kansas Eng. Co., Topeka, engrs. Noted Nov. 23.

Missouri—Dec. 8, by State Hy. Dept. at div. office Montgomery City, grading 4.062 mi. road from McKittrick northwardly, 12 ft., Federal Aid Project 141, Montgomery Co. B. H. Piepmeier, state highway engr. Noted Oct. 26.

Mo., Maplewood—Dec. 6, by G. Komar, city clk., City Hall, and St. Louis Co., (Clayton) constructing 3,100 ft. Greenwood Blvd. from Big Bend Rd. to Canterbury Ave., 30 ft. $40,000. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, engr. Noted Nov. 2.

Tex., Beaumont—Dec. 7, by J. B. Peek, judge Jefferson Co., grading and paving 7.35 mi. State Highway 40, Federal Aid Project 349, 16 ft., (a) rein.-con., (b) Bituminous macadam, 5,845 cu.yd. concrete, 20,185 cu.yd. roadway and 17,715 cu.yd. earth excav., $317,088; 6.81 mi. State Highway 3 from Liberty Co. line east, 18 ft., (a) 68,064 sq.yd. bituminous surfacing, 71,664 sq.yd. concrete base, (b) 71,664 sq.yd. rein.-con. pavement, 179,674 lb. reinforcing steel, etc., $335,000; 8.72 mi. State Highway 3 from Amelia west, 18 ft., (a) 91,820 sq.yd. rein.-con. pavement, 229,987 lb. reinforcing, (b) 81,105 sq.yd. bituminous, 91,820 sq.yd. concrete base; etc. $397,500. A. C. Love, co. engr.

Tex., Corsicana—Nov. 13, by A. P. Mays, judge Navarro Co., grading and paving, 1 mi. road through Richland Creek Bottom in Winkler Rd. Dist. 15, 15 ft., repairing bridge and resetting pier on 60 ft. steel span over Richland Creek, 1,000 cu.yd. road and 3,000 cu.yd. ditch excav., 8,500 sq.yd. concrete pavement, 24,000 lb. rein.-forcing, to G. A. Duren, Sumpter Bldg., Dallas, $34,900.

Colorado—Dec. 4, by State Hy. Comn., Denver, grading 11.787 mi. Ocean to Ocean Highway, State Aid Project 694, Park Co., 18 ft., clearing 14 acres, 14,700 cu.yd. borrow, 66,500 lb. structural and 27,500 lb. reinforcing steel, etc., $58,114; gravel surfacing 3.89 mi. Santa Fe Trail, Federal Aid Project 218-B, Bent Co., 18 ft., 7,800 cu.yd. overhaul, 36,860 sq.yd. gravel surfacing, 1,054 cu.yd. concrete, 25,400 lb. reinforcing, 10,600 cu.yd. earth excav., etc., $50,929; 11 timber bridges on State Roads 32 and 9-S, Cheyenne Co., $21,385. L. D. Blauvelt, State Capitol Bldg., Denver, highway engr.

Calif., San Diego—See "Miscellaneous."

Calif., San Francisco—Dec. 6, by Bd. Pub. Wks., improving north ½ Sloat Blvd. between 19th and 35th Aves., 1,500 cu.yd. excav., 3,300 cu.yd. fill, 152,270 sq.ft. 1½ in. asphaltic concrete on 6 in. concrete, 9,950 lin.ft. 2 x 8 in. r. w. headers, 1,400 sq.ft. basalt block pavement on concrete foundation, 370 cu.yd. gravel surface, for city and San Francisco Co. $52,000, to be paid from county road funds. M. M. O'Shaughnessy, city engr. Noted Aug. 31.

Quebec—Dec. 30, by J. L. Boulanger, deputy minister of highways, Quebec, graveling 18.36 mi. Levis-Sherbrooke Highway, in parishes of St. Nicolas, St. Redemptour, St. Ettiene, St. Gilles, St. Agapit and Shipton. M. Necktar, ch. engr.

Quebec — Dec. 30, by J. L. Boulanger, deputy minister of highways, Quebec, graveling 41.77 mi. Rimouski-Matapedia Highway, through St. Florence, Restigouche, Assemtequgau and St. Laurent de Matapedia Twps. M. Nectkar, Dept. Rds., engr.

BIDS RECEIVED

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., opened bids Nov. 22, repaving (1) East 31st St., granite block on concrete (2) West 74th St., sheet asphalt, restoring roadway foundation curb and sidewalk on (3) West 141st St., widening and repaving (4) Canal St., granite block, from Casper Helbock, 633 Wales Ave., (1) $13,665; P. J. Kearns Contg. Co., 2306 Creston Ave., (1) $15,143 (3) $2,932 (4) $12,320; Burnside Contg. Co., 270 Burnside Ave., (1) $16,178 (3) $2,738 (4) $13,132; Brusstar Constr. Co., Harlem River and 150th St., (2) $2,799; Asphalt Constr. Co., 208 Bway., (2) $3,045; Sicilian Asphalt Paving Co., 41 Park Row, (2) $3,610. Noted Nov. 16.

Fla., Pensacola—Escambia Co. paving 10 mi. road from Pensacola to Roberts, 16 ft., from C. H. Turner Constr. Co., Pensacola, using 6 in. plain cement concrete $250,808; S. S. Fulgham, Pensacola, $270,265; J. F. Morgan Paving Co., Jacksonville, (street address not available) bituminous macadam $375,734, sheet asphalt $320,454.

Fla., Tampa—Hillsborough Co. paving (1) 4.78 mi. Seffner-Thonotosassa Rd. (2) 14.74 mi. Hopewell-Tampa Rd. (3) 6.06 mi. Lake Magdalene Rd. (4) 6.75 mi. Temple Terraces (5) 6.65 mi. Midway Rd. (6) 12.23 mi. River View Brick Rd. (7) 14.74 mi. Interbay Rd. (8) 2.02 mi. Waters Ave. (9) 3.56 mi. Armenia Ave. (10) 15.13 mi. Citrus Park Rd. (11) 2.35 mi. Wimaumo Rd. (12) 17.11 mi. Plant City-Picnic Rd. (13) 28.02 mi. Bayshore Rd. to Manatee Co. line (14) 11.16 mi. Lithia Rd. (15) 10.91 mi. Plant City-Thonotosassa Rd. with (a) brick (b) asphalt block (c) 2½ in. sheet asphalt (d) 5 in. rock (e) relaid brick (f) new brick, from Mickler & McLeod, Stovall Bldg., (1a) $2.32 per sq.yd. (5a) $2.41; Warren Bros. & Carroll, Tampa, (street address not available), (1b) $1.95 (5b) $2 (11b) $1.925 (12b) $2.10 (13b) $1.905 (14b) $1.98; Dixon Contg. Co., Real Estate Bldg., Savannah, Ga., (1c) $1.20 (1d) $0.96 (12c) $1.31 (12d) $0.99; W. H. Kendrick, 104 B Melville Ave., (2a) $2.40 (6e) $0.40 (6f) $2.35 (11a) $2.35 (12a) $2.45 (13a) $2.25 (14a) $2.35 (15a) $2.40; Cone Bros., Tampa, (street address not available), (2b) $1.95 (3b) $1.98 (7b) $1.97 (9b) $1.90; W P McDonald Constr. Co., Orlando, (2c) $1.29 (2d) $0.80 (4c) $1.34 (4d) $0.86 (5c) $1.30 (5d) $0.91 (7c) $1.33 (7d) $0.91 (11c) $1.46 (11d) $0.80; J. G. Yeates Paving Co., Tampa (street address not available), (3a) $2.27 (4a) $2.25 (6e) $0.60 (6f) $2.40 (7a) $2.26 (8a) $2.25 (9a) $2.26 (10a) $2.58; J. F. Morgan Paving Co., 514 Graham Bldg., Jacksonville, (3c) $1.38 (3d) $0.82 (8c) $1.31 (8d) $0.77 (9c) $1.31 (9d) $0.80 (10c) $1.33 (10d) $0.80 (13c) $1.34 (13d) $0.81 (14c) $1.33 (14d) $0.82 (15c) $1.40 (15d) $0.86; Bruen & Sullivan, Tampa, (street address not available), (4b) $1.89 (8b) $1.90 (10b) $1.92 (15b) $1.94. Noted Oct. 26.

Tex., Marlin—Falls Co. grading, gravel surfacing and bridging 9.22 mi. State Highway 44, Federal Aid Project 297, 16 ft., from Hannah Constr. Co., Box 994, Waco, $80,354; P. M. Skinner, Southwestern Life Bldg., Dallas, $80,654; Kuykendall & Shelton, Temple, $85,458. Noted Nov. 9.

Wash., Seattle — Opened bids Nov. 17, paving and trestle work on Railroad Ave., 7,750 sq.yd. asphaltic concrete, 43,000 lin.ft. creosoted piling, 2,000 ft. old piling, 625,000 ft. trestle lumber, from Hauge & Espaland, 1813 North 50th St., $96,185; Jahn & Bressi, Thompson Block, $97,176; Standard Constr. Co., Seaboard Bldg., $99,163.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to Grimm Constr. Co., 170 McKinley Ave., grading, curbing and flagging Bay Ridge Ave., etc., $4,366, Clinton Pl. $1,289, Rutland Rd. $5,393, 58th St. $1,100; to F. Persicano, 350 Fulton St., Ave. H $2,253, 77th St., $802; to C. Gallagher, 745 Dean St., Kings Highway $3,426; to Castle Bros. Inc., Johnson Pl., East 19th St. $3,435; to G. M. Mandatta, 129 29th St., 76th St. $5,256; to Caponi Contg. Co., 1320 25th St., Narrows Ave. $15,445; to L. Mangeri, 190 31st St., 88th St. $7,351; to Sicilian Asphalt Paving Co., 41 Park Row, New York, paving Kingston Ave. $10,792, Midwood Ave. $13,080, Newport St. $5,191, grading and paving Snediker Ave. $5,382, Montgomery St. $7,919, repaving Rockaway Ave. $19,192; to Borough Asphalt Co., 1301 Metropolitan Ave., East 12th St. $8,354; to Cranford Co., 52 9th St., East 37th St. $4,040, East 8th St. $8,094, East 8th St. $15,663, East 7th St. $7,548, Ave. R $3,892, grading and paving Ave. S $2,982; to Cleveland Trinidad Paving Co., Flushing, New Utrecht Ave. $6,291; to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., grading and paving 86th St. $31,060, 83rd St. $6,824, repaving Court St. etc., $10,531, Franklin Ave. $6,020. Noted Oct. 26 and Nov. 2.

W. Va., Hamlin—Lincoln Co. grading 3½ mi. Harts-Logan Co. line Rd., 18 ft., to Hunt-Forbes Constr. Co., Ashland, Ky., $40,554.

W. Va., Winfield — Putnam Co. paving with bituminous macadam 2 mi. McLean Turnpike, Project 2170, to J. L. McDermott & Son, Pt. Pleasant, $43,755.

North Carolina—State Hy. Comn., Raleigh, grading and paving in Raeford, Hoke Co., Project 546, 8,900 sq.yd. sheet asphalt on concrete, 3,000 cu.yd. excav., etc., to Dawkins Constr. Co., Greenwood Bldg., Norfolk, Va., $25,408.

S. C., St. George—Dorchester Co., constructing 4 mi. road between Dorange and Reevesville, to J. B. Johnston, St. George, $17,117; bridge on above road, to Funderbunk Constr. Co., Orangeburg, $6,380. Noted Nov. 2.

Fla., Tampa—Paving Rome Ave., 2½ in. asphalt brick, granite curb, to J. M. Yeates Co., Tampa, $27,521.

Miss., Pascougoula—Bd. Supervs. Jackson Co. at office of Chancery clk., 8.44 mi. Federal Aid Project 126, Sect. A, from Moss Point to Alabama state line, 18 ft., rein.-con., to S. A. Gano, 715 Maison Blanche Bldg., New Orleans, La., $269,588. Noted Nov. 26.

Louisiana—State Hy. Dept., Baton Rouge, 7 mi. Monroe-Jonesboro Rd., Ouachita Parish, to Lambert Constr. Co., Alexandria, $61,000.

Kentucky—State Hy. Dept., Frankfort, surfacing with rock asphalt 0.415 mi. Pineville-Middlesboro Rd., State Project 5, Sect. C. Bell Co., to Davis & Graham, Pineville, $17,507. Noted Nov. 16.

Streets and Roads (Continued)

Michigan — State Hy. Dept., Lansing, grading and surfacing 4.724 mi. State Trunk Line Rd. 15-12, Sect. A, Menominee Co., to Menominee Co. Rd. Comn., Menominee, incl. 36,418 cu.yd. excav. $0.50, 59 cu.yd. 1:2:4 concrete $17, 44.3 cu.yd. 1:3:6 concrete $15, 44,191 sq.yd. stone-gravel surface $0.67, total $53,863. Noted Nov. 2.

Wis., Milwaukee—Grading 122,000 cu.yd. earth north of and adjacent to harbor entrance, to R. Kucharski, 796 Rogers St., $0.30 and $0.33 per cu.yd. Noted Nov. 9.

Ia., Greenfield—Comrs. Adair Co., grading 5.4 mi. Greenfield-Fontanelli Rd., Federal Aid Project 173, Sect. B, to J. H. Miller & Son, Corydon, 129,055 cu.yd. earth excav. $0.249 per cu.yd.; Fitzgerald & Hogan, Tipton, 16,045 ft. 6 in. tile $0.135 per ft., 1,250 ft. 10 in. $0.276, 200 ft. 12 in. $0.345 per ft. Noted Nov. 9.

Ia., Washington—Washington Co. grading 5.083 mi. primary road from Keokuk Co. line east, to N. C. Nelson, Eagle Grove, 94,104 cu.yd. excav. $0.244 per cu.yd.

Minn., Crookston — Polk Co., to E. F. Reamer, Hibbing, 8.7 mi. State Project 30-01, Federal Aid Project 271, between Winger and Erskine, 94,000 cu.yd. excav., $25,298; 2.1 mi. Federal Aid Project 292, $21,052; 18.6 mi. State Project 8-06, Federal Aid Project 278, between Erskine and Lengby, 296,000 cu.yd. excav., portable and monolithic culverts, one 20 ft. concrete span and one 23 ft. concrete deck girder span bridge, $82,808; to C. A. Pogue, 4th and Winnipeg Sts., Grand Rapids, 14.2 mi. State Project 6-06, Federal Aid Project 293, between Crookston and Euclid, 190,270 cu.yd. excav., portable and monolithic culverts, $42,955. Noted Oct. 5.

Minn., Duluth—St. Louis Co., to Butler Bros. Building Co., Hamm Bldg., St. Paul, 5.42 mi. State Job 2208, from Hibbing to Chisholm, 51,773 sq.yd. concrete; 4.97 mi. State Job 2209, from Chisholm to Buhl, 52,688 sq.yd. concrete; 7.59 mi. State Job 2210, from Buhl to Mountain Iron, 81,002 sq.yd. concrete; 2.61 mi. State Job 2211, from Mountain Iron to Virginia, 27,970 sq.yd. concrete; 3.62 mi. State Job 2212, from Virginia to Gilbert, 39,346 sq.yd. concrete; 6.93 mi. State Job 2213, from Gilbert to Biwabik, 74,375 sq.yd. concrete; 5.09 mi. State Job 2214, from Biwabik to Aurora, 54,837 sq.yd. concrete, total cost of above projects $985,695; 1.17 mi. Thompson Hill Rd., Co. Job 2153, from here to Carlton Co. line, 13,971 sq.yd. concrete, $36,920; 4.82 mi. State Rd. 2, Federal Aid Project 171, from here to Carlton Co. line, 50,975 sq.yd. concrete, $133,795; 7.9 mi. State Rd. 3, Federal Aid Project 201, from here to Lake Co. line, 81,621 sq.yd. concrete, $213,623. Noted Oct. 19.

Wyo., Casper—Paving 25,600 yd. Railroad Ave., Kimball and Beech Sts., 2 in. Warrenite bitulithic with seal coat on 3 in. bituminous concrete, 6,000 cu.yd. excav., 7,908 lin.ft. concrete curb, etc., to Warren Constr. Co., Casper, paving $2.15 per sq.yd., excav. $0.98 per cu.yd., total $78,776. Noted Oct. 26.

Missouri—State Hy. Dept. at div. office Ironton, 11.26 mi. road from Ironton to Rotosi, Federal Aid Project 107 A, Iron Co., 7,650 lin.ft. grading, 13,724 sq.yd. bituminous macadam on broken stone base, etc. to Campbell Equipment Co., Minneapolis, Minn. (street address not available) $57,128. Noted Nov. 16.

Missouri—State Hy. Dept., Jefferson City, to L. Renzel, Jackson, 3.41 mi. road on Kings Highway, State Project Route 25, Sect. 22, Cape Girardeau Co., $1,318; 4.928 mi. road on King Highway, State Project Route 25, Sec. 20, Cape Girardeau Co., $20,953; 4.377 mi. road on Kings Highway, State Project Route 25, Sect. 21, Cape Girardeau Co., $13,520. Noted Nov. 16.

Missouri—State Hy. Dept., at div. office Platte City, 13.687 mi. road on Jefferson Highway, Federal Aid Project 96, Platte Co. 90,773 cu.yd. earth and 4,300 cu.yd. rock excav., 13,649 cu.yd. borrow, etc. to Diemer Williamson Constr. Co., Brookfield, $54,785. Noted Nov. 16.

Tex., Groesbeck—Paving 6 blocks, 11,860 sq.yd. 2½ in. vertical fibre brick on 5 in. concrete 2,450 lin.ft. curb and gutter, to Janes Constr. Co., Southwestern Life Bldg., Dallas, $44,000.

Tex., Lufkin — Angelina Co. grading, gravel surfacing and bridging 13.54 mi. Highway 7 between Huntington and Zavalla, 16 ft., to J. S. Moore & Sons, Lufkin, $160,356. Noted Nov. 16.

Tex., Orange—Orange Co. 5 mi. concrete road, 18 ft., to F. P. McElrath, Coriscana, $2.50 per sq.yd. 6 in. concrete.

Tex., Tahoka—For 20,333 sq.yd. brick paving on natural base, and 3,846 lin.ft. curb and gutter, to Plains Paving Co., Amer. Natl. Bank, Wichita Falls, $120,000. Noted Aug. 10.

Okla., Marietta—For 25,100 sq.yd. rock asphalt pavement and 16,200 ft. curb and gutter, to H. Kidd, Hutchinson, Kan., $138,000. Noted Oct. 26.

Wash., Ephrata—Grant Co. grading and surfacing 2 mi. road from Vantage Ferry to Beverly, 14,000 cu.yd. earth, 8,000 cu.yd. loose and 9,000 cu.yd. solid rock excav., etc., to Rajotte-Winters, Realty Bldg., Spokane, $39,650. Engrs. est. $40,190.

Wash., Seattle — Concrete paving Alki Ave. et al, to Fiorito Bros., 3950 6th Ave. N. W., $112,309, engrs. est. $119,831; Taylor Ave., to J. L. Smith, Pioneer Bldg., $32,769. Noted Nov. 23.

Oregon—State Hy. Comn., Salem, clearing, grading and surfacing Pendleton-Despani-Gulch Highway, Umatilla Co., to Warren Constr. Co., Craig Rd., Portland, 244 ft. 18 in. corrugated galvanized pipe $2.20, 220 ft. 24 in. $3, 32 ft. 36 in. $6, 6 cu.yd. Class B concrete $30, 38.5 cu.yd. Class C $25, 7,450 cu.yd. crushed gravel surfacing $1.85, etc., total $27,087.

Calif., Bakersfield—Improving California Ave., to Federal Constr. Co., Call Bldg., San Francisco, $49,745. Noted Nov. 23.

Calif., Stockton — Supervs. San Joaquin Co., paving with oil macadam Locust Ave. Rd. and Netter Rd., to Isey & Holden, Lodi, $26,087 and $10,085 respectively. Noted Nov. 23.

Que., Montreal—Asphalt pavements on 1,125 ft. Christopher Columbus St. from Everett to Hanatoux Sts., 50 ft., to B. Brault Ltd., 2855 Rosemount Blvd., $26,915.

Industrial Works

PROPOSED WORK

N. H., Manchester—Carpenter Hotel Co. had plans prepared by H. W. Rhodes, archt., 574 A Congress St., Portland, Me., 1 story, 70 x 160 ft. garage, brick. $40,000.

Mass., Clinton—Roubaix Mills, Inc., 792 Main St., having plans prepared by Lockwood, Greene & Co., archts. and engrs., 24 Federal St., Boston, and soon take bids 1 story dyehouse, brick and steel, plain foundation. $50,000.

R. I., Woonsocket—Rhode Island Knitting Co., Jeffers St., soon lets contract 2 story, 40 x 100 ft. mill addition, rein.-con. and brick, plain foundation, Jeffers St. $50,000. Noted Nov. 16.

Conn., Bridgeport—A. V. Langenegger, 2190 Park Ave., having plans prepared by Fletcher-Thompson, Inc., archts. and engrs., 542 Fairfield Ave., 3 story, U-shaped factory, brick and heavy timber, Federal St. $150,000.

Conn., Hartford — Hartford City Gas Light Co., 565 Main St., plans large addition to gas generating plant. Architect not selected.

Conn., New Haven—Connecticut Co., 127 Church St., plans 2 story power plant addition. $150,000. Architect not announced.

Conn., Waterbury—Brass City Machine & Tool Wks., 29 Pearl St., soon lets contract 2 story and basement factory addition, brick and timber, plain foundation. $40,000.

Conn., Westport — Lees Mfg. Co., 320. Bway., New York City, having plans prepared by Fletcher-Thompson, Inc., archts. and engrs., 542 Fairfield Ave., Bridgeport, 3 story, 50 x 150 ft. factory brick and timber, here. $75,000.

N. Y., Buffalo—Citizens Commercial Safe Deposit Co., Ellicott Sq., plans storage building, William St. $75,000.

N. Y., Buffalo—Kittinger Bros., 1893 Elmwood Ave., plans addition to factory, brick. $40,000. Architect not announced.

N. Y., New York—Harper Bros., 333 Pearl St., soon receive bids 5 story publishing plant, brick and steel, plain foundation, East 33rd St. Warren & Wetmore, 16 East 47th St., archts. and engrs. $800,000.

N. Y., Parmas—Cooper Electric Corp., Hilton, plans lighting and power plant, here. $50,000.

Pa. Altoona—W. J. Lee, 1303 7th Ave., plans 3 story and basement, 100 x 120 ft. rein.-con., brick and steel wholesale house, 7th Ave. and 13th St. $150,000. Architect not selected.

Pa., Erie — Northwestern Motors Co., 21st and State Sts., plans to rebuild brick factory recently destroyed by fire. $200,000.

Pa., Nanticoke—Nanticoke Garage Co., having plans prepared by G. T. Price, archt., 409 Miller Bldg., Scranton, 3 story, 46 x 100 ft. brick, stone and tile garage, Spring St. $65,000.

Pa., Kendall (Coraopolis P. O.)—Duquesne Steel Fdry. Co., Farmers Bank Bldg., Pittsburgh, plans to rebuild major portion of foundry destroyed by fire, here. $300,000.

Pa., Pittsburgh—Pure Oil Co., Chestnut and High Sts., Columbus, O., having plans prepared 1 story and basement, 80 x 150 ft. rein.-con., brick and steel garage. Private plans.

Pa., Tullytown—Megargee Paper Mills, 16 South 5th St., Phila., plans plant near here. Architect not selected.

Md., Baltimore—Air Reduction Co., 342 Madison Ave., New York City, having plans prepared by Francisco & Jacobus, engrs. and archts., 511 5th Ave., New York City, acetylene plant, brick and concrete, Fayette St., here. $150,000.

N. C., Lillington—Cape Fear Gravel Pits, Inc., plans gravel production plant also plant for the manufacture of concrete building blocks and tile. $250,000. C. W. Lacy, pres.

Miss., Magee—Plans electric light and waterworks improvements. $25,000. Swanson-McGraw, Inc., 704 United Fruit Bldg., New Orleans, La., consult. engrs.

Ky., Paducah—Paducah Ice. Co. plans 2 additional units to ice manufacturing plant. $70,000. Architect not announced.

Mich., Lansing—United Produce Co., c/o W. S. Holmes, archt., Tussing Bldg., had sketches made for 4 story and basement, 84 x 280 ft. cold storage plant, rein.-con. and steel, plain foundation, Kalamazoo St. $200,000.

Mich., St. Joseph—Whitcomb Hotel having plans prepared by Cahill & Douglas, engrs., 217 West Water St., Milwaukee, Wis., power plant and brick stack.

Wis., Hustisford—J. Hurley, Hartland, plans 2 story, 75 x 150 ft., dairy, brick and rein.-con., plain foundation, here. $50,000. Architect not selected.

Wis., Milwaukee—Welch Investment Co., 105 Wells St., having plans prepared by H. C. Hengels, archt., 445 Milwaukee St., 2 story, 75 x 150 ft. addition to garage, brick and concrete, plain foundation. $50,000.

Wis., Wisconsin Rapids—Prentiss-Wabers Co. plans 2 story, 50 x 110 ft. factory, brick and steel, plain foundation. $50,000. Architect not selected.

Wis., Sheboygan—Vulcan Last Co., Crandon, plans 2 story, 75 x 125 ft., brick, rein.-con. and steel factory, plain foundation, here. Architect not selected.

Mo., St. Louis—G. O. Langenberg, archt., 4045 Forest Park Blvd., soon lets contract 3 story and basement, 150 x 200 ft., furnace factory, rein.-con. and brick, plain foundation, Bircher St. near Euclid St., for Haynes-Langenberg Mfg. Co., 4045-47 Forest Park Blvd. C. W. Morton, 1339 Syndicate Trust Bldg., engr. Noted Nov. 16.

Ark., Cotter—Dixie Power Co., Batesville, opens bids about Jan. 1, hydro electric plants with dams on White, Buffalo and Big North Fork Rivers, here. $15,000,000.

Tex., Canton—See "Waterworks".

Tex., McLean—See "Waterworks".

Ore., Haines — Commercial Creamery plans to rebuild plant destroyed by fire. $60,000-$75,000. A. H. Goodhue, pres.

Calif., San Francisco — O'Brien Bros., Inc., archts., 240 Montgomery St., preparing plans five 1 story, concrete garages and show rooms, various sections of city. $100,000. Owner's name withheld.

Calif., San Francisco—Reinhart Lumber & Planing Mill Co., 17th and Kansas Sts., has 5 acres in southern section of city and plans planing mill.

Calif., San Francisco — San Francisco Chronicle, Chronicle Bldg., plans newspaper plant, loft and office building, 5th and Mission Sts. M. D. De Young, publisher. Architect not announced.

Calif., San Francisco—State Bd. Harbor Comrs., Ferry Bldg., take bids in about 4 months, 6 story, 122 x 812 ft., rein.-con. warehouse, China Basin. $2,000,000. F. G. White Ferry Bldg. ch. engr. Foundation work (almost completed) was let to Healy-Tibbitts Constr. Co., 9 Main St., $761,343.

Calif., San Francisco—De Boom Paint Co., 560 Clay St., had plans prepared by H. A. Minton, archt., Monadnock Bldg., 2 story, rein.-con. shop and loft building, Commercial St. near Montgomery St.

Que., Outremont—Perrault & Gadbois, archts., Park Ave., Montreal, will take bids Dec. 6, for 4 story, and basement, 100 x 157

Industrial Works (Continued)

ft. garage, Bernard and De L'Epee Aves. Owner's name withheld.

Ont., Ford—Ford Motor Co. of Canada, had plans prepared by A. Kahn, archt., 1000 Marquette Bldg., Detroit, Mich., 1 story, 22 ft. high, 570 x 1,088 ft. and 2 story, 44 ft. high 65 x 1,088 ft. machine shops, rein.-con., brick and steel, plain foundations.

Ont., Welland—Welland Cotton Co. having plans prepared 1 and 2 story, 100 x 350 ft. rein.-con. mill, Bergar St. $250,000 Private plans.

B. C., Vancouver—Cranes Shipyards, Ltd., North Vancouver, plans to remove old plant and build new ship repair plant and marine ways, Georgia and Denman Sts, $40,000. Private plans.

BIDS DESIRED

R. I., Providence—G. Wolf, archt., 88 Althea St., taking bids 2 story, 50 x 120 ft. garage and service station, brick and rein.-con., plain foundation, Pearl St., for Goldberger & Brody, c/o architect. $55,000.

Pa., Johnstown—E. Hahn Packing Co., Hickory St., taking bids 3 story and basement, 48 x 108 ft. and 24 x 112 ft. concrete and brick addition to plant, Hickory St. $65,000. Private plans.

Pa., New Castle—Natl. Radiator Co., Central Ave. and Ohio St., Johnstown, will build 1 story, 30 x 365 ft. concrete, brick and steel addition to foundry. Work will be done by separate contracts. J. E. Adams, Nemo Bldg., Johnstown, engr.

Pa., Phila.—P. Dandolfi, 41st and Poplar Sts., taking bids 2 story, 50 x 200 ft. brick and steel garage, plain foundation, Wyoming and Muscher Sts. $75,000. Neubauer & Supowitz, 929 Chestnut St., archt.

Pa., Pittsburgh—Auto Truck Equipment Co., 7511 Penn Ave., and A. G. Wickersham, archt., 517 McClure Ave., Homestead, taking bids 1 story and basement, 31 x 99 ft. concrete and brick shop 7505 Penn Ave.

Pa., Shamokin—A. W. Gortner & Sons, taking bids 2 story and basement, 49 x 125 ft. rein.-con., brick and steel warehouse, plain foundation. $75,000. W. H. Lee, 32 South 17th St., Phila., archt.

Wis., Cedarburg—Hansen Canning Machine Co., Port Washington, taking bids 1 story, 112 x 112 ft., concrete and steel factory, plain foundation. $40,000. Private plans.

Wis., Madison—Valvoline Oil Co., 815 East Main St., taking bids two 40 x 50 ft. filling stations incl. oil storage tanks, pumps, warehouse, brick, Lakeside St. $40,000. A. D. Conover, Tenney Bldg., archt.

Wis., Milwaukee—Leiser & Holst, archts., 105 Wells St., taking bids 1 story and basement, 45 x 115 ft., tile and steel factory addition, plain foundation, for Milwaukee Gas Specialty Co., 2017 Clybourn St. $40,000.

Calif., Isleton—J. F. Butts Co., 2 Pine St., San Francisco, receiving bids 1 story, 100 x 260 ft. cannery, 80 x 120 ft. warehouse, 36 x 200 ft. wharf, 30 x 70 ft. can house, boiler room building, 30 cottages and apartment house, here. $150,000. W. J. Miller, 417 Market St., San Francisco, archt.

Calif., Newman—Natl. Ice Cream Co., 371 Guerrero St., San Francisco, receiving bids 2 story, rein.-con. and steel plant. Wieland-Mazurette-Wieland, 1002 H St., Modesto, archts. Noted Feb. 2.

Calif., San Francisco — A. S. Bugbee, archt., 26 Montgomery St., receiving bids 2½ story and basement, rein.-con. garage, Sacramento St. near Polk St., for L. R. Lurie, Mills Bldg. $54,000. Noted Nov. 16.

Calif., Tracy—General Milk Co. of California will build rein.-con. and steel plant, by separate contracts. $75,000. Metal lath, to General Fireproofing Co., 20 Beale St., San Francisco; structural steel to Union Constr. Co., Key Route Basin, Oakland; pipe and fittings to General Mchy. Co., 39 Stevenson St., San Francisco.

CONTRACTS AWARDED

Mass, Boston—Boston Flower Exchange, Inc., 1 Winthrop Sq., 2 story, 135 x 200 ft. garage and mercantile building, brick, wood pile foundation, 541 Tremont St., to L. P. Soule & Son Co., 80 Boylston St., $80,000.

Mass., Boston—Handschumacher & Co., Inc., 44 North St., 3 story packing plant addition, rein.-con., plain foundation, North St., to Scully Co., 118 1st St. Cambridge. Archts. est. $125,000.

Mass., Cambridge—Cambridge Motor Co., 195 Massachusetts Ave., 2 story and basement, 55 x 200 ft. with 62 x 66 ft. ell, garage and service station, rein.-con., steel and brick, plain foundation, Massachusetts Ave. and Front St., to J. F. Smith Constr. Co., 99 Boylston St., Watertown (Boston P. O.). Archts. est. $150,000.

Mass. Fall River—Standard Oil Co., 26 Bway., New York City, 61 x 83 ft. garage, 20 x 20 ft. pump house, 30 x 51 ft. warehouse, all 1 story, rein.-con., Slade St., here to S. C. Sperry Co., 300 Main St., Cambridge Archts. est. $50,000.

Mass., Quincy (Boston P. O.)—Brooks-Skinner Co., Inc., Quincy Point, will build 1 story, 100 x 242 ft. factory, brick and timber, plain foundation, at plant by day labor. $50,000. Private plans.

Mass., Spencer—Spencer Gas Co., 110 Main St., will alter and build 1 story plant addition, will include raising present building 15 ft., etc., by day labor. $40,000-$50,000. W. M. Russell, 77 Franklin St., Boston, engr.

Mass., Worcester—Parker Wire Goods Co., 18 Grafton St., 1 story, 14 ft. high, 120 x 130 ft. factory, brick and concrete, plain foundation, Washington St. to E. J. Cross Co., 82 Foster St. Archts. est. $75,000. Noted Nov. 9.

Mass., Worcester—Waldorf System Inc., 169 High St., Boston, 1 story, 16 ft. high, 65 x 125 ft., brick and concrete, plain foundation Arch and Summer Sts., here to Keefe Bros. Co. 98 Front St. Archts. est. $40,000. Noted Sept. 28.

Conn., Hartford—Hartford "Courant," 64 State St., 2 story, brick and steel addition to plant, plain foundation, to Porteus-Walker Co., 13 Forest St. Archts. est. $50,000. Noted Nov. 16.

N. Y., Brooklyn—M. Galtabiano, c/o T. Goldstone, archt. and engr., 50 Graham Ave., 1 story, 100 x 100 ft., brick, steel and concrete garage, plain foundation, Decatur St. and Wykoff Ave. by day labor. $40,000.

N. Y., Buffalo—Island Warehouse Co., Ganson St. and Ship Canal, 10 story, 9 x 100 x 268 ft. flour mill, steel and rein.-con., to Fegles Constr. Co., 706 1st Ave. N., Minneapolis, Minn. Archts. est. $500,000. Noted Nov. 23.

N. Y., New York—Empire State Ice Co., 76 West Monroe St., Chicago, general contract 3 story, 110 x 136 ft., brick, steel and concrete plant, 161st St. and Grant Ave., here, to Niewenhous Co., Inc., 316 East 161st St., $135,000.

N. J., Hammonton—Littlefield Ice Co., 3 story, ice and storage plant, rein.-con., brick and steel, plain foundation, to W. F. Koller, Otis Bldg., Phila., $50,000.

Pa., Johnstown—W. Steele & Sons Co., archts., 1600 Arch St., Phila., 5 story and basement, 133 x 242 ft. rein.-con. and brick warehouse, Maple Ave., to Turner Concrete Steel Co., 1713 Sansom St., Phila., for Johnstown Terminal Warehouse Co. Archts. est. $600,000. Noted Nov. 2.

Pa., Phila.—Amer. Ice Co., 6th and Arch Sts., and C. L. Weir, engr., 41 East 42nd St., New York City, 2 story, 61 x 80 ft. and 1 story, 21 x 80 ft. rein.-con., brick and steel plant, plain foundation, to Levering & Garrigues, 552 West 23rd St., New York City. Noted Nov. 16.

Pa., Phila.—Amer. Stores Co., Noble and York Sts., 6 story, 100 x 400 ft. rein.-con. and brick warehouse, plain foundation, 31st and Master Sts., to A. B. Kister, 1204 Chancellor St. $500,000.

Pa., Phila.—General Electric Co., Witherspoon Bldg., 6 story addition to factory, 7th and Willow Sts., to H. E. Baton, 1713 Sansom St., $80,000. Noted Sept. 28.

Pa., Phila.—A. G. Zimmerman, archt., 85 9th Ave., New York City, 8 story, 150 x 257 ft. rein.-con., brick and steel bakery, plain foundation, 12th St. and Glenwood Ave., to J. Griffith Sons Co., 112 West Adams St., Chicago, Ill., for Natl. Biscuit Co., 10th Ave. and 15th St., New York City. $1,000,000. Noted Oct. 19.

W. Va., Clarksburg—Clarksburg Ice & Storage Co., will build 1 story, 50 x 120 ft., ice plant, by day labor. $50,00. Private plans. Noted Oct. 12.

Ga., Atlanta—White Provision Co., Howell Mill Rd., packing plant, to Griffin Constr. Co., Chandler Bldg. Archts. est. $250,000.

O., Cleveland—Double Eagle Bottling Co., 6517 St. Clair Ave., 2 story and basement, 30 x 60 ft. factory, brick and wood, 6517 St. Clair Ave., to M. Satkovich, 1060 East 176th St. Archts. est. $40,000. Noted Nov. 16.

O., Norwood—Chevrolet Motor Co., General Motors Bldg., Detroit, Mich., 2 story, 25 ft. high, 320 x 500 ft. auto assembly plant rein.-con. and flat slab construction, here, to W. F. Wood Co., 1805 Ford Bldg., Detroit, Mich. Noted Nov. 9.

O., Toledo—Chevrolet Motor Co., General Motors Bldg., Detroit, Mich., 1 story, 91 x 450 ft. plant rein.-con., brick and steel here, to H. J. Speaker, Toledo, (street address not available). Archts. est. $225,000. Noted Nov. 16.

Wis., Manitowoc — Aluminum Specialty Co., 17th and Wollmer Sts., 3 story, 52 x 149 ft., factory and warehouse, brick, rein.-con. and steel, plain foundation, to W. H. Mielke, 1331 South 10th St. Archts. est. $40,000.

Wis., Plover—Whiting—Plover Paper Co., Stevens Point, 3 and 4 story, 30 x 108 ft. brick and timber addition to plant, plain foundation, to C. R. Meyer & Sons Co., 50 State St., Oshkosh. Engrs. est. $55,000.

Wis., Sheboygan — Vollrath Co., West Michigan Ave., 2 story, 180 x 200 ft. factory, brick and steel, plain foundation, to M. Stubenrauch, 1820 North 7th St. Archts. est. $55,000.

Ill., Chicago—See "Miscellaneous."

S. D., Sioux Falls—J. Morrell & Co., 3 or 4 story tank house, rein.-con., brick and steel, to Sioux Falls Constr. Co., Boyce-Greeley Bldg. Archts. est. $175,000.

Mo., St. Louis—Auto Car S. & S. Co., Locust and Leffingwell Sts., 1 story, 134 x 155 ft., rein.-con. and brick garage and service building, plain foundation, 2740 Locust St., to Murch Bros. Co., Railway Exch. Bldg. Archts. est. $60,000.

Mo., St. Louis—Johansen Bros. Shoe Co., 3640 Laclede Ave., 4 story and basement, 55 x 105 ft., factory addition and 3 story, 47 x 71 ft. administration building, rein.-con. and brick, Laclede Ave. near Grand Blvd., to Hartmann & Schuermann Contg. Co., Century Bldg. Archts. est. $100,000.

Wyo., Rawlins—Producers & Refiners Co., Casper, refinery, 10,000 bbl. capacity, here, to Hammond Iron Wks., East Warren (Warren P. O.), Pa.

Idaho, Montpelier—Union Pacific R.R., 58 East Washington St., Chicago, 35 x 328 ft. freight house, rein.-con., brick and steel, here, to Burke Eng. Co., Kearns Bldg. Salt Lake City, Utah. Archts. est. $260,000.

Calif., San Francisco — Amalgamated Laundries, 8th and Harrison Sts., 1 story, rein.-con. garage, 8th St. near Harrison St., to Barrett & Hilp 918 Harrison St., $40,000.

Que., Montreal—Quebec Liquor Comrs., Delormier St., 2 story, 75 x 100 ft., rein.-con., brick and stone garage, Delormier St., to O. Archambault 610 Parc Lafontaine, $50,000.

Ont., London — Middlesex Motors Ltd., 781 Dundas St., 1 story, 76 x 200 ft. rein.-con. garage and repair shop, to R. G. Wilson & Son, 193 College St., $65,000. Noted Oct. 12.

Buildings

PROPOSED WORK

Vt., Rutland — Bank — Marble Savings Bank having plans prepared by J. J. Cook, archt., 408 Pearl St., Buffalo N. Y., 2 story, 55 x 75 ft., marble. $170,000.

Mass., Salem—School—City having plans prepared by J. H. Bickford, archt., 6 Beacon St., Boston, and takes bids about Jan. 1, 4 story, 40 x 90 ft., brick, plain foundation, South and Essex Sts. $150,000.

Mass., Springfield — Business — L. W. Besse, 348 Main St., having plans prepared by Brown & Von Beren, archts., 185 Church St., New Haven, Conn., 6 story, 70 x 115 ft., brick and terra cotta, plain foundation, Vernon St. $200,000.

R. I., Pawtucket—School—Bd. Educ. had plans prepared by R. C. M. Monahan, archt. 255 Main St., and soon takes bids, 3 story, brick, concrete and steel, plain foundation, Fountain St. $1,200,000.

R. I., Providence—Auditorium and Library—Providence College plans 2 story, 60 x 150 ft., brick, steel and concrete, on Campus. $150,000. Architect not announced.

R. I., Providence — Gymnasium — Public Buildings Dept., City Hall, completing plans 2 story, brick, concrete and steel, plain foundation, Pond St. $250,000. Public Buildings Dept., City Hall, archts.

Conn., Derby—Theatre—I. J. Hoffman, Capitol Theatre, Ansonia, having revised plans prepared by E. C. Horn & Son, archts., 1476 Bway., New York City, 2 story and basement, 65 x 200 ft., Elizabeth St., here. $250,000. Noted July 6.

Conn., New Haven—Home—Jewish Home For Children, c/o Norton & Townsend archts., 839 Chapel St., had plans prepared

Buildings (Continued)

3 story and basement, 50 x 130 ft., concrete, brick and steel, plain foundation. Dixwell Ave. $150,000.

Conn., Norwich—High School—Bd. Educ. plans 3 story, brick. $200,000. W. T. Towner, archt., 152 West 42nd St., New York City, archt.

Conn., Norwich — Theatre etc. — A. A. Spitz, Caesar Misch Bldg., Providence, R. I., having plans prepared by Cudworth & Thompson, archts., Thayer Bldg., 4 story, brick and rein.-con., Ferry St., here. $150,000.

Conn., Rockville — School — Rockville School Dist., plans 1 story and basement, brick and steel, plain foundation, in West District. $150,000. W. B. Chambers, 111 East 40th St., New York City, archt.

N. Y., Buffalo — Amusement Palace — Crystal Palace of Buffalo, Inc., c/o Lewis & Hill, archts., Brisbane Bldg., having plans prepared 4 story, 134 x 300 ft., rein.-con., brick and steel, incl. auditorium, offices, swimming pool and 50 x 200 ft. gymnasium, Pearl St. $300,000.

N. Y., Buffalo—Church—Trinity Methodist Episcopal Church, 35 West Utica St., plans new stone church, 15th century Gothic style, Main and Masten Sts. $150,000. R. L. Foulke, pastor. Architect not announced.

N. Y., New York—Apartment—Margon & Glaser, archts. and engrs., 2806 3rd Ave., preparing plans 5 story, 75 x 100 ft., brick steel and stone, plain foundation, 192nd St. and St. Nicholas Ave. Owner's name withheld.

N. Y., New York—Apartment—Margon & Glaser, archts. and engrs., 2806 3rd Ave., preparing plans 5 story, 100 x 100 ft., brick, steel and stone, plain foundation, Grand Concourse and 180th St. $175,000. Owners name withheld.

N. Y., New York—Hospital—G. R. Hall Syndicate, c/o Sugarman & Hess, archts. and engrs., 16 East 43rd St., soon receives bids 80 x 115 ft., brick, steel and stone, plain foundation, West End Ave. and 72nd St. $3,000,000.

N. Y., New York—Hospital—Physicians Medical Hotel Corp., c/o H. G. Wiseman, archt. and engr., 25 West 43rd St., having plans prepared 9 story, 100 x 175 ft., brick, steel and stone, plain foundation, 5th Ave. and 103rd St. $1,500,000.

N. Y., New York — Office — Guaranty Trust Co., 140 Bway., plans 23 story, 95 x 135 ft., brick, steel and stone, plain foundation, Bway. and Liberty St. $2,000,000. Cross & Cross, 681 5th Ave., archts. and engrs.

N. Y., New York—School—Bd. Educ., 500 Park Ave., soon takes bids 5 story, 60 x 100 ft., brick, steel and stone addition to P. S. 121, plain foundation, East 102nd St. and 2nd Ave. $500,000. C. B. J. Snyder, Concord St. and Flatbush Ave. extension, Brooklyn, archt. and engr. Noted Sept. 28.

N. J., Vineland—Church—Church of Pilgrim, c/o H. McMullin, 303 North 7th St., having plans prepared by Mills & Van Kirk, archts., Harrison Bldg., Phila., 2 story and basement, cut stone, East and Elmer Aves. $150,000.

Pa., Altoona—Bank—S. A. Hite, 2509 8th Ave., plans to build 6th Ward Bank, 3 or 4 story, 100 x 120 ft. rein.-con., brick and steel, 7th Ave. and 25th St. $150,000. Architect not selected.

Pa., Ambridge—School—Bd. Educ. having plans prepared by W. Williams, archt., Magee Bldg., Pittsburgh, brick school, Duss Ave. $300,000.

Pa., Bedford—Hotel—L. F. Hoffman having plans prepared by C. N. Friz, archt., Lexington Bldg., Baltimore, Md., 3 story, 75 x 430 ft. with two 50 x 150 ft. wings, Grand View Ave. $300,000.

Pa., Bellefonte — Church — Evangelical Church plans 2 story and basement, 100 x 120 ft. church and sunday school with adjoining parsonage, brick, steel and stone, High and Spring Sts. $150,000.

Pa., Cynwyd—Apartment—Kier Constr. Co., Franklin Bank Bldg., Phila., soon takes bids 4 story and basement, rein.-con., brick, steel and stone, plain foundation, here. $200,000. R. C. Loss, 2218 Chestnut St., Phila., archt.

Pa., Johnstown—Theatre—G. Panagotacos, Grand Theatre, Main St., plans 85 x 132 ft. brick, steel and stone, Main St. near Franklin St. $200,000.

Pa., Middletown—Home—Penna. State I. O. O. F., c/o W. H. Lee, archt., 32 South 17th St., Phila., soon takes bids 3 story and basement, 157 x 295 ft. brick, steel and stone, plain fonudation. $250,000.

Pa., Phila.—Administration—Bd. Educ., 19th and Chestnut Sts., plans 3 story and basement, lime, stone and granite, Parkway Blvd., Cherry and 16th Sts. $1,000,000. Private plans.

Pa., Phila.—School—Bd. Educ., 19th and Chestnut Sts., soon takes bids, 3 story and basement, 150 x 171 ft. rein.-con., brick, steel and stone, plain foundation, Spring Garden and Brandywine Sts. $750,000. Private plans.

Pa., State College — Dormitory — Penna. State College soon takes bids, 2 and 3 story, limestone. $2,000,000. Day & Klauder, Franklin Bank Bldg., Phila., archts.

Pa., Wilkes-Barre—Store—Hub Clothing Co., Public Sq., plans 4 story addition $150,000. Architect not announced.

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are picked men. Applications are continually being received from all parts of the United States and Canada, and from these the best are accepted. Some of our Construction News correspondents have been with us for years, and one or two new ones are "put on" every week. One of our biggest jobs is the upkeep of our Correspondent Staff.

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Every report sent in by a correspondent gives the source of his information, and as much detail as may be available. If in the opinion of our office force there is the slightest question as to authenticity, or if essential details are omitted, the report is returned with a notation on the back of it. We are in continual communication with our correspondents, and they are imbued with the spirit of

our two watchwords—accuracy and timeliness.

When an important item of business information is both accurate and timely it has another quality which embraces the two just named, and it is this third and comprehensive quality which we aim to achieve in these pages—

Usefulness

Buildings **(Continued)**

Md., Baltimore — Schools — **City voted $15,000,000 bonds to build and extend schools. A. Heller, business mgr.**

W. Va., Charleston — Club — **Kanawha** County Club having plans prepared by **L.** Lott, **archt., 1004 Commercial Bldg., Dayton,** O., **2 story. $150,000.**

Fla., Tavares—Court House—**Lake Co.** having **plans prepared by F. H. Trimble,** Orlando, **and A. J. MacDonough, Eustis,** archts., **for court house. Noted Sept. 21.**

La., Gretna—Schools—Jefferson Parish soon **takes bids 5 schools. E. Weil, Whitney Central Bldg., New Orleans, and W.** T. **Nolan, Canal Commercial Bldg., New** Orleans, **archts. Noted Aug. 10.**

Tenn., Knoxville — Apartment — **Adair** Realty & Trust Co., Atlanta, Ga., plans 150 x 150 **ft., on West Church St., here.** $400,000. **Architect not selected.**

Tenn., Memphis — Hospital — Methodist Episcopal Church South, having plans prepared hospital. **$400,000, nurses home and** laundry **$100,000, equipment $50,000. Union** and Bellevue Sts. L. H. Estes, secy.

O., Akron—Theatre—B. F. Keith **Theatre** Co., c/o E. F. Albee, Palace Theatre Bldg., New York City, having plans prepared by C. W. and G. Rapp, archts., State Lakes Theatre Bldg., Chicago, 1 story, brick, steel and concrete, Main St., here. $500,000.

O., Gambier—Dormitory—Kenyon College, c/o W. T. Pierce, **pres.,** having plans prepared by A. Garfield, archt., Natl. City Bldg., Cleveland, 4 story, brick, steel and concrete. $200,000.

O., Cleveland—Apartment—Ambassador Impvt. Co., c/o M. Marmorstein, 607 Ulmer Bldg., having plans prepared by S. H. White, archt., 1032 Schofield Bldg., 6 story, on 118 x 200 ft. lot, brick, steel and concrete, East 89th St. and Euclid Ave. $500,000.

O., Cleveland—Apartment Hotel—W. V. Brothers, Natl. City Bldg., having plans prepared by J. M. Dyer, archt., 916 Ulmer Bldg., 6 story and basement, brick, steel and concrete, East 93rd St. and Carnegie Ave. $300,000.

O., Dayton—Hotel—Consolidated Builders Co., Salem Ave., having plans prepared by F. J. Hughes & Co., archts., 406 U. B. Bldg., 11 story, 50 x 160 ft., rein.-con. and brick, 1st St. and Robert Blvd. $500,000. H. J. Osbon, pres.

O., Elyria—High School—Bd. Educ. having plans prepared by R. S. Silsbee, archt., Lorain Co. Bank Bldg., altering and building 2 story, 100 x 100 ft., brick, steel and concrete addition to Washington Junior High School. $175,000.

O., Lakewood (Cleveland, P. O.)—Library—Lakewood Pub. Library Bd., c/o R. H. Ingraham, librarian, 15425 Detroit Ave., having plans prepared by C. W. Hopkinson, archt., 900 Rose Bldg., Cleveland, 2 story, brick, steel and concrete addition, 15425 Detroit Ave. $150,000. Noted May 18.

O., Lakewood (Cleveland, P. O.)—Store and Apartment—J. E. Lowe, c/o S. H. White, archt., 1032 Schofield Bldg., Cleveland, having plans prepared 3 story, brick and steel, on 100 x 141 ft. site, Detroit and Cohasset Aves. $150,000.

O., Sandusky—Bank and Office—Millot & Parker, archts., Sandusky, soon let contract 4 story, 37 x 119 ft., brick and steel, for Commercial Bank & Trust Co. $150,000.

O., Warren—Apartment—E. D. Hester, 25 Oak Knoll Dr., had plans prepared by Keich, O'Brien & Hosker, archts. and engrs., Western Reserve Bank Bldg., brick and timber apartment, to have 35 apartments of 3, 4 and 5 rooms, Kenilworth Rd. and East Market St. $150,000.

Mich., Detroit—Apartment—H. Silverman, 1030 Penobscot Bldg., having plans prepared by M. H. Finkel, archt., 333 Majestic Bldg., 11 story, 100 x 120 ft. rein.-con., brick and steel, plain foundation, Cass and Putnam Ave.

Mich., Detroit—Store and Office—Donovan Bldg. Co., c/o A. Kahn, archt., 1000 Marquette Bldg., having plans prepared 10 story and basement, 60 x 200 ft. rein.-con., steel and stone, plain foundation, Woodward Ave. and Duffield St.

Mich., Highland Park (Detroit P. O.)—Apartment—A. Kahn, archt., 1000 Marquette Bldg., Detroit, preparing plans for 4 story and basement, rein.-con., brick and steel, plain foundation, Ferris and Woodward Aves. $350,000. Owner's name withheld.

Mich., Jackson—High School—Bd. Educ. having plans prepared by L. H. Field, archt., Jackson, 3 or 4 story, rein.-con. and brick incl. swimming pool, athletic stadium, etc., West Main St. Will vote on $350,000 bonds.

Wis., Janesville—Sanatorium—Rock Co., Courthouse, having plans prepared by Van Ryn & De Gelleke, archts., 114 Grand Ave., Milwaukee, 2 and 3 story, 104 x 116 ft., brick, tile and concrete plain foundation. $150,000.

Wis., Madison—Main Hall—University of Wisconsin, Administration Bldg., plans 4 story, 175 x 300 ft., brick, rein.-con. and steel, plain foundation. $412,000. Architect not selected.

Wis., Nashotah—Dormitory and Gymnasium — Nashota Theological Seminary having preliminary plans prepared by A. C. Eschmeiler, archt., 141 Wisconsin St., Mliwaukee, 3 and 1 story, brick, stone and concrete, plain foundation. $150,000.

Kan. Kansas City—Market and Office—Pershing Rd. Properties Co., 412 Scarrit Bldg., Kansas City, Mo., had plans prepared by W. S. Ferguson & Co., engrs., 1900 Euclid St., Cleveland, O., 6 story and basement 115 x 138 x 234 ft., rein.-con., brick and terra cotta, 24th St. and Pershing Rd. $1,000,000.

Kan., Winfield—School—Voted $200,000 for school and improvements. Address Secretary School Bd. Architect not selected.

Mo., Kansas City—Temple—Mt. Moriah Cemetery, 100 Interstate Bldg., having plans prepared by Hoit, Pierce & Barnes, archts., 607 Reliance Bldg., and soon takes bids 1 story and baseemnt, 106 x 154 ft., 105th and Holmes Sts. $150,000.

Mo., St. Louis—Apartment—A. Rosenfeld, c/o Donaldson System, engrs., 1111 International Life Bldg., having preliminary plans prepared 3 story and basement, 90 x 175 ft., rein.-con., plain foundation, Kingsbury and Adelaide Sts. $200,000. Architect not selected.

Tex., Austin—Hotel—J. B. Pope, Littlefield Bldg., is genl. chn. of Hotel Organization, Com. which plans hotel. $800,000.

Tex., Beaumont—Schools—Attorney Generals Dept., Austin, approved $500,000 bond issue for new schools. Address H. A. Steinhagen, mayor.

Okla., Muskogee — Dormitory — Morrow College plans dormitory, concrete and brick. $160,000. C. Dawson, Muskogee, archt.

Ore., Salem—Apartment—C. E. Linde, archt., 510 Artizans Blvd., Portland, takes bids about Feb. 1, 4 story, 100 x 100 ft., rein.-con., plain foundation, Capitol and Court Sts., here, for Capitol Apartment Co. $200,000.

Calif., Fresno—Store, Office and Loft—Fresno Hardware Co., 1247 J St., plans 4 story, J St. $150,000. A. B. McWhorter, secy. and mgr. Architect not selected.

Calif., Oakland — Schools — City having plans prepared by C. W. Dickey, archt., 2149 Bway., 1st unit of S. B. Anthony School, Park Blvd. and Hopkins St., rein.-con., $100,000 (completed $1,000,000); 3 story, brick and steel addition to Lakeview School, Perry and Grand Aves., $90,000.

Calif., San Francisco—Loft and Office—See "Industrial Works."

Calif., San Francisco—Market and Apartment—J. B. Gaffney and R. A. Luce, 1031 Market St., having plans prepared by W. C. Falch, archt., Hearst Bldg., 6 story and basement, rein.-con., Market St. near Gough St. $200,000.

Ont., Hamilton—Collegiate—Bd. Control, City Hall, plans brick and stone, King St. Bids early in spring. $500,000. Prices wanted on materials. G. S. Coppley, chn.

B. C., Point Grey — Science — Provincial Government voted $1,000,000 toward completion science building, (frame erected) and erection several other buildings here, for University of British Columbia, 10th and Willaw Sts., Vancouver. Sharp & Thompson, London Bldg., Vancouver, archts.

B. C., Vancouver—Administration, etc.—Childrens Home, 2613 Wall St., plans 2 or 3 story, central administration building and 5 cottages, brick or tile, Wall St. $200,000. Architect not selected.

BIDS DESIRED

N. Y., Brooklyn — Apartment — O. Falk, c/o Shampan & Shampan, archts. and engrs., 50 Court St., 128 x 146 ft., brick, steel and stone, plain foundation, 68th St. and Ridge Blvd. $35,000. Work will be done by separate contracts under supervision of architects.

N. Y., New York—Apartment—Bricken Realty Impvt. Co., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., will build 11 story, 85 x 95 ft. brick, steel and stone, plain foundation, Lexington Ave. $500,000. Work will be done by separate contracts under supervision of architects.

Pa., Grove City — Hotel — Owlsey Co., archts., 1301 Mahoning Bank Bldg., Youngstown, O., taking bids 4 story, 99 x 123 ft. rein.-con., brick and steel, for Grove City Hotel Corp., c/o C. Hawshaw, Grove City. $150,000.

Pa., Phila.—Apartment—C. E. Oelschlager, archt., 1615 Walnut St., taking bids 4 story and basement, 115 x 175 ft. rein.-con., brick and steel, plain foundation, 42nd and Walnut Sts., for J. B. Thompson, c/o architect. $250,000.

Pa., Phila.—School—Dec. 7, by Bd. Educ., 19th and Chestnut Sts., 3 story and basement, rein.-con., brick and steel, plain foundation, Washington Lane and Musgrave St. $750,000. Private plans.

Pa., Phila.—F. E. Hahn, archt., 1112 Chestnut St., taking bids 5 story and basement, 141 x 150 ft. rein.-con., brick, steel and stone, caisson foundation, Broad and Pine Sts., for Y. M. H. A., c/o A. M. Greenfield, 15th and Chestnut Sts. $500,000. Former bids rejected. Noted Sept. 28.

Md., Chevy Chase — Apartment — L. G. White, Continental Trust Bldg., Wash., D. C., will build apartment house here by separate contracts. $500,000. Stern & Tomlinson, Continental Trust Bldg., Wash., D. C. archts.

Fla., Jacksonville—Schools—Dec. 9, by F. A. Hathaway, supt. Duval Co. School Bd., 2 schools, one at 10th and Hubbard Sts., other Stockton and College Sts. $200,000. Greeley & Benjamin, Bisbee Bldg., archts.

Tenn., Morristown—High School—Dec. 8, by C. T. Jones, archt., James Bldg., Chattanooga, 3 story and basement, 150 x 200 ft., South St. $150,000.

O., Cleveland — Store and Apartment — Eighteen Twenty East 79th St. Co., c/o Wright & Behan, archts., 4502 Euclid Ave., taking bids 3 story and basement, 113 x 116 ft., brick, steel and concrete, 1820 East 79th St. $325,000.

O., Dayton—Office—Dec. 1, by United Brethren Church, 14 story, 60 x 128 ft., and 7 story addition to adjoining structure, rein.-con., tile and brick, 4th and Main Sts. $850,000. F. J. Hughes Co., 406 U. B. Bldg., archts.

O., McCombs—School—Dec. 22, by C. Dollerof, clk. Bd. Educ., 2 story and basement, 135 x 150 ft., brick, rein.-con. and steel. $300,000. T. D. McLaughlin, Savings Bldg., Lima, archt.

Mich., Hancock—School—Dec. 1, by Bd. Educ., 3 story and basement, 80 x 116 ft. rein.-con., brick, stone and tile. $300,000. G. L. Lockhart, 1353 University Ave., St. Paul, Minn., archt.

Wis., Kenosha—Courthouse, etc.—Dec. 28, by Kenosha Co., 3 and 2 story and basement, 126 x 226 ft. and 67 x 138 ft. courthouse, administration building and jail, stone, brick and concrete, plain foundation. $65,000. Lindl, Lesser & Schutte, 82 Wisconsin St., Milwaukee, archts.

Mo., Kansas City—Church—Jan. 1, by Central Presbyterian Church, 3727 Forest Ave., 1 story and basement, Campbell St. $150,000. Shephard & Wiser, 302 R. A. Long Bldg., archts.

Tex., Amarillo — Hospital — Dec. 12, by Comrs. Potter Co., 2 story, hospital, nurses home and tubercular cottage, rein.-con. and brick, plain foundation. $160,000. G. A. Carlander, Amarillo, archt. and engineer.

Tex., Dallas—Dec. 4, by Comrs. Dallas Co., two 60 ft. steel span bridges, 18 ft. roadway, over Johnson and Fish Creeks. Nagle Witt & Rollins, Courthouse, engrs.

Tex., San Antonio—High School—Dec. 5, by Phelps & Dewes, archts., Gunter Bldg., 1 story with partial 2nd floor for cafeteria, brick and tile, caisson foundation on concrete footings, New Braunfels, Cooper and Delmar Sts. $180,000. W. E. Simpson Co., Natl. Bank Commerce Bldg., engrs. Noted Nov. 25.

Calif., Isleton—Apartment—See "Industrial Works."

Calif., San Diego—Hotel and Theatre—See "Miscellaneous."

Calif., Santa Barbara—High School—Dec. 18, by E. C. Dengate, clk. Santa Barbara High School Dist., 1 and 2 story and basement, rein.-con. $500,000. W. H. Weeks, 369 Pine St., San Francisco, and R. F. Sauter and E. K. Lockard, San Marcos Bldg., archts. Noted Nov. 16.

BIDS RECEIVED

D. C., Wash. — High Schools — Dist. Comrs., 509 Dist. Bldg., for 2 junior high schools (1) price for both schools (2) McFarland School (3) Langley School, from M. Serreto, Main Treas. Bldg., (1) $715,000 (2) $363,863 (3) $356,853; G. E. Wyne, Home Life Bldg., (1) $767,300; M. A. Long, 2016 West North Ave., Baltimore, Md. (1) $824,840 (2) $414,776 (3) $416,619. Noted Nov. 2.

Buildings (Continued)

CONTRACTS AWARDED

Mass., Brighton (Boston P. O.)—Apartment and Store—Silverman, Brown & Heenan, (archts. and owners), 51 Cornhill, Boston, will build 6 story, 70 x 200 ft., brick stone and steel, plain foundation, Allston St. here, **by day labor. $550,000.**

Mass., Brookline (Boston P. O.)—Apartment—F. Diliberto, 34 School St., Boston, will build 3 story, brick, stone and steel, plain foundation, Parkman Ave. and Pleasant St. **here, by day labor.** $150,000. **S. S. Eisenberg, 46 Cornhill, Boston, archt.**

Mass., Worcester—School—St. Casimirs Lithuanian Church, 41 Providence St., 3 story, brick, steel and concrete, plain foundation, Waverly St., to J. M. and C. J. Buckley Co., 128 Vernon St. Archts. est. **$150,000.** Noted Oct. 5.

Conn., Glastonbury—High School—School Bldg. Com., 2 story and basement, brick and steel, plain foundation, Main St., to Industrial Constr. Co., 721 Main St., Hartford. Archts. est. $150,000. Noted Nov. 2.

N. Y., New York — Apartment — Calma Realty Co., c/o G. and E. Blum, archts. and engrs., 505 5th Ave., 80 x 100 ft., brick, steel and stone, plain foundation, Lexington Ave. and 93rd St., by day labor. $350,000. Noted Sept. 14.

N. Y., New York—Apartment—**J. S. Kahn,** c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., 9 story, 75 x 95 ft., brick, steel and stone, 24 West 9th St., by day labor. $400,000.

N. Y., New York—Apartment—**J. F. Meehan,** c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., 5 story, 100 x 125 ft., brick, steel and stone, plain foundation, Wythe Ave., by day labor.

N. Y., New York—Loft—Four Twenty-One to Four Twenty-Five West 54th St. Corp., c/o F. A. Rooke, archt. and engr., 15 East 40th St., will build 6 story, brick, steel and stone, plain foundation, by day labor. $400,000. C. Scott, pres.

Pa., Phila.—Bank and Office—Corn Exch. Bank, 1506 Chestnut St., 6 story 39 x 108 ft. rein.-con., brick and steel caisson foundation, 1510 Chestnut St., to H. E. Baton, 1713 Sansom St. $520,000.

Pa., Phila.—Schools—Bd. Educ., 19th and Chestnut Sts., 2 story, 3rd and Duncannon Sts. and 3 story and basement, Germantown Ave. and Southampton St., to Cramp & Co., Denckla Bldg., $428,562 and **$444,297**, respectively; 3 story and basement, 9th and Oregon Aves., to McCloskey & Co., 1629 Thompson St., $406,666. Noted **Nov. 16.**

Fla., Sanford — Bank and Office — First Natl. Bank 6 story, rein.-con., hollow tile and brick, to G. A. Fuller Co., Munsey Bldg., Wash., D. C., $225,000.

Va., Richmond—Office and Bank—Amer. Natl. Bank, Amer. Natl. Bank Bldg., 10 story, 47 x 106 ft., rein.-con. and steel, Grace and 4th Sts., to Wise Granite and Constr. Co., Inc., 1001 East Main St., $350,000.

Va., Richmond—Office and Bank—**Grace** Street Bank, 10 story, brick and limestone, Grace and 3rd Sts., to Wise Granite and Constr. Co., Inc., 1001 East Main St., $300,000.

Tenn., Knoxville—Church—First Baptist Church, Gay St., steel, brick and marble, concrete pile foundation, West Main St., to Worsham Bros., Empire Bldg., $385,000. Archts. est. $300,000. Noted June 22.

O., Cleveland—Apartment—C. B. Grundstein, 14188 Superior Rd., 3 story and basement, 106 x 142 ft., brick and wood, North Moreland Blvd., to I. and B. Dolinsky, 2216 East 83rd St. Archts. est. $200,000. Noted Nov. 23.

O., Cleveland—Parcel Post Station—J. Kulp, 105 West Monroe St., Chicago, 5 story and basement, brick, steel and concrete, 131 West St. Clair Ave., here, to S. W. Emerson Co. 1836 Euclid Ave. $400,000. Noted Aug. 31.

O., Cleveland—School—Bd. Educ., East 6th St. and Rockwell Ave., 2 story, 146 x 295 ft., brick, steel and concrete addition, 932 Jefferson Ave., to A. Dall, 3079 Euclid **Blvd., Cleveland Heights, $439,908; heating and ventilating apparatus,** to J. Roemer Heating Co., East 22nd St., $60,706. Noted Nov. 16.

O., Lakewood (Cleveland, P. O.)—Theatre and Office—Lincoln Theatre Building Co., c/o C. G. Burton, 2301 Center Rd., Cleveland, 2 story and basement, 80 x 165 ft., brick and steel, Madison and Arthur Aves., here, to J. W. Chrisford, 1452 Highland Ave., Cleveland. Archts. est. $150,000.

O., Oakwood (Dayton, P. O.) — High School—Bd. Educ. 3 story and basement, brick and rein.-con., Lebanon Pike, to Danis-Hunt Constr. Co., 907 Schwind Bldg., Dayton, $350,000. Noted Oct. 19.

Mich., Ann Arbor—Dormitory—University of Michigan Alumni c/o R. W. Koch, archt., 734 Book Bldg., Detroit, 4 story, 39 ft. high, 50 x 150 ft., rein.-con., brick and steel, plain foundation, University Ave., to Natl. Constr. Co., 1031 Dime Bank Bldg., Detroit. Archts. est. $150,000.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., 12 story and basement, 58 x 183 ft. and 67 x 181 ft. rein.-con., brick and steel, plain foundation, Duboise and Waterloo Aves., to F. N. Cooper, 6370 Gratiot Ave., $321,104. Noted Nov. 23.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., 2 story and basement, 171 x 191 ft., rein.-con., brick and steel, plain foundation, Palmer Ave. to Martin-Krausmann Co., 606 Woodward Ave., $403,500. Noted Nov. 23.

Wis., Kenosha—Store and Office—S. Schwartz, 927 North Sheridan Rd., Waubegan Ill., 3 story and basement, 66 x 126 ft. brick and steel joist, plain foundation, Main St., to T. Jensen, 820 North Ave., Waukegan, Ill. Archts. est. $150,000.

Wis., South Madison (Madison P. O.)—High School—F. L. Kronenberg, archt., Carroll Blk., Madison, 2 story, 60 x 180 ft. rein.-con., brick and steel, here, to J. H. Findorff & Son, 601 West Wilson St., for Bd. Educ. Archts. est. $150,000. Noted Nov. 2.

Kan., Winfield — College — Southwestern College, Wichita, general contract 3 story and basement, 150 x 170 ft., rein.-con., brick, and stone, to G. H. Gassman, Arkansas City, $152,000. Noted Nov. 16.

Mo., St. Louis—Apartment—Guild Investment Co., 4907 West Pine Blvd., 5 story and basement, 96 x 129 ft., rein.-con. and brick, plain foundation, to S. Frank, Century Bldg. Archts. est. $200,000. Noted Nov. 23.

Mo., St. Louis — Apartment — Syndicate c/o Weisels Gerhart Real Estate Co., 8th and Chestnut Sts., 3 story and basement, on 100 x 200 ft. lot, rein.-con. and brick, plain foundation, North Court St., to H. Horowitz, Arcade Bldg. Archts. est. $250,000.

Calif., Oakland—Store—Roos Bros., 4th and Market Sts., 3 story, 100 x 124 ft., rein.-con., Bway. and 15th St., to W. Knowles, Central Bank Bldg., $300,000. Noted Sept. 14.

Que., Montreal—Art School—Provincial Government, Quebec, 3 story, 60 x 175 ft. brick, steel and stone, to Collette & Freres, St. Catherine St. E., $150,000. Noted Sept. 14.

Que., Montreal—Clubhouse—Metropolitan Columbian Assn., Montreal, (street address not available) 5 story, 82 x 140 ft. rein.-con., brick and steel, Mountain St., to Archambault & Leclaire, 71 St. James St., $254,000.

Ont., Owen Sound—School—A. Wright, trustee and chn. Bd. Educ., 3 story and basement, 100 x 300 ft. brick and stone technical school, 5th Ave., to Green & Woolrich, 201 5th Ave., $185,000. Noted Nov. 2.

Federal Government Work

PROPOSED WORK

N. C., Greensboro — Post Office — Treas. **Dept., Wash.,** D. C., plans U. S. Post Office, **here. J. A.** Wetmore, acting superv. archt.

BIDS DESIRED

N. C., Wilmington—Barge—Dec. 26 at office U. S. Engineer, Wilmington, for 1 steel barge; adv. this issue.

Tex., El Paso—Quarters, etc.—Dec. 20, at office Constructing Quartermaster, William Beaumont General Hospital, for officers' quarters, guard house, etc., here; adv. this issue.

BIDS RECEIVED

Mo., St. Louis—Earthwork—Secretary Mississippi River Comn., 1311 International Life Bldg., 170,000 cu.yd. hydraulic fill, above Cairo, Ill., in Sub-Dist. 1 of Drainage Union Dist. 1, Illinois, from La Crosse Dredging Co., 405 Plymouth Bldg., Minneapolis, Minn., $43,690; Northern Dredge & Dock Co., 428 Metropolitan Bank Bldg., Minneapolis, Minn., $68,000. Noted Nov. 2.

Mo., St. Louis—Earthwork—Secretary Mississippi River Comn., 1311 International Life Bldg., 380,000 cu.yd. earthwork, near Apex, Kings Lake D.D. from McWilliams Co., Inc., Exch. Bldg., Memphis, Tenn., **$85,082; La Crosse Dredging Co., 405** Plymouth Bldg., Minneapolis, Minn., $90,250; W. Lemaster, Benton, Ill., $102,600. Noted **Oct. 26.**

Calif., San Francisco — Riprap Stone—U. S. Engineer, 240 Montgomery St., furnishing 3,000 ton riprap stone for Paradise Dam on San Joaquin River at head of Paradise Cut, from Raymond Granite Co., 3 Potrero Ave., $0.50 per ton.

CONTRACTS AWARDED

O., Chillicothe—Hospital—U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., group of 22 buildings, 1 and 2 story brick and concrete, for Neuro-Psychiatric Hospital, at Camp Sherman, here, to George A. Fuller Co., 4900 Euclid Ave., Cleveland, **$1,497,000.** Noted Nov. 23.

Miscellaneous

PROPOSED WORK

Piers—Cape May, N. J.—Chapman & Fisher, engrs., Bourse Bldg., Phila., take bids in February for two 700 ft. covered piers for storing materials, also coaling pier here. **$850,000.** Owner's name withheld.

Stadium—Erie, Pa.,—Bd. Educ., Library Bldg., plans stadium enclosing field 330 x 650 ft., bowl shape, 15,000 seating capacity, **$150,000. Engineer not selected.**

Stadium — Parkersburg, W. Va. — Bd Educ. plans stadium. $150,000. Architect not announced.

Electric Light System—Lecompte, La.—See "Waterworks."

Steam Heating Plant, etc. — Appleton, Wis.—Eagles Lodge making plans for new steam heating plant and boilers for lodge building. $25,000. E. A. Wettengel, 578 Pierce Ave. engr.

Graders and Tractors—Council Bluffs, Ia.—Plans purchase several graders and **tractors.** E. E. Stepman, **city engr.**

Stadium — Missoula, Mont. — Alumni of State University having plans prepared and will take bids in spring for stadium on State University campus, here. $40,000 being raised for project.

Wharves and Docks—Beaumont, Tex.—Attorney Generals Dept., Austin, approved $400,000 bond issue for wharves and docks. Address **B.** A. Steinhagen, mayor.

White Way—Corsicana, Tex.—Had plans prepared white way from Beaton and 11th Sts. $25,000. **J. W. Harrison, city engr.**

White Way — Jefferson, Tex. — Jefferson Ice & Light Co. making plans street lighting system. $30,000.

Trucks — Portland, Ore. — L. S. Kaiser, supt. waterworks, City Hall, takes bids in January for five ¾ ton and one 5 ton truck.

Street Sweeper—Palo Alto, Calif.—City plans to purchase motor driven street sweeper. $6,500. J. F. Bxybee, Jr., city engr.

Electric Distribution System—St. John, N. B.—Plans electric distribution system incl. pole lines and underground duct system. $600,000. G. F. Fisher, mayor.

Electric Lighting System—Atwood, Ont.—Atwood Lighting Co. plans electric lighting system. **J. G.** Dickson, pres.

Power Line—North Vancouver, B. C.—British Columbia Electric Ry. Hastings and Carroll Sts., Vancouver, plans power line from Lake Buntzen to Brittania Beach. $150,000. Company is also considering new pole line from Lake Buntzen to suburbs of Vancouver. J. I. Newell, c/o owner, electrical supt.

Marine Ways—Vancouver, B. C.—See "Industrial Wks."

BIDS DESIRED

Dock Wall—Buffalo, N. Y.—Dec. 27, by C. L. Cadle, supt. Pub. Wks., Albany, constructing certain portions of dock-wall, at Ohio Basin, here; adv. this issue.

Electric Light Standards—Buffalo, N. Y.—Dec. 4, by Dept. Parks, 13 City and County Hall, 400 electric light standards.

Coarse Aggregate — New York, N. Y.—Dec. 8, by J. Miller, pres. Manhattan Boro. Municipal Bldg., furnishing and delivering 1,000 cu.yd. coarse aggregate for concrete.

Wall—Delaware—Dec. 13, by State Hy. Dept., Dover, wall on Philadelphia Pike, Contr. RW-1; adv. this issue.

Excavator and Tractor—Ft. Pierce, Fla.—Dec. 5, by Comrs. St. Lucie, Co., excavator and caterpillar tractor of ¾ of 1 cu.yd. capacity. $25,000. E. H. Collins, Ft. Pierce, engr.

PIPE LINE—VENTURA, CALIF.

Mutual Water Companies received bids constructing concrete pipe line. (A) Fowler & Myers, San Fernando; (B) United Concrete Pipe Co., Montalvo; (C) Boyd & Tellyer, San Diego. The unit bids were as follows:

	A	B	C
500 lin.ft. 36-in. reinforced concrete pipe	$4.05	$4.22	$4.10
3,800 lin.ft. 30 in. reinforced concrete pipe	2.20	2.82	3.25
2,500 lin.ft. 30 in. plain concrete pipe	2.20	2.75	3.00
2,000 lin.ft. 22 in. reinforced concrete pipe	1.05	1.28	1.58
1,800 lin.ft. 22 in. plain concrete pipe	1.05	1.25	1.58
2,400 lin.ft. 20 in. plain concrete pipe	.90	.99	1.50
2,700 lin.ft. 16 in. reinforced concrete pipe	.66	.60	1.20
2,700 lin.ft. 16 in. plain concrete pipe	.66	.58	1.15
4,500 lin.ft. 12 in. plain concrete pipe	.45	.39	.70
100 lin.ft. 8 in. plain, for air vents	.65	.40	.50
100 lin.ft. 10 in. plain for risers	.85	.50	.60
100 lin.ft. 18 in. plain for risers	1.25	1.00	1.50
Extended totals all items (21 items)	$36,743	$43,457	$55,632

FOUNDATIONS—NEW YORK, N. Y.

Following are lowest three bids opened Oct. 20, by Transit Comn., 49 Lafayette St., New York City, for constructing foundations for third addition to shops at Lenox Ave. and 148th St. Yard, (A) Rosenthal Eng. & Contg. Co., 226 Jackson St., Brooklyn, (awarded contract); (B) M. De Balso, 560 East 221st St.; (C) O'Connell & Strada, Inc., 3329 Olinville Ave. The unit bids were as follows:

	A	B	C
42,400 cu.yd. earth excavation, above mean high water	$2.12	$1.90	$1.75
2,250 cu.yd. earth excavation, below mean high water	3.45	4.50	2.50
525 cu.yd. concrete masonry, 1:2:3.85 concrete	20.00	20.00	16.00
6,100 cu.yd. concrete masonry, 1:2.5:5 concrete	19.00	15.00	15.25
5 cu.yd. brick masonry	32.00	35.00	28.00
150,000 lin.ft. timber piles	42	.70	.85
1M. ft. b.m. timber foundations	200.00	100.00	120.00
900 sq.yd. waterproofing, coating of pitch without fabric	.30	.60	.30
3,800 duct. ft. railroad ducts	.50	.60	.40
6 ton steel beams and shapes	160.00	95.00	90.00
27 ton steel rods and bars	90.00	75.00	75.00
3 ton miscellaneous iron castings	300.00	180.00	125.00
17 ton cast iron sewer pipe, straight pipe	90.00	90.00	110.00
2 ton cast iron sewer pipe, special castings	200.00	200.00	180.00
Extended totals	$295,801	$305,845	$315,970

FOUNDATIONS—FLUSHING, N. Y.

Following are lowest three bids opened Nov. 10, by Transit Comn., 49 Lafayette St., New York City, for constructing foundations for Route 52, Sect. 1, Flushing Route of Rapid Transit R.R., (A) Gustin Morris Contg. Corp., 72 Hunterspoint Ave., Queens; (B) H. Newman, 97 Court St., Brooklyn; (C) Meads & Co., 27 West 14th St., New York City. The unit bids were as follows:

	A	B	C
9,000 cu.yd. column excavation above M.H.W.	$3.25	$1.92	$3.40
50 cu.yd. column excavation below M.H.W.	3.25	3.84	8.00
10 replacing trees	25.00	25.00	25.00
210 cu.yd. concrete masonry 1:2:3.85 concrete	30.00	19.62	20.00
2,100 cu.yd. concrete masonry 1:2½:5 concrete	11.00	15.00	13.00
13,000 lin.ft. precast reinforced concrete piles	1.80	3.00	2.40
10 cu.yd. broken stone or gravel in place	4.00	6.50	7.00
150 sq.yd. waterproofing-pitch without fabric	.50	1.00	1.40
300 lin.ft. 4-in. vitrified drain pipe in place	.40	.50	.50
50 ton structural steel for column foundations in place	125.00	140.00	115.00
800 sq.yd. restoring street surface	2.00	3.00	2.50
100 lin.ft. restoring old curb	2.00	1.00	2.00
10 service connections for sewers	20.00	10.00	40.00
50 lin.ft. 4-in. water pipes and appurtenances	.50	.50	3.00
50 lin.ft. 6-in. water pipes and appurtenances	.60	1.00	4.00
10 service connections for water pipes	20.00	10.00	40.00
50 lin.ft. 6-in. c.i. gas pipes and appurtenances	.60	1.00	4.00
10 service connections for gas pipes	20.00	10.00	30.00
1 ton c.i. hub and spigot straight pipe	60.00	100.00	120.00
1 ton c.i. hub & spigot special castings	120.00	150.00	180.00
Extended totals	$91,613	$102,882	$104,280

Miscellaneous (Continued)

Gas Distribution System—Alexandria, La.—Dec. 7, by Comn. Council, gas distribution system incl. 136,000 ft. c.i. and 52,000 ft. steel pipe, valves, etc. W. H. Sylvester, city engr.

Creosoted Piles—New Orleans, La.—Dec. 7, by Bd. Port Comrs., New Orleans Court Bldg., 415 creosoted piles, 70 and 85 ft. long.

Shed—New Orleans, La.—Dec. 7, by Bd. Port Comrs., steel frame and corrugated iron shed at Market St. wharf. $150,000.

Wharf—New Orleans, La.—Dec. 14, by Bd. Port Comrs., New Orleans Court Bldg., reconstructing wharf and ratproofing at Robin St. Landing; adv. this issue.

Road Machinery—Illinois—Dec. 6, by Dept. Pub. Wks. and Buildings, and Div. Purchases and Supplies, Springfield, 27 portable heating kettles, 32 graders, etc. H. H. Kohn, supt.; adv. this issue.

Lumber — Bedford, Ia.—Dec. 5, by Supervs. Taylor Co., for 180,000 ft. No. 1 common Douglas fir bridge lumber $7,000.

Piling and Lumber—Indianola, Ia.—Dec. 6, by Supervs. Warren Co., for 7,140 ft. 9 in. tip cypress piling and 323,000 ft. fir bridge lumber.

Bituminous Macadam, etc.—Clayton, Mo.—Dec. 6, by W. Elbring, engr. St. Louis Co., Court House, furnishing 2,792 squares bituminous macadam for Florissant Rd. from northern limits of Ferguson, Mo., to St. Francois St. in St. Ferdinand, Mo., thence along St. Francois St. to Ferdinand St.; Ferdinand St. to Graham Rd.; 3,200 squares for Bellefontaine Rd. from city limits of St. Louis to Larimore Rd., 2,432 squares for New Halls Ferry Rd. from Old Halls Ferry to Parker Rds., 2,205 squares for Old Halls Ferry Rd. from New Halls Ferry Rd. to Black Jack, and Parker Rd. from Old Halls Ferry Rd. eastward 1,000 ft.; furnishing 124,101 gal. refined tar or Bermudez asphalt for bituminous macadam pavement for Florissant Rd. from St. Francois to Ferdinand Sts., 128,000 gal. for Bellefontaine Rd., 97,266 gal. for New Halls Ferry Rd., 88,200 gal. for Old Halls Ferry and Parker Rds.; 1,713 ton roofing gravel for Florissant Rd., St. Francois and Ferdinand Sts., 1,756 ton for Bellefontaine Rd., 1,342 ton for New Halls Ferry Rd., 1,217 ton for Old Halls Ferry and Parker Rds.

Steam Shovel—Marshall, Tex.—Marshall Brick Co. receiving bids steam shovel about 1¼ yd. capacity.

Tract Development—San Diego, Cal.—M. J. Lyon, archt. and engr., 521 Union Bldg., also at 333 Kearny St., San Francisco, taking bids for erecting townsite on 645 acres land at Tia Juana, Mexico, incl. 14 mi. macadam streets, sewers and lighting system, 4 story tile and timber hotel, rein.-con. theatre, harbor developments, railroad extensions, gas plant, golf courses, polo grounds, athletic field, amusement buildings, etc., for Zarocoza Investment Co., 521 Union Bldg., San Diego. Total cost between $4,000,000 and $5,000,000.

BIDS RECEIVED

Shaft—Brooklyn, N. Y.—Bd. Estimate & Apportionment, City Hall, New York, opened bids Nov. 27, Shore Rd. shaft, here, for freight and passenger railroad tunnel in Boros of Brooklyn and Richmond under New York Bay, New York City, from P. McGovern & Co., 50 East 42nd St., New York, 494,000; Keystone State Co., $510,000; Mason Hanger, $523,000. Noted Nov. 2.

Lumber—Ocean City, N. J.—State Hy. Dept., Trenton, opened bids Nov. 21, furnishing 487,400 ft. lumber for use on Ocean City-Somers Point Bridge, delivery made f.o.b. cars at railroad siding, here, from J. D. Loieaux Lumber Co., South Ave., Plainfield, $27,262 and $27,670; Townsend Lumber Yard, Ocean City (street address not available) $29,828 and $28,292; Boynton Lumber Co., Sewaren, $31,655 and $30,218. Noted Nov. 2.

Underpasses, etc.—North Carolina—State Hy. Comn., Raleigh, grading underpasses and building substructures under Southern R.R. at Gibsonville and Four Mile Siding, State Project 532, Guilford Co., from L. M. Lowdermilk, Route 4, Greensboro, $25,000; N. L. Teer, Durham, $29,080; C. B. Hester, Greensboro, $38,420. Noted Nov. 9.

Brick—Tampa, Fla.—Hillsborough Co. opened bids Nov. 18, furnishing 10,000,000 bricks, from Westport Co., Westport (Baltimore P. O.), $41.80 per 1,000; Southern Clay Mfg. Co., Vol St. Life Bldg., Chattanooga, Tenn., $45 per 1,000.

Asphalt—Detroit, Mich.—Dept. Pub. Wks., furnishing 6,000 ton asphalt f.o.b. Detroit, (1) per ton in packages (2) per ton in tank cars, from Atlantic Refining Co., 3144 Passyunk Ave., Phila., Pa., (1) $23.68 (2) $18.95; Standard Oil Co., 910 South Michigan Ave., Chicago, (1) $24.25 (2) $20.25; U. S. Asphalt Refining Co., 90 West St., New York City, (1) $23.85 (2) $20.

Retaining Wall — Des Moines, Ia. — For 180 ft. rein.-con. retaining wall, 40 ft. high, along east bank Des Moines River, north of University Ave., 760 cu.yd. rein.-con., 50 ton steel bars, from J. Horrabin, 1422 Walnut St., $24,600; Koss Constr. Co., 2818 5th St., $28,333; F. E. Marsh & Co., Jefferson, $28,900. Noted Nov. 16.

CONTRACTS AWARDED

Heating and Ventilating Apparatus, etc.—Brooklyn, N. Y.—Bd. Educ., 500 Park Ave., New York, heating, ventilating and temperature regulation apparatus in Thomas Jefferson High School, Dumont Ave., here, to Gillis & Goeghegan, 537 West Bway., New York, $179,840. Noted Nov. 9.

Wall, etc.—Buffalo, N. Y.—Commissioner Pub. Wks., Municipal Bldg., crib and concrete wall, to Great Lakes Dredge & Dock Co., Morgan Bldg., $97,000; low landing dock, to G. Parks Sons Co., 217 15th St., $8,850. Noted Nov. 9.

Asphaltic Wearing Surface Sand—New York, N. Y.—J. Miller, pres. Manhattan Boro, Municipal Bldg., furnishing and delivering 2,000 cu. yd. asphaltic wearing surface sand, to C. W. Crane, 17 Battery Pl., $2,080. Noted Nov. 23.

Column Foundations—New York, N. Y.—Transit Comn., 49 Lafayette St., column foundations for part of Rapid Transit R. R., Flushing Route, to Gustin Morris Co., Creek St. and Anabel Pl., Long Island City, $91,613. This corrects report in Nov. 23 issue.

Jetties, etc.—Longport, N. J.—Bd. Boro Comrs. to E. J. Holland, 11 North Hillside St., Atlantic City, placing stone on 11th Ave. jetty, $3.60 per ton; to F. P. Gandy, 28 North Sovereign St., Atlantic City, for bulkhead, $12 per ft.; to L. J. Sieling, Broad St., Red Bank, stone in front of seawall, $4.85 per ton, placing floats $3,450, $3,150 and $2,850. Noted Oct. 26.

Concrete Culvert Pipe—South Carolina—State Hy. Comn., Columbia, furnishing and delivering various sized concrete culvert pipe, to Southern Constr. Products Co., Anderson. Noted Oct. 26.

Foundation—Ill., Chicago—Olson Rug Co., 32 Lafin St., foundation for 5 story, 84 x 187 ft. factory, rein.-con., brick and steel, 1514-20 West Monroe St. to Sternberg-Powell Co., 37 West Van Buren St. Noted Oct. 12.

Train Sheds — Galveston, Tex. — Gulf, Colorado & Santa Fe R.R., Union Depot Bldg., 2 Y-shaped concrete and steel train sheds, to Doullut & Williams, Howard St., New Orleans, La., $25,000.

Tunnel—Rocky Point (Metz P. O.), Calif.—Southern Pacific Ry. Co., 65 Market St., San Francisco, 1,200 ft. single track railway tunnel, concrete lined, to Utah Constr. Co. Phelan Bldg., San Francisco, $200,000.

Gas Mains—Ottawa Ont.—Ottawa Gas Co., 35 Sparks St., will extend gas mains to Eastview, by day labor. $75,000. A. A. Dion, 2 4th Ave., engr.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

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OFFICIAL PROPOSALS

Bids: Dec. 13.

Highway Work

Dover, Del.

Sealed proposals will be received by the State Highway Department, at its office, Dover, Delaware, until 2 o'clock P.M., December 13, 1922, and at that place and time publicly opened, for the construction of State Highway work, involving the following approximate quantities:

CONTRACT RW-1
WALL ON PHILADELPHIA PIKE
750 cu.yd. Excavation.
700 cu.yds. Cement Rubble Masonry.

Performance of contract shall commence within ten (10) days after execution of the contract and be completed on or before April 1, 1923.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked "Proposal for the Construction of State Highway work under Contract No. RW-1."

The Contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen and index plans and specifications may be obtained upon deposit of ten dollars ($10.00) which amount will be refunded upon return of plans and specifications in good condition at the office of

STATE HIGHWAY DEPARTMENT.
Dover, Delaware.

Bids: Dec. 19.

Mt. Prospect Conduit

CONTRACT 196

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 A.M., Eastern Standard time, on Tuesday, December 19, 1922, for Contract 196, for the construction of the Mt. Prospect conduit, a portion of the City conduits of the Catskill aqueduct, extending from Shaft 24 of the City tunnel in Fort Greene park, along Cumberland Street, Lafayette, Washington and Flatbush Avenues to Clarkson Avenue, in the Borough of Brooklyn, New York City.

The conduit will consist of about 10,530 linear feet of 72-inch and 6,270 linear feet of 66-inch steel pipe, about 360 tons of cast-iron pipe and special castings of various sizes, a Venturi meter, valves and other appurtenances, all of which will have to be maintained for one year.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, etc., can be obtained at the office of the Secretary at the above address, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer at the above address.

GEORGE J. GILLESPIE,
President.
JAMES P. SINNOTT,
PHILIP F. DONOHUE,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

OFFICIAL PROPOSALS

Bids: Dec. 14.

Steel Truss Bridge

Hamburg and Evans, N. Y.

Sealed proposals will be received by the joint Town Board of Towns of Hamburg and Evans, Erie County, N. Y., at the office of the Town Clerk, Hamburg, N. Y., on Thursday, December 14th, at 2:00 P.M., for the construction of a steel truss highway bridge, 180-ft. span and 24-ft. roadway, on the Lake Shore State Highway, across the Eighteen Mile Creek.

Plans, specifications and bidding sheets may be obtained at the office of George C. Diehl, County Engineer, 577 Ellicott Sq., Buffalo, N. Y. Said plans and specifications are on file with the Town Clerks of the Towns of Hamburg and Evans, as follows:

Jos. E. Leach, for Hamburg, Main St., Hamburg, N. Y.

Edward F. Johns, for Evans, Angola, N. Y.

Each proposal must be accompanied by a certified check for at least 5 per cent of the amount of the proposal, and shall be made payable to George B. Abbott, Supervisor, Town of Hamburg.

Each proposal must also be accompanied by an affidavit from a surety or bonding company, duly qualified under the laws of the State of New York, stating that in case this bidder be awarded the contract for the work covered in the bid, said surety or bonding company will furnish the required bond within ten (10) days of the award of the contract.

The joint Town Board of Hamburg and Evans reserves the right to reject any or all proposals.

JOSEPH E. LEACH,
Town Clerk of Hamburg.
EDWARD F. JOHNS,
Town Clerk of Evans.
Dated, November 20, 1922.

Bids: Dec. 4.

Street Paving and Draining

Earlington, Ky.

Sealed proposals will be received up to 2 o'clock p.m., December 4, 1922, by the Mayor of the city of Erlington, Ky., for the paving and draining the several streets in the city of Earlington, Ky., with warrenite bitulithic pavement or vitrified brick pavement on a rolled stone base, the type to be selected by the City Council after the bids have been opened and compared.

Estimated Quantities.—Earth excavation, 23,570 cu.yd.; paving surface, 46,300 sq. yd.; crushed stone, 13,840 cu.yd.; curb and gutter, 22,870 lin.ft.; storm sewers, 12-in. to 42-in., 4,776 lin.ft.; manholes, 23; inlets, 62; concrete, 1:2½:5, 162.44 cu.yd.; 1:2:4, 84.02 cu.yd.; 1:2:3, 1.27 cu.yd.; reinforcing steel, 10,215 lb. These quantities subject to modification.

The City Council reserves the right to reject any or all bids. Each bid must be accompanied by a certified check for $250, payable to the Mayor of the city of Earlington, Ky.

Plans and specifications on file at the office of R. C. Giffin, Civil and Mining Engineer, Madisonville, Ky., and may be inpected there or a copy may be obtained upon deposit of $15, which deposit will be returned upon the return of the plans in good condition.

(Signed) C. B. JOHNSON, M. D.,
Mayor.

OFFICIAL PROPOSALS

Bids: Dec. 11.

Pumping Station Equipment

CONTRACT NO. 5

Monroe, Mich.

Sealed proposals will be received by the City Clerk of Monroe up to 7:30 o'clock p.m., Eastern Standard Time of the 11th day of December, 1922, for the furnishing and installing of the following pumping station equipment in the City Water Works.

One 3 m.g.d. steam pumping engine.
One steam turbine-driven electrical generator.
Two 150 hp. water tube boilers.
Two boiler feed pumps.
One feed water heater.
High pressure steam piping.
Smoke breeching.
One hand-power traveling crane.
One platform scale.
Two 1 m.g.d. motor-driven centrifugal pumps.
One 2 m.g.d. motor-driven centrifugal pump.
One sump pump.
Two coal trucks.
One switchboard.
Painting all machinery and piping.

The specifications under which the work is to be done may be examined at the office of the City Clerk, Monroe, Michigan, or at the office of Hoad, Decker, Shoecraft and Drury, Consulting Engineers, Ann Arbor, Michigan, and copies of the same may be obtained by making a deposit of five dollars, which will be refunded upon their return in good condition or their use in a submitted proposal.

A certified check in an amount of three thousand dollars ($3,000.00) will be required with each proposal.

The right to accept any proposal, to reject any or all proposals, and to waive defects in proposals is reserved by the city.

JAS. H. GILMORE, Mayor.
F. M. KRESSBACH, City Clerk.
HOAD, DECKER, SHOECRAFT
AND DRURY,
Consulting Engineers,
Ann Arbor, Michigan.

Bids: Dec. 18.

Refuse Incinerator

Allentown, Pa.

Sealed proposals will be received by the undersigned at his office, Room 301, City Hall until 9:30 o'clock A.M., Monday, December 18, 1922, for the construction of a Refuse Incinerator.

The work to be done consists of the furnishing, installing, and testing ready for operation, on foundations to be constructed by the City of Allentown a refuse incinerator with all appurtenances, of a capacity of 70 tons per 24 hours. The City of Allentown will construct under separate contracts the building, foundations for incinerator and appurtenances and chimney from plans submitted by the successful bidder.

All proposals must be made upon forms provided therefor and accompanied by a certified check for the sum of Five Thousand ($5,000.00) Dollars.

Specification and forms may be obtained at the office of the City Engineer, City Hall Allentown, Pennsylvania, upon depositing the sum of Fifty ($50.00) Dollars which amount will be returned upon the return of the specifications.

The City of Allentown reserves the right to reject any or all bids.

M. W. GROSS.
Mayor.

H. F. BASCOM,
City Engineer.

Bids: Dec. 6.

Bridge

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the Reconstruction of Grand Avenue Bridge, No. N-14, over Sunset Lake; consisting of three forty foot spans and thirty foot roadway, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey, on December 6th, 1922, at 11.00 a.m.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BYRANT B. NEWCOMB, Director.
Attest: CHAS. E. COLE, Clerk.
Freehold, N. J., November 8th, 1922.

Bids: Dec. 11.

Missouri River Bridge

Yankton, S. D.

Bids will be received up to ten o'clock A.M., December 11, 1922, by the Meridian Highway Bridge Company at its office in Yankton, South Dakota, for the furnishing and delivery and for the erection jointly or separately of approximately 3,700 tons of steel for the superstructure of a combined railway and highway bridge over the Missouri River at Yankton, South Dakota. Plans, specifications and bidding forms may be secured from the company's Consulting Engineers, Harrington, Howard and Ash, 1012 Baltimore Avenue, Kansas City, Missouri, upon deposit of $20.00—$10.00 of which will be returned upon the return, in good condition, of the plans and specifications.

Bids: Dec. 5.

Steel Water Tank and Tower

Ponca City, Okla.

Sealed bids will be received at the Office of the City Clerk up to 12 o'clock noon on December 5th, 1922, by the City of Ponca City, Oklahoma, for the furnishing of and the complete erection of one five hundred thousand (500 000) gallon steel water tank and tower. Specifications may be obtained at the office of the City Clerk upon deposit of ten dollars ($10.00). All bids must be accompanied by a certified check in a sum equal to ten per cent (10%) of the amount of the bid, said check to be forfeited to the City of Ponca City in case the successful bidder fails to enter into contract and give good and sufficient bond within ten days from the date of the award to him.

The right is reserved to reject any and all bids.

C. E. NORTON,
City Clerk.
PHILIP R. DUNTON,
Engineer

Bids: Dec 5.

Bridge

Cape May, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Cape May, for the construction of a bridge across Grassy Sound Channel, including Strauss Bascule Draw Span, Cresoted Timber Trestle and Abutments with Graveled Approaches on Sand Fill, on the line of the North Wildwood to Burleigh Road in Middle Township, Cape May County, N. J., and opened and read in public at Cape May Court House, Cape May County, N. J., on Tuesday, December 5th, 1922, at 12 o'clock noon.

Drawings, specifications and forms of bid, contracts and bond for the proposed work, prepared by R. Fendall Smith, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at Marmora, Cape May County, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings, by the Engineer on proper notice, and a deposit of $25.00, which will be refunded upon the return of the Plans and Specifications in good condition.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of Bridge and road on the outside, addressed to The Board of Chosen Freeholders of the County of Cape May, N. J., and must be accompanied by a Certificate from a Surety Company and a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of The Board of Chosen Freeholders, of the County of Cape May, N.J.

IRVING FITCH, Clerk.
Sea Isle City, N. J.

Bids: Dec. 14.

Grading and Bridges

Raleigh, N. C.

Sealed bids for the construction of the following Projects will be received by the **North Carolina State Highway Commission at Raleigh, N. C., until 10:00 A.M., on the 14th day of December, 1922, when they will** be opened and read:

Grading Project, including drainage pipe, structures, etc.

Project No.	County	Length
201	Carteret	14.14

BRIDGE PROJECTS

138-B Northampton—(a) 1 350 ft. steel span with 265 20 ft. timber spans or timber piles, or (b) same on pre-cast R.C. piles, (c) or same as (a) except timber superstructure on I beams, (d) same as (c) except pre-cast concrete piles for substructure.

256 Lenoir—3 bridges, 2 30 ft. R.C. Thru Girders, 3 30 ft. R.C. Thru Girders, and 4 40 ft. R.C. Thru Girders.

Specifications, proposal forms, etc., may be obtained from the State Highway Commission at Raleigh, N. C.

Plans may be seen in the Raleigh office, or in the offices of the District Engineers.

Bridge plans may be obtained from the State Highway Commission at Raleigh, N. C., upon *payment* of five ($5.00) dollars per set.

The right is reserved to reject any or all bids.

By order of the North Carolina State Highway Commission.

Bids: Jan. 1.

Road Bed, Bridges and Culverts

Kelso, Wash.

Sealed proposals for the construction of roadbed, bridges and culverts for approximately eight and one-half (8½) miles of railroad in Cowlitz County, Washington, will be received by the Longview, Portland & Northern Ry. Company at its offices at Kelso, Washington, up to 2 o'clock P.M., January 1st, 1923, when they will be opened and read, such eight and one-half (8½) miles being regarded by the company as the first unit of contemplated construction expected to total twenty-six (26) miles, contract expected to be let early in 1923.

Drawings, specifications and form of proposal, contract and bond are on file in the office of the Chief Engineer, Kelso, Washington, and may be inspected by prospective bidders; or same will be furnished to interested parties on deposit of Ten Dollars ($10.00), which will be refunded upon return of papers in good condition.

Bids must be made on proposal forms to be furnished by the company and in the manner designated therein, same to be inclosed in sealed envelope bearing the name and address of the bidder and to be marked "Bid for Railroad Construction."

The principal quantities involved are approximately as follows:

153,580	cubic yards common excavation.
39,300	cubic yards loose rock excavation.
59,300	cubic yards solid rock excavation.
222,660	cubic yards embankment borrow.
649,710	station yards overhaul.
924	lin. feet 18 in. concrete culvert pipe.
672	lin. feet 24 in. concrete culvert pipe.
60	lin. feet 30 in. concrete culvert pipe.
380	lin. feet 36 in. concrete culvert pipe.
70	lin. feet 42 in. concrete culvert pipe.
43,860	lin. feet piling.
514,500	ft. B.M. lumber for trestles.

Each proposal must be accompanied by a certified check payable to the Longview, Portland & Northern Ry. Company for not less than five (5) per cent of the total amount of the bid as a guarantee that contract will be entered into if awarded.

The person or persons, if any to whom the contract is awarded will be required to file a bond in a sum not less than 50 per cent of the total amount bid, with good and sufficient sureties, to guarantee the faithful performance of the contract.

Special attention of the bidder is called to "Information for Bidders" included in the proposal forms.

The right is reserved to reject any and all bids.

LONGVIEW-PORTLAND & NORTHERN
RY. COMPANY.
By WESLEY VANDERCOOK,
Chief Engineer.

Bids: Dec. 11.

Coagulation Basin

CONTRACT NO. 6

Monroe, Mich.

Sealed proposals will be received by the City Clerk of Monroe, Michigan, up to 7:30 o'clock p.m., Eastern Standard Time, on the 11th day of December, 1922, for the construction of a coagulation basin, consisting of an underground reinforced concrete substructure with a brick superstructure.

The work to be done under Contract No. 6 includes the construction of the basin complete with electric lighting, conduits and water piping, valves and connections.

The plans and specifications under which the work is to be done may be examined at the office of the City Clerk of Monroe, Michigan, or at the office of Hoad, Decker, Shoecraft and Drury, Consulting Civil Engineers, Ann Arbor, Michigan, and copies of the same may be obtained by making a deposit of five dollars, which will be refunded upon their return in good condition.

A certified check for a sum not less than five per cent of the amount of the bid will be required with each proposal.

The right to accept any proposal, to reject any or all proposals, and to waive defects in proposals is reserved by the City.

J. H. GILMORE, Mayor
F. M. KRESSBACH, City Clerk
Hoad, Decker, Shoecraft and Drury,
Consulting Civil Engineers,
Ann Arbor, Michigan.

Why?

WHY do Government regulations specify that contracts for construction, equipment and supplies over a certain minimum amount **must** be advertised?

WHY do the laws of most States and Municipalities specify the same thing?

WHY do so many private corporations advertise **their** big contracts?

WHY do Consulting Engineers, Architects, and others recommend and endorse the advertising of Contracts To Be Let?

And—

WHY are 90% of the advertisements on which **real national competition** is desired published in ENGINEERING NEWS-RECORD?

In the answers to the foregoing questions you will find unquestionable proof that

1—**Advertised Contracts** are the accepted form of public letting to insure the awarding of contracts free of prejudice.

2—**Advertised Contracts** guarantee the greatest possible saving through maximum competition and that—

3—**ENGINEERING NEWS-RECORD** is universally recognized as the **one** dominant medium of **national** circulation for advertising Contracts To Be Let.

Are your contracts advertised?
Are they advertised in Engineering News-Record?
If not—WHY?

0083

Bids: Dec. 14.

Road Work and Bridges

Richmond, Va.

Bids will be received at the Office of the Virginia State Highway Commission, corner 10th and Marshall Streets, Richmond, Va., until 12 o'clock noon, **Thursday**, December 14th, 1922, for the **construction** of:

1.—PROJECT F-169B, **Route 3**, (a) Blue Ridge Church to **Tinkers Creek**, in Botetourt County. **9.95** miles **of** 18 ft. x 8 in. bituminous macadam **road**, involving approximately 23,677 **cu.yds.** unclassified excavation; 53,557 **cu.yds.** borrow excavation; 9,519 cu.yds. channel change; 930 lin.ft. cast iron pipe; 300 lin.ft. vitrified clay pipe; 171 cu.yds. Class "A" concrete; 660 cu.yds. Class "B" concrete; 2,550 lin.ft. wooden guard rail; 230 lin.ft. wooden guard rail with steel posts. Alternate bids are requested using 6 in.-8 in.-6 in. x 18 ft. one course concrete pavement.

(b) 7 bridges **over** streams on the road between Blue Ridge Church and Tinkers Creek, having a total length of 381 ft., involving approximately 417 cu.yds. Class "A" concrete; **1,213** cu.yds. Class "B" concrete; 75,170 lbs. of reinforcing steel; 1,320 lin.ft. piles.

2.—PROJECT F-186A, Route 12, from Sandy River, west, in Pittsylvania County, approximately 6.28 miles of 6 in.-8 in.-6 in. x 18 ft. concrete pavement, involving approximately 3 acres clearing and grubbing, 27,965 cu.yds. excavation; 646 lin.ft. cast iron pipe; 378 lin.ft. vitrified clay pipe encased in concrete; 39 cu.yds. Class "B" concrete; 850 lin.ft. wooden guard rail.

3.—PROJECT S-205, Route 1, (a) Fredericksburg to Spotsylvania Court House in Spotsylvania County. 9.91 miles of 6 in.-8 in.-6 in. x 18 ft. concrete roadway, involving approximately 16 acres clearing and grubbing; 54,760 cu.yds. unclassified excavation; 1,100 lin.ft. cast iron pipe; 430 lin.ft. vitrified clay pipe, encased in concrete; 58 **cu.yds.** Class "A" concrete; 65 cu.yds. Class "B" concrete; 3,739 lbs. reinforcing steel, 2,310 lin.ft. wooden guard rail; 72 **lin.ft. wooden** guard rail, with steel posts.

(b)—Two **bridges**, near **Fredericksburg**, having a total length of 76 ft.-10 in., involving approximately 102 cu.yds. Class "A" concrete; 374 cu.yds. of Class "B" concrete, 1,540 lbs. reinforcing steel.

4.—PROJECT S-215, Route 13, (A) bridge over Appomattox River, in Prince Edward County. Length: 292 ft. 10 in. roadway 19 ft., involving approximately 282 cu.yds. Class "A" concrete, 474 cu.yds. cement rubble masonry, 41,700 lbs. reinforcing steel, 112,000 lbs. structural steel, 1,000 lin.ft. piles.

(b) APPROACHES, to the bridge involving approximately 33,178 cu.yds. borrow excavation, **3,614.4 sq.yds.** of 7 in. x 18 ft. concrete roadway, 2,256 lin.ft. wooden guard rail.

A certified **check** or bidder's bond must accompany each bid amount of certified checks, as follows:

Proj. S-169B—(a) road—$5,000.00; (b) bridge—$2,000.00. Proj. F-186A—$5,000.00. Proj. S205 (a) road—$5,000.00; (b)—bridge—$500.00. Proj. S215 (a) bridge—$1,500.00; (b) approaches $1,000.00. Amount of bidder's bond 20 per cent in excess of certified check.

Plans and specifications are on file at the office of the Virginia State Highway Commission, corner 10th and Marshall Streets, Richmond, and at the offices of the following District Engineers:

Proj. F-169B, and bridges, at Roanoke, Va.; Proj. F-186A at Lynchburg, Va. Proj. S-205, and bridges B and C, at Fredericksburg, Va.; Proj. S-215, A and B, at Richmond, Va.

Additional plans for bidders for the above projects can be obtained upon application to the State Highway Commissioner, upon receipt of five dollars ($5.00) payable to the Assistant Commissioner, $2.50 of which will be refunded when plans are returned in good condition within two weeks after bids are opened. Plans for the bridges can be secured from **W. F.** Hobart, 805½ E. Franklin Street, Richmond, Va., upon payments as follows:

Proj. S-169AB-Bridges—$4.15 for all seven. Proj. S-205 b and c 54c. each. Proj. S-215, a and b, $1.98.

Specifications and bidding proposals may be obtained by request from the office of the State Highway Commissioner.

Engineers will be at the following places to show prospective bidders over the Projects:

Project **F-169B** and **bridges**, at **Office of** District Engineer, Roanoke, Va., Tuesday, 10:00 A.M., November 28th.

Project F-186-A, at the Burton Hotel, Danville, Va., 10:00 A.M., Tuesday, December 5th.

Project S-205, and bridges, at Office of District Engineer, Fredericksburg, Va., 10:00 A.M., Thursday, December 7th.

Project S-215, a and b, at Prince Edward Hotel, Farmville, at 10:00 A.M., Tuesday, December 12th.

The State Highway Commission reserves the right to reject any or all bids.

STATE HIGHWAY COMMISSION,
H. G. SHIRLEY, Chairman.
G. P. COLEMAN, Commissioner.

Bids: Dec. 12.

State Hospital Work

Central Islip, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work—Kitchen and Dining Room Building and Connecting Corridor, at the Central Islip State Hospital, Central Islip, N. Y., will be reecived by the State Hospital Commission, Capitol, Albany, N. Y., until three o'clock P.M. on Tuesday December 12, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of **contract** within thirty (30) days after official **notice** of award of contract, and in accordance **with the terms** of Specifications Nos. **3965, 3966, 3967 and** 3968. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Central Islip State Hospital, Central Islip, N. Y., at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department **of Architecture, Capitol,** Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, **Albany, N. Y., upon** reasonable notice to and in the discretion of the State Architect, **L. F. Pilcher, Capitol, Albany,** N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.
Dated: November 23, 1922.

Bids: Dec. 12.

Engines and Boilers

Wheeling, W. Va.

Sealed proposals for the design, construction, erection, putting in operation and testing of two (2) engine driven centrifugal low service pumping engines; one turbine driven centrifugal high service pumping engine, three (3) 350 hp. boilers with stokers and the dismantling, moving and reerecting of the existing Allis-Chalmers pumping engine will be received by the city of Wheeling, W. Va., until 12 o'clock noon, Eastern Standard Time, on the 12th day of December, 1922, and will then be opened and read publicly.

Official proposal blanks, instructions to bidders, specifications, form of contract and bond may be seen at the office of the City Clerk, Wheeling, W. Va., or two (2) copies of each may be obtained by bona fide bidders upon application to The J. N. Chester Engineers, Pittsburgh, Pa., or to the city of Wheeling, W. Va., upon deposit of twenty-five dollars ($25.00), which amount will be refunded to bidders on receipt of a bona fide bid or upon the return of both copies in good order.

The right is reserved to reject any or all bids.

C. H. DOWLER,
City Manager.

Attest:
W. M. EVANS,
City Clerk.

A Representative Reports—

"It was my privilege to meet the Road Commissioners of Kalamazoo County (Mich.) in session and they wished me to convey to your staff their appreciation of the excellent results obtained through publishing proposals in *Engineering News-Record.*"

Bids: Dec. 27.

Dock Wall

TERMINAL CONTRACT NO. 53-B.

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Wednesday, December 27th, 1922, at which place and hour they will be publicly opened and read, for the construction of barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and amendatory laws, and Chapter 402 of the Laws of 1920, as follows:

TERMINAL CONTRACT NO. 53-B.

For constructing certain portions of the dock-wall at Ohio Basin, Buffalo.

Contract plans, sheets 1 to 3, inclusive.

Plans may be seen and detailed specifications, engineers' estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works, at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE,
Superintendent of Public Works.
November 23rd, 1922.

Bids: Dec. 19.

Bridges and Road Work

Charleston, W. Va.

Sealed proposals will be received by the State Road Commission of West Virginia at its office in Charleston, West Virginia, until 10 o'clock a.m. on the 19th day of December, 1922, and said proposals will be opened and read immediately thereafter at the Kanawha County Court House, Charleston, W. Va., for the construction of the following bridges and sections of State Road:

Project 3045, Monroe County—5 miles of the Union-Rock Camp road for grading and draining. Certified check for $3,000.

Project 3047-B, Nicholas County—6 miles of the Gilboa-Drennen Road for grading and draining. Certified check for $3,500.

Project 3182-A, Pocahontas County—6 miles of the Sunset-Frost Road for grading and draining. Certified check for $3,000.

Project 3102, Raleigh County—6 miles of the Shady Springs-Summers County Line Road for grading and draining Certified check for $3,000.

Project 3059, Five Block Bridge No. 856, Logan County over Spruce Fork—130-ft. steel through truss superstructure, concrete or Ashlar masonry substructure. Separate proposal will be received for substructure. Certified check $500, and superstructure certified check for $500.

Project 3188, Wayne County—5.5 miles of the Marrowbone-Crum Road for grading and draining. Certified check for $4,000.

Project 3061, Echo Bridge No. 811, Wayne County, over Twelve Pole Creek—120-ft. steel through truss superstructure, concrete or Ashlar masonry substructure. Separate proposals will be received for substructure. Certified check $500 and superstructure certified check $500.

Project 3078-A, Pleasants County—3 miles of the River Road, St. Marys to Belmont, for grading, draining and gravel surfacing. Certified check for $2,000.

Project 3082, Wetzel County—3 miles of the River Road, New Martinsville, north, for grading, draining and gravel surfacing. Certified check for $1,200.

Project 3157, Braxton County—8.3 miles of the Gassaway-Frametown Road for grading and draining. Certified check for $7,500.

Project 3160, Doddridge County—8.2 miles of the Northwestern Turnpike, West Union-Ritchie County Line, for grading and draining. Certified check for $4,000.

Project 3170-B, Clay County—3 miles of the Dull Creek-King Shoals Road for grading and draining. Certified check for $1,500.

Project 3026, Jefferson County—7 miles of the Charlestown-Kearneysville Road for grading, draining, and waterbound macadam surface course. Certified check for $5,000.

Project 122-A, Mineral County—8 miles of the Claysville to Grant County Line Road for grading and draining. Certified check for $3,500.

Project 3014, Pendleton County—7 miles of the Petersburg-Franklin Road for grading and draining. Certified check for $3,000.

Project 3033, Randolph County—12 miles of the Valle Head-Webster County Line Road for grading and draining. Certified check for $7,500.

Proposals will be received only upon State standard forms in accordance with plans, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates may be obtained from the office of the Division Engineer in whose territory the proposed construction is located, or from the office of the State Road Commission at Charleston, W. Va.

Each proposal must be accompanied by a certified check for the amount noted.

The right is reserved to reject any and all proposals.

THE STATE ROAD COMMISSION,
OF WEST VIRGINIA.
E. B. CARSKADON, Secretary.

Bids: Dec. 6.

Road Machinery

Springfield, Ill.

Sealed proposals for the following machinery for the Division of Highways will be received by the undersigned until ten o'clock A.M., December 6, 1922.

Twenty-seven Portable Heating Kettles.
Thirty-two Graders.
Forty-four Road Drags.

Full information will be furnished upon application to the undersigned.

The right is reserved to reject any and all bids.

DEPARTMENT OF PUBLIC WORKS AND BUILDINGS.
C. R. MILLER, Director.
DIVISION OF PURCHASES AND SUPPLIES.
H. H. KOHN, Superintendent.
November 22, 1922.

South Nyack, New York Saved $2,642.20

Through advertising for bids on a paving contract in *Engineering News-Record.*

This publicity in these Official Proposal Columns is a mighty profitable investment for any community.

It Costs so little, too.

Bids: Dec. 12.

Motor Driven Water Works Pumps

Wheeling, W. Va.

Sealed proposals for the design, construction, erection and putting in operation of three (3) low service and three (3) high service motor driven, centrifugal pumping engines in units of 10, 15 and 20 million gallons, will be received by the city of Wheeling, W. Va., until 12 o'clock noon, Eastern Standard Time, on the 12th day of December, 1922, and will then be opened and read publicly.

Official proposal blanks, instructions to bidders, specifications, form of contract and bond may be seen at the office of the City Clerk, Wheeling, W. Va., or two (2) copies of each may be obtained by bona fide bidders upon application to The J. N. Chester Engineers, Pittsburgh, Pa., or to the city of Wheeling, W. Va., upon deposit of twenty-five dollars ($25.00), which amount will be refunded to bidders on receipt of a bona fide bid or upon the return of both copies in good order.

The right is reserved to reject any or all bids.

C. H. DOWLER,
City Manager.

Attest:
W. M. EVANS,
City Clerk.

¶If one of your employees deliberately put off looking thoroughly into a machine or method for which was claimed a marked improvement over present operations, he'd "get the air." ¶If you have continually put off learning why Swart Contract Bond Service is better, what penalty do you recommend for your own neglect?

SWART 92 William St. New York

Bids: Jan. 5 (Date of closing extended).

Reservoir Dam

Bluefield, W. Va.

Sealed proposals or bids for the construction of a clay or earthen dam, containing about 40,000 cubic yards of material, to be sluiced into place, will be received at the office of the BLUEFIELD WATER WORKS & IMPROVEMENT COMPANY, at Bluefield, West Virginia, until three o'clock P.M., on the 5th day of January, 1923, when they will be publicly opened and read. All proposals shall be enclosed in an envelope furnished by the above styled company and shall be accompanied by a certified check on some national bank, in the sum of five (5%) per cent of the amount of the proposed bid. The contractor to whom the award is made will be required to furnish surety company bond in the sum of thirty five (35%) per cent of the amount of the contract, within thirty days after official notice of the award of contract and in accordance with the terms of the specifications. The right is reserved to reject any or all bids. Drawings, specifications and blank forms of proposals may be consulted at the office of company, 601 Princeton Avenue, Bluefield, West Virginia, or they will be forwarded by mail upon request if $4.00 accompanies the order. This amount will be refunded upon return of the plans and specifications in reasonably good order.

BLUEFIELD WATER WORKS & IMPROVEMENT COMPANY.
WM. McCARTHY,
Superintendent.
November 23rd, 1922.

Bids: Dec. 19.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Tuesday, December 19, 1922, for the improvement of highways in the following counties:

Albany ....(one highway: 0.23)
Cattaraugus ....(one highway: 0.15)
Monroe ....(one highway: 0.12)
Ontario ....(one highway: 0.41)
Otsego ....(one highway: 0.48)
Steuben ....(one highway: 4.24)
Suffold ....(two highways: Gravity Concrete Retaining Wall)

Also for the reconstruction of the following:

Montgomery...(two contracts: 1.50 & 2.50)
Niagara ....(one contract: 5.13)
Steuben ....(one contract: 3.00)
Suffolk ....(one contract: 4.50)
Tioga ....(one contract: 3.18)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved or reconstructed. The addresses of the Division Engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.
State Commission of Highways.
J. C. FINCH,
Secretary.

Bids: Dec. 29.

Garbage Incinerator

Portland, Ore.

Sealed proposals will be received at the office of the Purchasing Agent of the City of Portland, Oregon, until 2.00 o'clock P.M., Friday, December 29, 1922, for the construction of a garbage incinerator according to specifications on file.

A certified check for 10 per cent of the amount must accompany each bid.

Specifications and additional information may be obtained from

O. LAURGAARD,
City Engineer.

CONTRACT BONDS FOR RESPONSIBLE CONTRACTORS

When you require a contract bond, insist that the Ætna write it and you will be well and promptly served.

ÆTNA CASUALTY AND SURETY COMPANY

HARTFORD, CONN. AGENTS EVERYWHERE

OFFICIAL PROPOSALS

Bids: Dec. 14.

Wharf Reconstruction

New Orleans, La.

Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans, at their office, Suite 200, New Orleans Court Building, until December 14th at 3:00 P.M., and then publicly opened for reconstruction of wharf and ratproofing at Robin Street Landing.

A deposit of $4,000.00 in cash or certified check is required with each proposal.

A bond to the amount of 50% of the sum bid is required with notarial contract.

Specifications and proposal form are on file in the office of the Supervisor of Purchases at 1 Canal Street, New Orleans, Louisiana. Complete sets will be furnished to prospective bidders on deposit of $10.00, which will be refunded to depositors who submit proposals or return sets in good condition.

The right is reserved to reject any or all bids and to waive informalities.

J. H. WALSH, General Manager

Bids: Dec. 28.

Resurfacing Streets

Mobile, Ala.

Bids will be received by the Board of City Commissioners of the City of Mobile for resurfacing with either Asphalt, Warrenite Bitulithic Asphaltic Concrete, Type No. 1, and Asphaltic Concrete, Type No. 2, until noon, December 28th, 1922, 45,868 square yards of one and half inch surface, 45,868 square yards of one and half inch binder.

Plans and specifications can be had at the office of the City Engineer. The right is reserved to reject any or all bids.

R. V. TAYLOR, Mayor.
WRIGHT SMITH, City Engineer.

Bids: Dec, 11.

Labor-Material Percentage Contract

New Orleans, La.

Sealed proposals will be received at the Sewerage and Water Board, Room 401, No. 526 Carondelet Street, New Orleans, La., up to 12 o'clock noon of Monday, December 11th, 1922, on Labor-Material Percentage Contract for year 1923.

Specifications and blank forms of proposal may be obtained at the office of the Board.

The right is reserved to reject any or all bids.

October 12th, 1922.

A. G. MOFFAT,
Secretary.

GEO. G. EARL,
General Superintendent.

U. S. GOVERNMENT

OFFICE OF CONSTRUCTING QUARTERMASTER, WILLIAM BEAUMONT GENERAL HOSPITAL, EL PASO, TEXAS. Sealed proposals in triplicate will be received at this office until 10:00 A.M., December 20th, 1922, then publicly opened for constructing complete, including utilities, two (2) Field Officers' Quarters; one (1) Bachelor Officers' Quarters, and one (1) Guard House at William Beaumont General Hospital, El Paso, Texas. Plans and specifications furnished upon receipt of certified check for $20.00 to guarantee return.

COMMISSIONERS, D. C., Washington, November 28, 1922. Sealed proposals for furnishing and installing electric light fixtures at the new Eastern High School will be received in Room 509, District Building, until 2 o'clock p.m., December 14, 1922. Detailed information at Room 427, District Building. Deposit of $10 required to insure return of plans and specifications. Cono H. Rudolph, James F. Oyster, Charles Keller, Commissioners, D. C.

SEALED PROPOSALS will be opened by the Supt. of Lighthouses, Philadelphia, Pa., 2 p.m., Dec. 21, 1922, for building stone and reinforced concrete breakwater at Harbor of Refuge Light Station, Delaware Bay, Del. Information on application.

U. S. GOVERNMENT

SEALED PROPOSALS will be received by the Director, U. S. Veterans' Bureau, Arlington Building, Washington, D. O., until 11 o'clock a.m., December 18, 1922, and then and there publicly opened for the construction (exclusive of mechanical equipment) of 29 reinforced concrete buildings of the U. S. Veterans' Hospital at Livermore, California. Drawings and specifications may be obtained upon application to the office of Matthew O'Brien, Architect, No. 68 Post Street, San Francisco, California. Deposit of a certified check or postal money order for $250, payable to Matthew O'Brien, is required as security for the safe return of the drawings and specifications. C. R. Forbes. Director, U. S. Veterans' Bureau, November 18, 1922.

SEALED PROPOSALS will be received by the Director, U. S. Veterans' Bureau, Arlington Building, Washington, D. C., until 11 o'clock a.m., December 18, 1922, and then and there publicly opened for electrical work in connection with 29 buildings at U. S. Veterans' Hospital at Livermore, California. Drawings and specifications may be obtained upon application to the office of Matthew O'Brien, Architect, No. 68 Post Street, San Francisco, California. Deposit of a certified check or postal money order for $250, payable to Matthew O'Brien, is required as security for the safe return of the drawings and specifications. C. R. Forbes, Director, U. S. Veterans' Bureau, November 18, 1922.

SEALED PROPOSALS will be received by the Director, U. S. Veterans' Bureau, Arlington Building, Washington, D. C., until 11 o'clock a.m., December 18, 1922, and then and there publicly opened, for plumbing, heating and ventilating work in connection with 29 buildings of the U. S. Veterans' Hospital at Livermore, California. Drawings and specifications may be obtained upon application to the office of Matthem O'Brien, Architect, No. 68 Post Street, San Francisco, California. Deposit of a certified check or postal money order for $250, payable to Matthew O'Brien, is required as security for the safe return of the drawings and specifications. C. R. Forbes, Director, U. S. Veterans' Bureau, November 18, 1922.

SEALED PROPOSALS will be received by the Director, U. S. Veterans' Bureau, Arlington Building, Washington, D. C., until 11 o'clock a.m., December 18, 1922, and then and there publicly opened, for refrigerating machinery in the U. S. Veterans' Hospital at Livermore, California. Drawings and specifications may be obtained upon application to the office of Matthew O'Brien, Architect, No. 68 Post Street, San Francisco, California. Deposit of a certified check or postal money order for $50, payable to Matthew O'Brien, is required as security for the safe return of the drawings and specifications. C. R. Forbes, Director, U. S. Veterans' Bureau, November 18, 1922.

SEALED PROPOSALS will be received by the Director, U. S. Veterans' Bureau, Arlington Building, Washington, D. C., until 11 o'clock a.m., December 18, 1922, and then and there publicly opened for laundry equipment in the U. S. Veterans' Hospital at Livermore, California. Drawings and specifications may be obtained upon application to the office of Matthew O'Brien, Architect, No. 68 Post Street, San Francisco, California. Deposit of a certified check or postal money order for $50, payable to Matthew O'Brien, is required as security for the safe return of the drawings and specifications. C. R. Forbes, Director, U. S. Veterans' Bureau, November 18, 1922.

SEALED PROPOSALS will be received by the Director, U. S. Veterans' Bureau, Arlington Building, Washington, D. C., until 11o'clock a.m., December 18, 1922, and then and there publicly opened, for kitchen equipment in the U. S. Veterans' Hospital at Livermore, California. Drawings and specifications may be obtained upon application to the office of Matthew O'Brien, Architect, No. 68 Post St., San Francisco, California. Deposit of a certified check or postal money order for $50, payable to Matthew O'Brien, is required as security for the safe return of the drawings and specifications. C. R. Forbes, Director, U. S. Veterans' Bureau, November 18, 1922.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, HUNTINGTON, W. VA., November 15, 1922. Sealed proposals will be received here until 11 a.m. (Eastern Time), December 15, 1922, and then opened, for furnishing and delivering steel hull maneuver boat, etc., for Dam No. 30, Ohio River. Further information on application.

U. S. ENGINEER OFFICE, PITTSBURGH, PA. Sealed proposals will be received here until 12 noon (Eastern Time), December 20, 1922, and then opened for furnishing and delivering steel lock gates for Lock No. 1, Allegheny River. Further information on application.

U. S. ENGINEER OFFICE, WILMINGTON, DEL. Sealed proposals will be received here until 11 a.m., December 20, 1922, and then opened for excavating cutoffs in St. Jones and Mispillion Rivers, Del. Further information on application.

U. S. ENGINEER OFFICE, PITTSBURGH, PA. Sealed proposals for constructing and delivering one steel dipper dredge hull afloat at Pittsburgh, Pa., will be received at this office until 12 noon (Eastern time), December 1, 1922, and then opened. Information on application.

U. S. ENGINEER OFFICE, ROCK ISLAND, ILL., Nov. 10, 1922. Sealed proposals will be received here until 10 a.m., December 11, 1922, and then opened, for construction and delivery of ten (10) 100 ft. x 30 ft. x 6 ft. steel barges, complete as specified. Further information on application.

SEALED PROPOSALS will be received and publicly opened by the Director of the U. S. Veterans Bureau in the office of the Quartermaster General, 2306 Munitions Building, Washington, D. C., at 11 a.m., December 12, 1922, for the construction of a Neuro-Psychiatric Hospital at Knoxville, Iowa for the Veterans Bureau. Work will include the construction of fifteen buildings of reinforced concrete and brick, complete with water, lighting, heating, and sewer systems, roads and walks. Plans and specifications may be obtained after November 14, 1922 from the Quartermaster General, 2312 Munition Building, Washington, D. C., upon deposit of $100. One set of plans and specifications will be on exhibition at each of the following stations: Constructing Quartermasters at 30 Whitehall Street, New York City and Scott Field, Belleville, Illinois; also Quartermaster Supply Officers at 1819 West Pershing Road, Chicago, Illinois and Second and Arsenal Streets, St. Louis, Mo.

PROPOSALS FOR NINE STEEL BARGES.—Office Mississippi River Commission, Third District, P. O. Box 404, Vicksburg, Miss. Sealed proposals will be received here until 11 a.m. December 14, 1922, and then opened, for furnishing nine steel barges. Further information on application.

UNITED STATES ENGINEER OFFICE, DETRIOT, MICH.—Sealed proposals will be received here until 11 a.m., December 15, 1922, and then opened, for dredging and rock excavation in Livingstone Channel, Detroit River, Mich. Further information on application.

U. S. ENGINEER OFFICE, WILMINGTON, N. C., Nov. 25, 1922. Sealed proposals will be received here until 12 M., December 26, 1922, and then opened for constructing one 60-foot by 22-foot by 4-foot steel barge. Further information on application.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C. Nov. 20, 1922. Sealed proposals will be received at this office until 3 p.m., Dec. 14, 1922, and then opened, for fly screens for the United States Post Office, Santa Fe, N. M. in accordance with the specification, copies of which may he had at this office or at the office of the Custodian, in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.

SEARCHLIGHT SECTION

EMPLOYMENT—BUSINESS OPPORTUNITIES

Positions Wanted, 4 cents a word, minimum charge 75 cents an insertion.
Positions Vacant and all other classifications, 8 cents a word, minimum $2.

Box Numbers in care of any of our offices count as 10 words in addition to advertising copy.

Replies are forwarded each day as received at all of our offices without additional charge.

Discount of 10% is allowed if one payment is made in advance for 4 consecutive insertions.

THE ABOVE RATES ARE FOR ADVERTISEMENTS SET UNDISPLAYED. FOR DISPLAY RATES SEE "EQUIPMENT" HEADING.

E. N. R.

POSITIONS VACANT

COMPETENT general foremen, master rigger, carpenter foremen, master mechanics and assistant superintendents wanted for heavy hydro-electric construction work. Applicants should give reference and state minimum salary requirements. P-278, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

DRAFTSMAN, experienced, wanted for structural steel buildings; apply by mail only, giving age, nationality, education, experience and salary expected. Post & McCord, 101 Park Ave., New York.

DRAFTSMAN experienced in reinforced concrete and structural steel design. Permanent position for right man. Application must include full qualifications. P-296, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

DRAFTSMEN, detailers and checkers, on shop detailing for structural steel. Morava Construction Co., 85th and Stewart Avenue, Chicago, Ill.

DRAFTSMEN wanted with structural steel and general engineering experience. Location eastern Pennsylvania. State age, education, experience, references and salary desired. P-274, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

DRAFTSMAN and general clerical worker wanted. Young man about 21, for ornamental iron works, New York District. P-321, Eng. News-Record, 10th Ave. at 36th St., New York City.

DRAFTSMAN wanted on municipal work in North Carolina. Give age, education, experience, salary and sample of work. P-316, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

PUMPS

Wanted:—Six ambitious young men for salesman's training course. Must have vision enough to take full advantage of an intensive shop and office training and capable of development into high grade representatives. Engineering degrees required. Also one man of similar qualifications who wishes to specialize in foundry work. Write—

The Goulds Manufacturing Company
Seneca Falls, N. Y.
Attention S. S. Gould, Jr., Vice-Pres.

GOULDS

POSITIONS VACANT

ELECTRICAL instrument repairman wanted for the Panama Canal. $189.28 a month. Must have had at least two years experience in testing, repairing, calibrating, and installing voltmeters, ammeters, wattmeters and watthour meters of all kinds and makes. Must be American citizen, final papers, under 45 years, in good health. Free steamship transportation from New York or New Orleans, wages beginning date of sailing. Write "Chief of Office, The Panama Canal, Washington, D. C."

ENGINEER and draftsman wanted in foundry located western New Jersey; general work in drawing room. P-318, Eng. News-Record, 10th Ave. at 36th St., New York City.

ENGINEER wanted, mechanical and electrical, as assistant to the superintendent of a portland cement plant in the East; must be good, competent, trustworthy young man, with practical experience (cement not necessary); excellent chance for advancement if you can make good. State age, nationality, experience and wages expected. P-319, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

Construction Men

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Level, Transit, and Plane Table Work. "Running" of Farm, Stadia, Highway and Railroad Surveys.

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Day and evening courses. Booklet.

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HIGHER ENGINEERING

(BY MAIL)

Intensive Training for Young Engineers

Reinforced Concrete Engineering
Steel Designing, (Estimating)
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Wilson Courses provide the practice that every young engineer so badly needs after he leaves college. They duplicate actual designing just as it is done in first-class structural designing offices. They are actual experience work, meant to round out your education. Only high-grade men are enrolled for this work.

Get our free literature, if you are ambitious, and want that **ideal course.**

WILSON ENGINEERING CORPORATION

10 Broadway, Hanover, Mass.

POSITIONS VACANT

FIELD men wanted in Eastern States for the education and promotional work in connection with a well known basic building material. Sales experience desirable. Practical familiarity with building construction and engineering necessary with a knowledge of masonry, plaster, and concrete work and practice. Technical training desirable. Permanent positions with good prospects. Write full details. 808 Colorado Building, Washington, D. C.

SALES engineer wanted, experienced in structural and concrete design, to cover one or two Southern states marketing products manufactured by one of the largest concerns in our line; proposition attractive for the right man. Send history, past experience, age and photograph to the Southern General Fireproofing Co., Atlanta, Ga.

SEVERAL structural steel draftsmen wanted for bridge and building work. State experience, age, salary wanted and when can report. Working conditions good. The Ingalls Iron Works Company, Birmingham, Alabama.

SEVERAL first class structural draftsmen to make and check shop drawings. None but competent and experienced men are desired. Reply giving full information, Whitehead & Kales Company, Detroit, Mich.

WANTED structural engineers thoroughly experienced in structural steel designing for factory building; location architect's office, Detroit. State experience in full detail and salary desired. P-113, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

WANTED for large construction job in Province of Quebec, cost acountant with engineering education. Must be prepared to reside close to work. Apply giving experience and salary expected to P. O. Box 2670, Montreal, Canada.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Dec. 11	Monroe, Mich.	Nov. 23
Dec. 11	Monroe, Mich.	Nov. 30
Dec. 11	Westbrook, Minn.	Dec. 7
Dec. 12	Wheeling, W. Va	Nov. 16
Dec. 12	Valley Park, Mo.	Dec. 7
Dec. 15	Plant City, Fla.	Dec. 7
Dec. 19	Houma, La.	Nov. 23
Dec. 19	Brooklyn, N. Y. Adv. Nov. 30 and Dec. 7.	Nov. 30
Dec. 20	Drumheller, Alta.	Dec. 7
Feb. 1	Spokane, Wash.	Nov. 16

SEWERS

Dec. 11	New Orleans, La. Adv. Oct. 12 to Dec. 7.	Oct. 12
Dec. 11	Sanford, Fla.	Dec. 7
Dec. 11	Shaker Heights (Cleveland P. O.), O.	Dec. 7
Dec. 12	West Park, O.	Dec. 7
Dec. 13	Clay Center, Neb.	Dec. 7
Dec. 15	Harlinger, Tex.	Nov. 30
Dec. 28	Indianapolis, Ind. Adv. Dec. 7.	Dec. 7

WASTE DISPOSAL

Dec. 18	Allentown, Pa. Adv. Nov. 23 to Dec. 7.	Nov. 23
Dec. 29	Portland, Ore. Adv. Nov. 30 and Dec. 7.	Nov. 30
Jan. 24	Fargo, N. D. Adv. Dec. 7.	Dec. 7

BRIDGES

Dec. 11	Yankton, S. D.	Nov. 30
Dec. 11	Spokane, Wash.	Nov. 30
Dec. 12	Brunswick, Ga.	Nov. 9
Dec. 12	Alabama	Nov. 16
Dec. 12	Mt. Ayr, Ia.	Nov. 30
Dec. 12	Nashville, N. C.	Nov. 30
Dec. 14	Hamburg, N. Y. Adv. Nov. 30 and Dec. 7.	Nov. 30
Dec. 15	Columbus, Kan.	Dec. 7
Dec. 15	Haverhill, N. H.	Dec. 7
Dec. 16	Missouri	Nov. 30
Dec. 19	West Virginia Adv. Nov. 30 and Dec. 7.	Nov. 30
Dec. 19	Trenton, N. J. Adv. Dec. 7.	Dec. 7
Dec. 21	Coquille, Ore.	Dec. 7
Dec. 26	California	Dec. 7
Dec. 28	Sterling, Ill. Adv. Dec. 7.	Dec. 7
Dec. 28	Minnesota	Dec. 7
Jan. 23	Spokane, Wash	Sept. 21
Sept. 1, 1923,	Sydney, New South Wales, Australia	Aug. 3

DAMS

Jan. 5	Bluefield, W. Va. Adv. Nov. 30 and Dec. 7.	Nov. 30

RAILWAYS

Jan. 1	Washington Adv. Nov. 30 and Dec. 7.	Dec. 7

EXCAVATION, DRAINAGE, IRRIGATION

Dec. 12	Merced, Calif.	Dec. 7
Dec. 13	Brooklyn, N. Y.	Dec. 7

STREETS AND ROADS

Bids Close		See Eng. News-Record
Dec. 11	California	Nov. 23
Dec. 11	St. George, N. Y.	Dec. 7
Dec. 12	Tampa, Fla.	Dec. 7
Dec. 12	Alabama	Nov. 16
Dec. 12	St. Louis, Mo.	Nov. 23
Dec. 12	Mt. Ayr, Ia.	Nov. 30
Dec. 12	Mt. Ayr, Ia.	Dec. 7
Dec. 12	Hondo, Tex.	Dec. 7
Dec. 13	Corsicana, Tex.	Nov. 30
Dec. 14	Jacksonville, Fla.	Dec. 7
Dec. 14	Virginia	Nov. 30
Dec. 14	North Carolina Adv. Nov. 30 and Dec. 7.	Nov. 30
Dec. 14	Harvard, Neb.	Dec. 7
Dec. 14	North Carolina	Dec. 7
Dec. 15	Columbus, Kan.	Nov. 30
Dec. 15	Tennessee	Nov. 30
Dec. 15	Waco, Tex.	Dec. 7
Dec. 15	St. George, N. Y.	Dec. 7
Dec. 16	Mound City, Kan.	Nov. 23
Dec. 16	Quebec	Nov. 23
Dec. 16	Quebec	Dec. 7
Dec. 18	California	Dec. 7
Dec. 19	Topeka, Kan.	Nov. 23
Dec. 19	New York Adv. Nov. 30 and Dec. 7.	Nov. 30
Dec. 19	West Virginia Adv. Nov. 30 and Dec. 7.	Nov. 30
Dec. 19	Ohio	Dec. 7
Dec. 19	Emporia, Kan.	Dec. 7
Dec. 19	Allendale, S. C.	Dec. 7
Dec. 21	Arcata, Calif.	Dec. 7
Dec. 22	Spokane, Wash.	Nov. 2
Dec. 22	Eldorado, Kan.	Nov. 23
Dec. 22	Duluth, Minn.	Nov. 30
Dec. 22	Ohio	Dec. 7
Dec. 22	Duluth, Minn.	Dec. 7
Dec. 23	Mound City, Tex.	Nov. 30
Dec. 26	California	Dec. 7
Dec. 28	Mobile, Ala. Adv. Nov. 30 and Dec. 7.	Nov. 30
Dec. 28	Minnesota	Dec. 7
Dec. 29	Kansas City, Kan.	Dec. 7
Dec. 30	Quebec	Nov. 23
Dec. 30	Quebec	Nov. 2
Dec. 30	Quebec	Nov. 9
Dec. 30	Quebec	Nov. 16
Dec. 30	Quebec	Nov. 30
Jan. 2	St. Louis, Mo.	Dec. 7
Jan. 5	Larned, Kan.	Dec. 7
Jan. 7	Duluth, Minn.	Sept. 28

INDUSTRIAL WORK

Jan. 2	St. Louis, Mo.	Dec. 7

BUILDINGS

Dec. 9	Phila., Pa.	Dec. 7
Dec. 11	Bordentown, N. J.	Dec. 7
Dec. 11	Flushing, N. Y.	Dec. 7
Dec. 12	Amarillo, Tex.	Nov. 30
Dec. 12	Central Islip, N. Y. Adv. Nov. 30 and Dec. 7.	Dec. 7
Dec. 12	Boston, Mass.	Dec. 7
Dec. 13	Baltimore,, Md.	Dec. 7
Dec. 14	Allentown, Pa.	Nov. 16
Dec. 14	St. Louis, Mo.	Dec. 7
Dec. 14	Victoria, B. C.	Dec. 7
Dec. 15	Chisholm, Minn.	Nov. 23
Dec. 18	Bakersfield, Calif.	Nov. 16
Dec. 18	Santa Barbara, Calif.	Nov. 30
Dec. 19	Albany, Ala.	Dec. 7
Dec. 20	Binghamton, N. Y.	Nov. 23
Dec. 21	Hancock, Mich.	Nov. 30
Dec. 22	McCombs, O.	Nov. 30
Dec. 28	Kenosha, Wis.	Nov. 30
Dec. 28	St. Charles, Mo.	Dec. 7
Jan. 2	Olean. N. Y.	Nov. 9
Jan. 2	Duluth, Minn.	Nov. 23
Jan. 10	Nashville, Tenn.	Dec. 7
Mar. 23	Shreveport, La.	Nov. 9

FEDERAL GOVERNMENT WORK

Dec. 11	Barges—Rock Island, Ill. Adv. Nov. 23 to Dec. 7.	Nov. 16
Dec. 11	Changes—Oakland, Calif.	Nov. 23
Dec. 12	Hospital—Knoxville, Ia. Adv. Nov. 16 to Dec. 7.	Nov. 16
Dec. 13	Dredging—New York, N. Y.	Nov. 23
Dec. 14	Garage, etc.—San Diego, Calif.	Nov. 16
Dec. 14	Barges—Vicksburg, Miss. Adv. Nov. 16 to Dec. 7.	Nov. 16
Dec. 15	Dredging—Detroit, Mich. Adv. Nov. 16 to Dec. 7.	Nov. 16
Dec. 15	Maneuver Boat—Huntington, W. Va. Adv. Nov. 16 to Dec. 7.	Nov. 23
Dec. 18	Buildings, Electrical Work, etc. —Livermore, Calif.	Nov. 23
Dec. 20	Barges—Milwaukee, Wis.	Nov. 23
Dec. 20	Lock Gates — Pittsburgh, Pa. Adv. Nov. 23 to Dec. 7.	Nov. 23
Dec. 20	Excavating Cut-offs—Wilmington, Del. Adv. Nov. 23 to Dec. 7.	Nov. 23
Dec. 20	Repairs—San Diego, Calif.	Nov. 23
Dec. 20	Pier Extension—Puget Sound, Wash.	Nov. 23
Dec. 20	Riprapping Dike—Mare Island, Calif.	Nov. 23
Dec. 20	Quarters, etc. — El Paso, Tex. Adv. Nov. 30 and Dec. 7.	Nov. 30

Bids Close		See Eng. News-Record
Dec. 21	Breakwater—Phila., Pa.	Nov. 23
Dec. 26	Barge—Wilmington, N. C. Adv. Nov. 30 and Dec. 7.	Nov. 30
Dec. 26	Remodeling—Rockford, Ill.	Dec. 7
Dec. 27	Post Office—Leesburg, Va.	Dec. 7
Dec. 27	Covering Railroad Track—San Diego, Calif.	Dec. 7
Dec. 28	Hospital — Tupper Lake, N. Y. Adv. Dec. 7.	Dec. 7
Dec. 28	Equipment, etc.—Tupper Lake, N. Y.	Dec. 7
Dec. 28	Radial Brick Stack—Tupper Lake, N. Y.	Dec. 7
Dec. 28	Water Tank—Tupper Lake, Lake, N. Y.	Dec. 7
Dec. 30	Power House — Huntington, W. Va. Adv. Dec. 7.	Dec. 7
Dec. 30	Dredging Pump—Florence, Ala. Adv. Dec. 7.	Dec. 7
Jan. 3	Piers—Pearl Harbor, H. T.	Nov. 16
Jan. 5	Dredge—Cincinnati, O. Adv. Dec. 7.	Dec. 7

MISCELLANEOUS

Dec. 13	Wall—Delaware	Nov. 30
Dec. 14	Wharf—New Orleans, La.	Nov. 30
Dec. 14	Stadium—Berkeley, Calif.	Dec. 7
Dec. 14	Portland Cement — New York, N. Y.	Dec. 7
Dec. 14	Steel—New York, N. Y.	Dec. 7
Dec. 15	Ties and Timber—Montreal, Quebec	Dec. 7
Dec. 18	Coal Handling Plant — Melbourne, Victoria, Australia	Sept. 21
Dec. 20	Bridge Material, etc. — Corydon, Ia.	Dec. 7
Dec. 21	Culvert—Riverdale, Ark. Adv. Dec. 7.	Dec. 7
Dec. 27	Dock Wall—Buffalo, N. Y. Adv. Nov. 30 and Dec. 7.	Nov. 30
Jan. 1	Transmission Line—Spokane, Wash.	Nov. 9

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. C., Kings Mountain—Town Comrs. to sell $68,000 bonds, Dec. 15, for water and sewer extensions. G. E. Lovell, secy.

La., Lafayette—Will sell $144,000 bonds for waterworks and light plant. Address A. Mouton, mayor.

Ill., Sheridan—Making plans new water supply system. $30,000. Marr, Green & Co., 400 North Michigan Ave., Chicago, engrs.

Ill., Stockton — Making plans improvements to water supply system, incl. more economical pumping machinery and equipment. $15,000. W. G. Kirchoffer, Dean Bldg., Madison, Wis., engr.

Wis., Black River Falls—Making plans addition to waterworks system incl. additional water supply. $15,000. W. G. Kirchoffer, Dean Bldg., Madison, engr.

Wis., Milton—Making plans waterworks, sewerage and sewage disposal system. $25,000. W. G. Kirchoffer, Dean Bldg., Madison, engr.

Kan., Alma — Making plans general waterworks improvement. $35,000 bonds voted. A. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., engrs.

Mo., Kirksville—Election latter part of month to vote on $325,000 bonds for general waterworks improvements. Black & Veatch, Mutual Bldg., Kansas City, engrs.

Mo., La Plata—Election latter part of month to vote on $190,000 bonds new water system and sewers. Black & Veatch, Mutual Bldg., Kansas City, engrs.

Okla., Woodward—Voted $175,000 bonds for new water plant and distribution sys-

Waterworks (Continued)

tem. Black & Veatch, Mutual Bldg., Kansas City, Mo., engrs.

Mo., St. Louis—Feb. 9, to vote on 12,000,000 bonds (Proposition 21) for extensions, improvements and additions to water system incl. new plant on Missouri River and equipment, supply mains and right of way, etc., 100,000,000 gal. reservoir, service mains and contingencies. W. W. Horner, City Hall, engr.

Wash., Spokane—Spokane Irrigation Dist. voted $75,000 bonds new domestic and irrigation water system, cast iron.

Wash., Yakima — Plans to acquire distributing system of Pacific Power & Light Co. $400,000; 30 mi. pipe line from Rattle Snake Creek $750,000; reservoir $150,000. Plans election to vote on $1,000,000 bonds. City may have to mortgage the whole water system for $750,000, as bonding limit would be reached at $550,000. C. F. Wilson, city engr.

Wash., Yakima — Tieton Water Users Assn. had plans prepared and takes bids in spring, increasing main canal from 320 to 400 sec. ft. by raising sides of canal and enlarging tunnel, cement lining 13 mi. lateral "G." Will purchase annually 10,000 acre ft. from government. $1,000,000. J. J. Moore, Yakima, engr.

Calif., Chico—Election Jan. 16, to vote on $475,000 bonds to purchase privately owned water systems, also vote on funds exceeding $100,000 for improvements and extensions. F. S. Robinson, city engr.

Calif., Eagle Rock — Plan election to vote on $60,000 bonds for sinking wells, laying additional mains and reservoir; $40,000 bonds for installing fire hydrants and additional mains.

BIDS DESIRED

Fla., Plant City—See "Sewers."

O., West Park—See "Sewers."

O., Shaker Heights (Cleveland P. O.)—See "Sewers."

Minn., Westbrook—Dec. 11, by village, waterworks improvements, 11,375 lin.ft. 4 in. c.i. pipe, 14 hydrants, 11 gate valves, 4,200 lb. special castings, drill well, 6 in. to 14 in. diameter, 650 lin.ft. deep, pump house, pump unit. $15,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, Ia., engrs. Noted Nov. 16.

Neb., Clay Center—See "Sewers."

Mo., Valley Park—Dec. 12, by Bd. Aldermen, 21,628 ft. 4-8 in. c.i. mains, 70 ton special fittings, 5,253 cu.yd. earth excav., etc. $36,000. L. A. Day, 34 East Grand St., St. Louis, engr. Noted Nov. 16.

Okla., Cushing—Dec. 14, to vote on $500,000 bonds extending waterworks and sewerage systems. O. Block, city engr. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, Mo., consult. engrs. Noted Feb. 2.

Alta., Drumheller — Dec. 20, by H. A. Brown, secy. treas., furnishing 9,000 lin.ft. 4, 6, 8 and 12 in. c.i. or steel water pipe, 8,000 lb. special castings, gate valves, hydrants, brass cocks and service boxes, also labor and certain materials for constructing 9,000 lin.ft. watermains. Haddin & Miles Ltd., Calgary, consult. engrs.

BIDS RECEIVED

Pa., Phila.—Opened bids Nov. 29, water piping in Northeast sewer treatment plant, from Roberts Filter Co., Rawn and Tacowanda St., $101,900; J. J. McHugh, 1617 Race St., $136,944; Acme Machine Co., 316 North 17th St., $177,927. Noted Nov. 16.

O., Akron—S. Porter, clk. Summit Co., opened bids Nov. 24, 15,375 ft. 6 and 8 in. mains in Tallmadge Sewer Dist. 1, Impvt. 13, from D. A. Sant, 3634 Stettinus Ave., Cincinnati, $33,455; J. D. Kuhn, Barberton, $36,455; Gangl Constr. Co., 2nd Natl. Bldg., $36,745. Engrs. est. $36,376. Noted Nov. 16.

O., Cleveland—For 1 story, 30 x 35 ft. pumphouse and concrete substructure at Lake Shore Blvd. Pumping Sta., from Western Reserve Constr. Co., 2244 Murray Hill Rd., $21,000 D. Lowensohn, 12603 Clifton Blvd., $25,918; Rice Jones Co., 1836 Euclid Ave., $27,020.

O., Cleveland—Cuyahoga Co. opened bids Nov. 22, 2,690 ft. 12 in. c.i. mains in Ridge Rd. north of Linndale Rd., Impvt. 24, from Water & Sewer Impvt. Co., 10923 Detroit Ave., $14,624; Gantose Constr. Co., Columbia Bldg., $15,338.

CONTRACTS AWARDED

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Bogart Ave., etc., to C. DeBlasio, 339 7th Ave., Mt. Vernon, $21,000. Engrs. est. $25,000. Noted Nov. 23.

N. Y., Brooklyn — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Blake St., here, to F. L. Paino, 572 1st St., $67,455. Noted Nov. 23.

Ala., Bessemer—Tennessee Coal, Iron & R.R. Co., laying 10,00 ft. 10 in. and 6,500 ft. 16 in. c.i. water supply pipe to Bessemer Furnaces, to Long, Sullivan & Haggarty, 2014 2nd Ave., $12,987. Owner furnishes all material. Total cost $61,000.

O., Kent—For 15,160 ft. 6 in. mains. Universal pipe, etc., to L. Garrett Constr. Co., Kent, $1.60 per ft., total cost incl. extra work $32,920. Noted Nov. 2.

Wis., Cedarburg—For 200 water meters ⅝ in. and ¾ in., to Worthington Pump Co., Cudahy St., Milwaukee, Model G, $8.50. Noted Nov. 23.

Kan., Phillipsburg—Waterworks system, to Carrothers & Piburn, Colony, $34,086; filters, to C. T. McFarland, 307 Mutual Bldg., Kansas City, Mo., $3,400.

S. D., Ashton—Waterwork system, incl. 800 lin.ft. 8 in. c.i. pipe, 50,000 gal. concrete reservoir, steel tank and tower, to Phelps-Drake Co., 710 Metropolitan Life Bldg., Minneapolis, $18,000.

S. D., Timber Lake—Extending water mains incl. 780 lin.ft. 8 in., 3,160 ft. 6 in. and 4,600 ft. 4 in. c.i. pipe, etc., to W. B. Carter, 606 United Bank Bldg., Sioux City, Ia., $14,763.

Mo., Paris—Improving water-works system, to Ray & Son, Baxter Springs, $13,150, pump to Chalmbers Co., Kansas City (street address not available) $2,240; electric light, pole line construction, to C. Harley, Paris, $6,100. Noted Nov. 9.

Wash., Bucoda—For new water system, incl. two 60,000 gal. reservoirs, to Amer. Wood & Pipe Co., Box 1614, Tacoma, $25,000. Engrs. est. $27,000.

Calif. Fair Oaks—Fair Oaks Irrigation Dist., furnishing and delivering riveted steel pipe, to Western Pipe & Steel Co., 444 Market St., San Francisco, $16,945. Noted Nov. 30.

Que., Lambert—To Canada Iron Foundries Co., Ville Ste. Pierre, 5,000 ft. 6 in. c.i. water pipe, 179,000 lb., $58.80 per ton, 4,500 ft. 8 in. c.i. pipe, 234,450 lb. $58.80 per ton, both Class C pipe; to Independent Concrete Pipe Co., Woodstock, 2,050 ft. 30 in. rein.-con. pipe, $6.96 per ft., total $14,268.

Sewers

PROPOSED WORK

Pa., Sharon—Plans new sewage disposal plant. $175,000. L. E. Burnside, city engr.

Pa., Wilkes-Barre—City retained Alexander Potter, consult. engr., 50 Church St., New York, to prepare plans new sewage disposal plant.

N. C., Kings Mountain — See "Waterworks."

La., Homer—Will sell $120,000 bonds for sewerage system in Dist. 1.

O., Akron—Purchased 500 acres land and plans sewage disposal plant. $3,000,000. J. E. Root, Delaware Bldg., engr. Metcalf & Eddy, 14 Beacon St., Boston, Mass., consult. engrs.

Ill., Bradley—Making plans new water supply system. $95,000. Marr, Green & Co., 400 North Michigan Ave., Chicago, engrs.

Ill., Franklin Grove—Making plans new sewerage system. $75,000. Marr, Green & 400 North Michigan Ave., Chicago, engrs.

Ill., Merriam—Making plans sewage disposal system. $100,000. P. B. Wilson, city engr. Marr, Green & Co., 400 North Michigan Ave., Chicago, consult. engrs.

Ill., Sheridan—Making plans new sewerage system. $40,000. Marr, Green & Co., 400 North Michigan Ave., Chicago, engrs.

Ill., Evanston—Making plans sewers in Deempster St. $60,000. Marr, Green & Co., 400 North Michigan Ave., Chicago, engrs.

Wis., Milton—See "Waterworks."

Mo., La Plata—See "Waterworks."

Mo., St. Louis — Feb. 9, to vote on $8,000,000 bonds (Proposition 6) constructing and reconstructing public sewers and acquiring right-of-ways; $11,000,000 bonds (Proposition 7) converting River Des Peres into public sewer for foul and storm water by deepening and widening channel constructing laterals and acquiring right-of-way. W. W. Horner, 300 City Hall, engr.

Okla., Cushing—See "Waterworks."

N. M., Las Vegas—Voted $50,000 bonds for new sewerage system.

Calif., Colton—Plan election to vote on $25,000 bonds to construct sewerage system.

Calif., Fresno—Having plans prepared 24 in. drain in 20 blocks along Stanislaus St. from alley between L and M Sts., to H St., thence to Merced St., to connect with present outfall sewer. These drains to replace 8 in. pipe now in place, proposed capacity through these new drains will be about 5,000,000 gal. per day. W. Stranahan, city engr.

Calif., Lodi—Election Dec. 19, to vote on $100,000 bonds sewage disposal plant. L. F. Barzellotti, city engr. C. F. Smith, 7 Nottingham St., Berkeley, consult. engr.

Que., Montreal—Plans sewer in Duquesne St., incl. 101 ft., 8 ft. steel casing pipe and 186 ft. 8 ft. concrete pipe. $27,000. E. Fusey, supt. sewer dept.

Ont., Burlington—Having plans prepared laying storm sewer in Water St. $35,000. Prices wanted on materials. Address A. Hobson, mayor.

Ont., London—Preparing plans cement storm sewers, horseshoe construction, 6 ft. wide. $85,000. Prices wanted on all materials. H. A. Brazier, city engr.

BIDS DESIRED

Fla., Plant City—Dec. 15, by City Council, constructing and extending sewerage system and water mains, 14,300 ft. 8 in. and 6,000 ft. 10 in. terra cotta pipe, 7,000 ft. 10 in. c.i. pipe, etc. $36,000. E. N. Stanley, Plant City, engr.

Fla., Sanford—Dec. 11, by C. J. Ryan, city mgr., 17,000 ft. 4 to 24 in. vitr. sewers and 1,600 ft. vitr. segment block for branches.

O., Shaker Heights (Cleveland P. O.)—Dec. 11, storm and sanitary sewers, also 6 and 8 in. c.i. mains in portion Shaker Blvd., Norwood and Milverton Rds. F. A. Pease Eng. Co., 804 Marshall Bldg., Cleveland, engrs.

O., West Park—Dec. 12, sewers, watermains, grading and laying sidewalks on Normandy, West 157th and Norway Aves. To exceed $25,000. J. Reitz, City Hall, engr.

Ind., Indianapolis—Dec. 28, by Bd. of Sanitary Comrs., City Hall, furnishing and erecting mechanical equipment of Sect. 4, Div. 3, sewage disposal plant. C. H. Hurd, 1405 Merchants Bank Bldg., consult engr.; adv. this issue.

Neb., Clay Center—Dec. 13, by J. E. Ray, city clk., complete sewerage system incl. sewage disposal plant, settling tank, trickling filters, pumping station, ejectors, 20,000 lin.ft. 8 in., 4,450 lin.ft. 10 in. and 3,500 lin.ft. 12 in. vitr. clay pipe, $64,400, Grant, Fulton & Letton, 505 Bankers Life Bldg., Lincoln, engrs.

Mo., Hamilton—Taking bids complete new sanitary sewerage system, 8-12 in. vitr. tile. $60,000. A. T. Archer & Co., 609 New England Bldg., Kansas City, engrs.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids Nov. 29, sewers in (1) East 17th St. (2) Ocean Ave. (3) East 37th St. (4) Riverdale Ave. (5) Brooklyn Ave. (6) 15th Ave., sewer basins in (7) Synder Ave. (8) 87th St., from J. W. Murphy (1) 97% of engineers estimate ($6,695) (3) 89% of engrs. est. ($3,694); Nazarro & Querriero (1) 99.97% (3) 99%; G. L. Schrade, 693 Flatbush Ave., (1) 111.11% (2) 134% of engrs. est. ($600) (3) 88.4% (4) 137% of engrs. est. ($1,602) (5) 132% of engrs. est. ($2,232) (6) 127.27% of engrs. est. ($2,346) (7) 141% of engrs. est. ($350) (8) 136% of engrs. est. ($650); Manmill Constr. Co., 2035 Douglass St., (2) 122% (4) 123.8% (7) 109% (8) 128%; J. Jennings, Belle Harbor, (4) 128%; Gustin Morris Contg. Co., Creek St. and Anabel Pl., Long Island City, (5) 131%. Noted Nov. 23.

Pa., Phila.—Opened bids Nov. 29, sewers in (1) Abbottsford Ave., Louden and Arnold Sts. (2) 65th Ave. N., Ognotz Ave., Ameri-

Sewers **(Continued)**

can, Atlantic, Kingston and Venango Sts. (3) Washington Lane, Ognotz Ave., and Ellett St. (4) Erie Ave., Farson, 54th and 55th Sts. (5) Oxford Ave., McKean and Sansom Sts. (6) Haines St. from Ognotz Ave. to Limekin Pike and from Anderson to Ardleigh Sts., Howard and McCallum Sts. (7) 67th and Torresdale Aves., Salmon, Stockley, Walker and Watts Sts. (8) York Rd. (9) intercepting sewer in 40th Ward lowlands, from E. Pascuzzi, Lincoln Bldg., (1) $29,877; J. Lombardi, Lincoln Bldg., (1) $31,653, (3) $36,974, (6) $29,588, (7) $26,671; E. Leva 3851 North 10th St., (1) $33,562, (2) $34,031, (5) $22,988; J. Moss, 1052 Wakeling St., (2) $36,876; E T. Bennis, 641 Chelten Ave., (2) $36,997, (3) $33,364, (4) $29,653; J. J. McHugh, 1716 Race St., (3) $35,765, (4) $29,981; (5) $21,563, (6) $27,025, (7) $29,753, (8) $29,573, (9) $50,037; W. H. Garson, 5033 Brown St., (4) $27,227, (5) $18,835, (6) $27,966, (7) $28,976; R. Lombardi, Lincoln Bldg., (8) $28,402, (9) $61,753; A. Joffola, 1203 Tree St., (8) $29,652, (9) $43,586.

Md., Baltimore—Bd. of Awards, City Hall, opened bids Nov. 22, hauling and placing 5,100 ft. 24-54 in. rein.-con. pipe, 1,340 ft. 15-24 in. vitr. clay pipe, 8,700 ft. 5-15 in. sewer and house connections, 1,480 ft. 46 in. circular and 51 x 90 in. rectangular concrete section drain, 60 manholes, Sewer Dist. G 14, from Ryan Constr. Co., 735 Real Estate Trust Bldg., Phila., Pa., $95,446; Aidlo Constr. Co., 75 Knickerbocker Bldg., $102,062; F. Carozza, 5209 York Rd., $103,843. Noted Nov. 16.

CONTRACT AWARD

O., Cleveland Heights (Warrensville P. O.)—For vitr. tile sewers in Ardmore Sewer Dist., 2 streets to N. Carroccio, Benwood Ave., Cleveland, $38,547; 3 streets to Salem & George Bros., 237 Bradley Court, Cleveland, $45,467; 6 streets to A. Marra, Ulmer Bldg., Cleveland, $55,246. Noted Nov. 2.

Neb., Omaha—Sewers in Dist. 849, from Redman Ave. to 36th St., to J. J. Hanighan Co., 617 South 14th St., $38,973; in Dist. 780, 5th to 9th Sts. from Dorcas to Bancroft Sts., to Kruse Constr. Co., Spencer, Ia., $22,066. Noted Oct. 26 and Nov. 2.

Tex., Abilene—To Janes Constr. Co., Southwestern Life Bldg., Dallas, disposal plant $5,300; 5 mi. 8-18 in. sewers $30,700.

Tex., Houston—Storm sewers in Polk, Rice and Elmwood Sts., to F. C. Youman, 908 Colquitt St., $30,638.

Utah, Ogden—Laying 8, 15 and 18 in. vitr. sewers in Dist. 145, north of Ogden River, to Taylor-Child Constr. Co., Ogden, (street address not available) $64,990.

B. C., Vancouver — Joint Sewerage & Drainage Bd., 850 Hastings St. W., will build 1 mi. Colingwood Valley storm water trunk sewer, by day labor under supervision of J. Slater, engr., c/o owners. $157,676.

Waste Disposal

PROPOSED WORK

N. D., Fargo—Voted $60,000 bonds waste disposal plant. R. T. Jacobsen, city engr.

Mo., St. Louis—See "Miscellaneous."

BIDS DESIRED

N. D., Fargo—Jan. 24, at office A. R. Watkins, city aud., complete garbage incinerator plant; adv. this issue.

Bridges

PROPOSED WORK

Pa., Johnstown—Plans new bridge on Napoleon St. $100,000, also replacing bridges on Franklin St. $100,000, Cooperdale St. $125,000, Woodvale St. $70,000 and Poplar St. $90,000, rein.-con. and steel. Will start work in spring on Napoleon St. bridge. J. E. Greiner & Co., Fulton Bldg., Pittsburgh, engrs. Noted Nov. 23.

Pa., Pittsburgh—Allegheny Co. plans 90 ft. steel girder bridge, stone abutments, over Miller's Run. V. R. Cavall, co. engr.

Va., Petersburg—City, Norfolk & Western R.R., Roanoke, Atlantic Coast Line R.R., 71 Bway., New York City, and State Hy. Comn., Richmond, had preliminary plans prepared 1,800 ft. bridge, 28 ft. roadway, 5 ft. sidewalk, here. $314,000. J. C. Greiner, Lexington Bldg., Baltimore, Md., engr.

Tenn., Murfreesboro — State Hy. Dept., Nashville, making plans and soon takes bids rein.-con. arch bridge over Stones River, near here, Federal Aid Project 47. D. Q. McComb, Nashville, ch. engr.

Wis., Ashland—See "Streets and Roads."

Wis., Green Lake — See "Streets and Roads."

Wis., La Crosse — See "Streets and Roads."

Wis., Montello—See "Streets and Roads."

Wis., Phillips—See "Streets and Roads."

Ia., Washington—Washington Co. plans bridge and culvert work, 1,448 cu.yd. rein.-con., 3,520 ft. wood piling, etc. $33,968. Iowa Highway Comn., Ames, engrs.

Minnesota—See "Streets and Roads."

Kan., Hutchinson—Comrs. Reno Co. soon take bids 548 ft. 6 in. Marsh rainbow arch bridge, 20 ft. roadway, across Arkansas River. $45,000. W. A. Stacey, co. engr. Noted Nov. 9.

Missouri—State Hy. Dept., Jefferson City, plans one 35 ft. and two 40 ft. rein.-con. deck girders, and three 60 ft. steel truss spans, rein.-con. abutments, 20 ft. roadways, on road from Fredericktown to Marble Hill, Federal Aid Project 202, Bollinger Co.; two 100 ft. steel truss spans, 1 concrete pier, 2 rein.-con. bents, 20 ft. roadway, over Aux Vasse River, on Sta. 214 plus 00, on road from St. Louis to Kansas City, Federal Aid Project 144, Callaway Co. B. H. Piepmeier, state highway engr.

Mo., St. Louis—Feb. 9, to vote on $1,600,000 bonds (proposition 16) for construction or reconstruction and extension of bridges and viaducts and elimination of railroad grade crossings as follows: viaduct at Kingshighway over Oak Hill tracks $155,000, Shaw Ave. over Oak Hill tracks $80,000, Kingshighway over Terminal tracks $65,000, over Frisco and River Des Peres at Fyler Ave. $90,000, over Frisco and River Des Peres at Arsenal St. $90,000, over Frisco at Southwest Ave. $230,000; eliminating grade crossing of Wabash R.R. with Sarah, Boyle, Newstead and Taylor Aves. $250,000, Oak Hill between Carondelet Park and Kingshighway $310,000, Oak Hill between Reilly Ave. and Carondelet Park $280,000; raising Missouri Pacific R.R. tracks at Southwest Ave. $50,000. W. W. Horner, 300 City Hall, engr.

Mo., St. Louis—Feb. 9, to vote on $1,500,000 bonds (Proposition 17) for acquisition of land and construction of western approach to municipal bridge across Mississippi River; $1,500,000 bonds (Proposition 18) for acquisition of land and construction of eastern approach to above bridge. W. W. Horner, 300 City Hall, engr.

Mo., Waverly—State Hy. Dept., Jefferson City, soon takes bids 1,600 ft. steel bridge, 20 ft. roadway, near here. $500,000. B. H. Piepmeier, Jefferson City, state highway engr. Harrington, Howard & Ash, Orear Leslie Bldg., Kansas City, consult. engrs.

Nev., Reno—Making plans bridge over Truckee River on Lake St. $60,000. H. Chism, city engr.

Calif., Merced — Merced Irrigation Dist. had plans prepared viaduct, 1,700 ft. long, 210 ft. high, over Merced River in Pleasant Valley, 2,000 ton steel, concrete foundation, to be constructed in connection with relocation of Yosemite R.R., which involves 1,000,000 cu.yd. excav., over 70% solid rock, 16.75 mi. new roadbed, 16.75 mi. new track, 70 lb. metal culverts, $25,000; steel bridges $500,000; tunnel $350,000. Total cost of railroad $2,450,000. R. C. Starr, Merced, ch. engr.

BIDS DESIRED

N. H., Haverhill—Dec. 15, by J. R. Worcester Co., engrs., 79 Milk St., Boston, one 250 ft. steel truss bridge, 24 ft. wide across Connecticut River, between here and Newberry, Vt. $60,000. States assisting in financing.

N.J., Trenton—Dec. 19, by Bd. Freeholders Mercer Co. 49 ft. 3 in. clear span through plate girder bridge over Shipetaukin Creek, on Brunswick Pike. H. F. Harris, Court House, engr. J. A. L. Waddell, 35 Nassau St., New York City, consult. engr.; adv. this issue.

S. C., Allendale—See "Streets and Roads."

Ohio—See "Streets and Roads."

Ill., Sterling—Dec. 28 by Road and Bridge Comn. Whiteside Co., for 1,000 ft. bridge on 1st Ave. over Rock River; E. O. Hills, co. supt. highways. Noted Nov. 30, adv. this issue.

Minnesota—Dec. 28, by State Hy. Dept., St. Paul, Bridge 2700 over Baudette River at Baudette, State Project 11-24, five 80 ft. truss spans, $60,000; Bridge 3112, Federal Aid Project 57, State Project 6-25, three 75 ft. truss spans, $25,000; both in Beltrami Co.; Bridge 3945, Federal Aid Project 213, State Project 5-27, 400 ft. steel, over Minnesota River, Le Sueur Co., $50,000; Bridge 3921, State Project 1-39, three 40 ft. concrete deck girder spans, over Straight River, Steele Co., $28,000. J. T. Ellison, state bridge engr. Noted Oct. 20, 1921, and Nov. 23.

Kan., Columbus—Dec. 15, by Bd. Comrs. Cherokee Co., 2 rein.-con. through arch bridges, one 130 ft. span and other 80 ft. span, each with 20 ft. roadway, near Baxter Springs. $40,000. L. J. Noftzger, co. engr. Marsh Eng. Co., 205 Masonic Temple Bldg., Des Moines, Ia., designing engrs.

Wash., Kelso — See "Railways under Washington."

Ore., Coquille—Dec. 21, by Coos Co., for steel girder draw-span over Catchny Slough, 66,000 lb. steel, 6,500 lb. swinging machinery, 11,000 ft. wood piling, 62,000 ft. lumber, etc.; also bascule lift bridge, concrete substructure, over Coal Bank Slough, 45,000 lb. steel, 15,000 lb. machinery, 220 cu.yd. concrete, 25,000 ft. lumber, 7,500 ft. piling, etc. C. R. Wade, co. judge.

California—Dec. 26, by State Hy. Dept., Sacramento, bridge across Stone Creek near Hamilton City, Glenn Co., four 100 ft. steel truss spans and twenty 30 ft. rein.-con. girder approach spans; bridge across San Francisco-Sacramento R.R, near Denverton, Solano Co., two 34 ft. and one 39 ft. rein.-con. girder spans and grading approaches. A. B. Fletcher, state highway engr.

BIDS RECEIVED

Pa., Phila.—Delaware River Joint Bridge Comm., Widener Bldg., opened bids Nov. 29, 2 main towers of bridge over Delaware River between here and Camden, N. J., incl. (1) 13,600,000 lb. silicon steel (2) 4,890,000 lb. carbon steel (3) 290,000 lb. cast steel, from Bethlehem Steel Co., Bethlehem, (1) $0.0743 (2) $0.0663 (3) $0.1803, total $1,386,974; Keystone State Constr. Co., 210 South 13th St., Phila., and New York Ship Bldg. Corp., 120 Bway., New York City, (1) $0.0789 (2) $0.0723 (3) $0.1473, total $1,469,304; McClintic Marshall Co., Oliver Bldg., Pittsburgh, (1) $0.0812 (2) $0.0765 (3) $0.121, total $1,513,495; Amer. Bridge Co., 71 Bway., New York City, (1) $0.0955 (2) $0.0955 (3) $0.1375, total $1,805,670.

Pa., Pittsburgh—Opened bids bridge over Allegheny River, 40th St., substructure (1) Design A, (2) Design B, (3) Design C, from H. P. Converse & Co., Pittsburgh, (street address not available), (1) $757,259 (2) $1,592,512 (3) $1,605,512, Dravo Contg. Co., Diamond St., (1) $830,377 (2) $1,316,413 (3) $1,381,413, Vang Constr. Co., Conestoga Bldg., (1) $920,438 (2) $1,542,091 (3) $1,642,800; superstructure, (a) carton steel, (b) copper bearing, from Amer. Bridge Co., Frick Bldg., (a) $784,108 (b) $804,249, McClintic Marshall Co., Oliver Bldg., (a) $708,537 (b) $728,677, Fort Pitt Constr. Co., Martin Bldg., (a) $900,646, (b) $920,787; paving on bridge, J. H. McQuade Sons Co., Bakewell Bldg., $68,585, T. Cronin Co., Carson St., $99,524; relocation of Ohio St., T. Cronin Co., Carson St., $197,205, Fort Pitt Constr. Co., Martin Bldg., $199,701, J. F. Casey Co., Union Ave., $236,036; ornamental iron, Heckla Iron Wks., Ferguson Bldg., designs A or D, $42,650, designs B, C or F, $36,890, All Steel Equipment Co., Union Arcade, designs A or D, $32,092, designs B, C or F $26,272. Noted Nov. 2.

Tex., Glen Rose—Sommerville Co. 2 concrete and steel bridges over Glen Rose and Booker Crossings on State Highways 10 A and 25, 107,940 lb. structural and 90,909 lb. reinforcing steel, 767.4 cu.yd. concrete, from J. E. Harris Co., Colorado, $28,224; Allison & Tracy, Gorman, $28,338; Van Orden-Winans Co., Ft. Worth, $29,743. Noted Nov. 23.

CONTRACTS AWARDED

Pa., Lemoyne—Phila. & Reading R.R., Reading Terminal, Phila., reconstructing 280 ft. bridge, 56 ft. wide, to F. A. Flink, Lemoyne, $28,000.

North Carolina—State Hy. Dept., Raleigh, constructing rein.-con. bridge over Yadkin River, seven 150 ft. arch spans, Project 673, Davidson Co., to Hardaway Contg. Co., 909 Elizabeth Ave., Charlotte, $185,000. Noted Aug. 17.

S. C., Columbia—Richland Co., constructing 2 concrete bridges on Monticello High-

Bridges (Continued)

way, to General Road & Drainage Co., Liberty Bank Bldg., $26,012. Noted Nov. 9.

Fla., Milton—Comrs. Santa Rosa Co., bridge over Yellow River, 4,450 ft. timber trestle, 10 ft. roadway, two 80 ft. steel spans, to C. T. Dawkins, Montgomery, Ala. (street address not available) $50,650. Noted Oct. 19.

Colo., Denver—Foundation for 16th St. viaduct, to F. B. Varnum, 2035 East 18th Ave., $58,402. Noted Nov. 23.

Idaho, Pocatello—P. B. Wilson, dist. engr. State Hy. Comn., Pocatello, one 90 ft. steel bridge ¾ mi. approaches, etc., on Idaho-Pacific Highway, Federal Aid Project 59, Bannock Co., to Dolivirk, Orino Constr. Co., Spokane, Wash., (street address not available), $26,815. Noted Nov. 9.

Dams

PROPOSED WORK

North Carolina — W. V. N. Powellson, pres. Carolina-Tennessee Power Co., Murphy, is interested in company which had plans prepared 2 large dams and 2 generating stations, to generate $60,000 hp., on Hiwassee River, in Cherokee Co. $5,000,000. Engineer not announced.

Railways

PROPOSED WORK

North Carolina—Atlantic Coast Line Ry., Atlantic Coast Line Bldg., Wilmington, plans 45 mi. double track, installation of automatic signals, equipment, yards and other improvements. $13,000,000. J. E. Willoughby, ch. engr.

Tennessee—See "Miscellaneous" under Nashville.

Michigan—Michigan Northern R. R., c/o E. B. Ramsey, pres., 522 West Franklin Ave., Lansing, had plans prepared 102 mi. single track, 80 lb. steel, $17,000 per mi., incl. depots, switches, cinder ballast, (exclusive of rolling stock), operating through Ingham, Gratiot, Isabella and Midland Counties. Project before commission at Washington. Terminals will be located at Lansing and Midland. $1,800,000.

California — See "Miscellaneous under Eureka."

California—See "Bridges, under Merced."

BIDS DESIRED

Washington—Jan. 1, by Longview, Portland & Northern Ry. Co., Kelso, roadbed, bridges and culverts for approximately 8½ mi. railroad in Cowlitz Co. W. Vandercook, Kelso, ch. engr.; adv. this issue.

CONTRACTS AWARDED

Oregon—Oregon-California-Strahorn R.R. c/o D. H. McCarthy, genl. mgr., Klamath Falls, grading 12 mi. extension between Hilderbrand and Sprague River, to Nettleton, Bruce & Eschbach Co., Amer. Bank Bldg., Seattle, Wash., $175,000.

Excavation, Drainage, Irrigation

PROPOSED WORK

Miss., Sumner — Comrs Upper Quiver River D. D. soon takes bids 870,000 yd. floating dredge. 590,000 yd. large dragline and 790,000 yd. small dragline work. H. L. French, Sumner, ch. engr. A. L. Dabney, 2245 Court St., Memphis, Tenn., consult. engr.

Tex., Orange—Orange Co. election Dec. 30 to vote on $250,000 bond issue for channel improvements. J. E. Johnson, Orange, engr.

Tex., Uvalde—Uvalde Co. election Dec. 30, to vote on $2,000,000 bonds to create Frio Irrigation Dist., incl. 40,000 acres. M. B. Hodges, co. engr.

Tex., Victoria—Attorney Generals Dept., Austin, approved $36,000 bond issue for new ditch work in Victoria D. D. 4. J. G. Johnson, Victoria, engr.

Okla., Pauls Valley—Voted $45,000 bonds for 7,000 ft. drainage ditch. Mathews & Hawley, Ardmore, engrs.

Wash., Pasco—Burbank Irrigation Dist. plans irrigating 22,000 acres in Franklin and Walla Walla Counties, wing dam at Strawberry Island, locks for navigation on Snake River and power plant. $1,300,000. War Dept. may appropriate $700,000, cost of locks. Engineer not selected.

Wash., Spokane—See "Waterworks."

Calif., Ukiah—J. F. Williams, Box 285, Fortuna, had plans prepared 25,185 lin.ft. canal, 25 ft. wide on top, 5 ft. on bottom, 10 ft. deep; concrete storage dam, 300 ft. high, 665 ft. long, 138 ft. long on bottom, 15 ft. wide, storing 137,385 acre ft. water; power plant equipped with turbine water wheels utilizing fall of 430 ft., developing 22,580 hp., 500 sec.ft. through Penstocks. Water to be taken from North Fork of Eel River, Mendocino Co. $2,000,000. Engineer not announced.

BIDS DESIRED

N. Y., Brooklyn—Dec. 13, by E. Riegelmann, boro pres., Boro Hall, dredging Fresh Creek from head of Fresh Creek Basin to channel of Jamaica Bay.

Calif., Berkeley—See "Miscellaneous."

CONTRACTS AWARDED

N. C., Asheville—E. W. Grove, excavation and removal of Battery Park Hill, where Battery Park Hotel now stands, preparatory to construction of new 200 room hotel, to Woodcock & Reed, Asheville, $250,000. Noted Nov. 16, under "Buildings."

Ky., Greenville—Bd. Drainage Comn., dredging 13 mi. ditch to straighten Caney and Pond Creeks, ending near Green River, 162,000 cu.yd. excav., to Wisconsin Drainage Co., Elkhorn, Wis., $0.12 per cu.yd., total $19,400. Bd. Drainage Comn. clears all right of way and builds bridges, if any are needed. Noted Oct. 19.

Streets and Roads

PROPOSED WORK

New York—H. S. Sisson, comr. State Hy. Dept., Albany, received no bids Nov. 21, reconstructing 1.5 mi. Repair Contr. 3036, Montgomery Co. $56,801. Noted Nov. 9.

New York—H. S. Sisson, comr. State Hy. Dept., Albany, rejected bids opened Nov. 21, reconstructing 2.5 mi. Repair Contr. 3037, Highway 152, Fonda east, Montgomery Co. $94,505. Noted Nov. 9.

N. Y., Binghamton—Broome Co. plans to expend $75,000 for road building in 1923. H. A. Williams, Binghamton, co. engr.

N. J., Penns Grove—Plans paving Delaware, Penn, Franklin, Harmony, Pitman, Sack and Beach Sts., 2 mi. long, bituminous macadam. $40,000. Address Mayor Kidd.

Pa., Phila.—Plans to expend $3,000,000 for paving work next year. F. C. Dunlap, City Hall, engr.

Va., Fairfax—Fairfax Co. voted $275,000 bonds for concrete road from here to Falls Church, 18 ft.

Florida — State Hy. Dept., Tallahassee, rejected bids opened Nov. 14, clearing and surfacing 11.6 mi. road from Lake City to Wellborn, State Project 504, Columbia and Suwannee Counties. W. F. Cocke, state highway engr. Noted Nov. 23.

Fla., Key West—Plan election to vote on $50,000 bonds improving various streets. B. C. Moreno, Key West, engr.

Fla., St. Augustine—St. Johns Co. election Dec. 19, to vote on $500,000 bonds constructing 70 mi. county roads. J. F. Rodenbaugh, St. Augustine, engr.

Fla., West Palm Beach—Having plans prepared paving, curbing and guttering Florida Ave. and alley, also Flagler Dr. and alley, $25,400; Tamarino, Alley, Frederick, Douglass, Iris, Gardenio and A Sts., 3rd, 7th and 14th Aves., etc., $25,400; Fern, Jessamine, Datura, Okeechobee, Railroad and Division Sts., 15th and 20th Aves., $25,500; 21st St. from Tamarino St. to Lincoln Park, 38th and Olive Sts., 11th, McKinley and Ely Aves., East Parkway, Allendale Rd., Bingham and Lytton Courts, $28,300. K. Riddle, West Palm Beach, engr.

Ala., Birmingham—City takes bids in about 60 days, grading and paving 1 mi. Ave. F Ensley, 10,400 lin.ft. 24 in. combined concrete curb and gutter, 17,000 sq. yd. asphalt on concrete. $56,000. A. J. Hawkins, city engr.

Ala., Birmingham—City and Jefferson Co. take bids in about 60 days, grading, curbing, guttering, paving and laying sidewalks on 2½ mi. Pratt City; Ensley Rd., 38 ft., 60,000 sq.yd. asphalt on concrete, 26,000 lin.ft. combined concrete curbing and guttering. $135,000. A. J. Hawkins, city engr.

Tenn., Nashville—See "Miscellaneous."

Kentucky—State Hy. Dept., Frankfort, plans constructing 9 mi. Gracey Rd. from Hopkinsville to Gracey, connecting with Federal Aid Rd., crossing Trigner Co. to Eggners Ferry on Tennessee River. J. S. Boggs, state highway engr.

Kentucky—State Hy. Dept., Frankfort, having plans prepared grading 8½ mi. Louisville-Paducah Rd., Ohio River Route, Crittenden Co. J. S. Boggs, state highway engr.

O., Akron—W. F. Peters, dir. Pub. Serv., takes bids early in 1923 grading and paving 1,200 ft. 5th Ave. from South Arlington to Elbon Sts., 26 ft., 2,180 lin.ft. stone and 375 lin.ft. granite curb, 1,000 sq.ft. cement sidewalk, 3,400 cu.yd. earth excav., 3,980 sq.yd. vitr. brick on 6 in. concrete. $28,000. E. A. Kemmler, Delaware Bldg., engr.

O., Canton—Stark Co. plans paving 2 mi. Canton-Sherman Church Rd., 16 ft., and 5 mi. Navarre-Richville Rd., 16 ft., both vitr. brick. G. Sickafoose, Court House, engr.

Ind., Logansport—Cass Co. plans gravel surfacing 15,300 ft. Merritt-Cole-Dolbee Rd., 16 ft. $25,277. J. Bennett, Logansport, engr.

Wis., Ashland—Ashland Co. appropriated $82,489 for county and state aid road and bridge construction during 1923. W. E. Dillon, comr.

Wis., Elkhorn—Walworth Co. voted to construct following roads in 1923; 5.9 mi. Spring Burlington Rd., State Trunk Highway 20, concrete, $150,600; 1½ mi. Darien-Sharon Rd., concrete, $34,666; 4½ mi. Whitewater-La Grange Rd., State Trunk Highway 12, concrete $130,000; ½ mi. Whitewater-Palmyra Rd., concrete $13,000; 9 mi. Lake Geneva-Genoa Junction Rd., concrete $270,000; 1½ mi. Elkhorn-Tibbets Rd., concrete $35,400; 3½ mi. East Troy-Beulah Rd., gravel, $22,000; 4½ mi. Delavan-Walworth Rd., gravel $24,000; 2½ mi. Spring Prairie-East Troy Rd., gravel $15,000; 4.7 mi. Delavan-Millard Rd., gravel $25,000. H. J. Peters, comr.

Wis., Fond du Lac—Fond du Lac Co. appropriated $1,263,373 for construction of concrete and gravel roads as follows: 5 mi. Fond du Lac-Calumet Rd., Trunk Highway 56, 18 ft. concrete, $150,646; Trunk Highway 55 in Village of Eden, Towns of Eden, Asceola and Auburn, 18 ft. concrete, $274,500; Highway 103, Towns Springvale, Lamartine, Waupin and Oakfield, 16 ft. concrete, $145,000; Highway 23 in Village of Rosendale, Towns of Springvale, Rosendale, Eldorado and Lamartine, 18 ft. concrete, $195,000; Highway 91 City of Ripon, Towns of Ripon and Rosendale, 18 ft. concrete, $160,000; 3½ mi. Highway 49, 16 ft. concrete, $100,000; Eden-Armstrong Co. Oshkosh Rd. Town Eldorado, 16 ft. gravel, $40,000; Fond du Lac, Oakfield Rd., 16 ft. gravel, $40,000; Lamartine-Woodhull Rd., 16 ft. gravel,$3,000; Waupun-Brandon Rd., 16 ft. gravel, $50,000; Fairweather-Waupun Rd., 16 ft. gravel, $80,000. Campbellsport St., Kilian Rd., gravel, $50,000. 2½ mi. Waupun-County Line Rd., gravel, $10,000. G. Treleven, comr.

Wis., Green Lake—Green Lake Co. appropriated $81,866 for county and state aid road and bridge construction during 1923. D. C. Williams, comr.

Wis., Jefferson—Jefferson Co. Bd. voted to improve 27.985 mi. state roads in 1923 as follows: Oconomowoc-Watertown Rd., State Trunk Highway 19, 18 ft. concrete; 1½ mi. State Trunk Highway 107, 18 ft. concrete, also curb and gutter to be laid at expense Village of Lake Mills; Ixonia-Watertown Rd., State Trunk Highway 18, 18 ft. concrete; Portland Waterloo Rd., State Trunk Highway 19, 18 ft. concrete; Whitewater Fort Atkinson Rd., State Trunk Highway 12, 18 ft. concrete; Watertown-Hubbletown Rd., State Trunk Highway 19, 18 ft. concrete; Ft. Atkinson-Cambridge Rd., State Trunk Highway 12, 18 ft. concrete. R. D. Royce, Ft. Atkinson, comr.

Wis., La Crosse—La Crosse Co. appropriated $25,000 for road oil and oiling roads. J. Hintgen, comr.

Wis., La Crosse—La Crosse Co. made following appropriations for road construction, etc., during 1923; $39,461 to meet town appropriations for road and bridge work; $7,900 for east French Island Rd.; $50,000 to operate Holland quarry and complete road construction on No. 11 between Midway and Onalaska; $25,000 to complete 2½ mi. surfacing on Trunk Line 108; $35,000 to surface portion Highway 21; $25,000 to

Streets and Roads (Continued)

surface No. 21 to point where it connects with Highway No. 28; $20,000 for shaling and relocating Highway 108 to Jackson Co. line; $15,000 for heaving grading work. J. Hintgen, comr.

Wis., Montello—Marquette Co. appropriated $25,674 for county and state aid road and bridge construction during 1923. H. Schmitz, comr.

Wis., Oshkosh—Winnebago Co. Bd. voted to issue $117,000 bonds for improvements to following roads: Oshkosh-Ripon Rd. $50,000; Fremont-Zitau-Winchester-Neenah Rd., 18 ft. concrete, $67,000; Fremont-Zittau-Winchester-Neenah Rd., 16 ft. concrete $20,451; concrete road between here and Ripon $34,108; Pansy bridge, Town of Nekimi $1,600. J. Binning, comr.

Wis., Phillips—Price Co. appropriated $84,689 for county and state aid road and bridge construction during 1923. B. M. Griffin, comr.

Wis., Watertown — Common Council passed ordinance concrete paving, curbing and guttering Milford, West Milwaukee, Milwaukee, North 6th and 5th Sts., 30 ft. $50,000. A. Kraeft, city engr.

Ia., West Union—Making plans, paving various streets during 1923. $50,000. H. R. Green, Savings Bank Bldg., Cedar Rapids, engr.

Kan., Independence — Montgomery Co. making plans and soon takes bids graveling 5.35 mi. Independence Caney Rd., Project 121 B, 18 ft. H. K. Hibbard, co. engr.

Kan., Larned—Comrs. Pawnee Co. soon take bids sand clay surfacing 13.419 mi. Santa Fe Trail, 18 ft. $65,000. V. Stuart, co. engr.

Kan., Mound City—Linn Co. soon takes bids paving 3 mi. La Cygne Pleasanton Rd., Federal Aid Project 132 A, 18 ft., concrete, brick or bituminous pavement. C. E. Kenney, co. engr.

Kan., Oswego—Labette Co. making plans and soon takes bids graveling 0.619 mi. Ozark Trail, 18 ft. $25,000. W. J. King, co. engr.

Kan., Salina — Comrs. Saline Co. had plans prepared and soon takes bids grading 15 mi. Bee Line Rd., 30 ft. $100,000. W. H. Cost, co. engr.

Kan., Wichita—Plans concrete paving 14½ blocks incl. Walnut, Jackson, Sedgwick, Carlos, Lewellyn, Hendryx, Ida, Harrison, Jackson and alley west of Water Sts.; asphaltic concrete paving on 4 blocks, incl. Wellington, Market and Ida Sts.; vertical fibre brick paving on 7½ blocks incl. Market, 11th, 3rd, Osage and alley north of Douglas; asphalt paving 6 blocks incl. Wichita, Bitting, Elm and Hydaulic Sts.; curbing and guttering 2,400 ft. Circle Driver and Ellis St. P. L. Brockway, City Bldg., engr.

Kan., Wichita—Sedgwick Co. had plans prepared and takes bids about Dec. 23 grading, etc., 3½ mi. South Hillside Rd. and 29th St. M. Roseberry, co. engr.

Minn., Hutchinson — Having plans prepared paving various streets. $40,000. C. L. Pillsburg Co., 1200 2nd Ave. S., Minneapolis, engrs.

S. D., Hot Springs — Plans paving 10 blocks Lincoln, Jennings and Parks Aves., and probably Chicago Ave. $40,000. J. A. Pfeiler, city aud.

N. D., Fargo—Plans paving 82 blocks, incl. 120,000 sq.yd. $550,000. R. T. Jacobson, city engr.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, takes bids in spring paving 1,900 ft. Chouteau St. from Compton Ave. to Grand Blvd., 7,900 sq.yd. asphalt, etc., $16,400; 4,700 ft. Chouteau St. from Vandeventer St. to Kingshighway, 21,245 sq.yd. asphalt, etc., $61,400. W. W. Horner, 301 City Hall, engr. Noted Oct. 26.

Mo., St. Louis—See "Miscellaneous."

Mo., St. Louis—Feb. 9, to vote on $8,650,000 bonds (Proposition 1) for establishing, opening and widening various streets; $5,800,000 bonds (Proposition 3) paving, repaving and improving streets and highways. W. W. Horner, 300 City Hall, engr.

Mo., St. Louis—Plans grading and paving 5,600 ft. Arsenal St. from 59th St. to tracks of St. Louis & San Francisco R.R., 30 ft., 11,200 lin.ft. concrete curbing, 17,365 sq.yd. 7 in. concrete, $80,400; 2,250 ft. Taylor Ave. from Bway. to West Florrissant Ave., 40 ft., 4,500 lin.ft. concrete curbing, 10,350 sq.yd. warrenite on concrete, $53,350; relaying and recutting old granite and furnishing new material where needed on 3,100 ft. 7th St. from Market St. to Choteau Ave., 40 ft., 12,115 sq.yd. recut granite block, $82,700. W. W. Horner, 301 City Hall, engr.

Tex., Carthage—Panola Co. election Dec. 23, to vote on $750,000 bond issue for road improvements. A. D. Nelson, co. judge.

Tex., Coleman—Coleman Co. election Dec. 20 to vote on $30,000 bond issue for road construction and highway improvements in Taylor Rd. Dist. 3. W. E. Dickerson, co. engr.

Tex., Palestine—Anderson Co. voted $1,500,000 bond issue for hard surfacing 82 mi. roads. C. R. Stewart, co. judge. Noted Nov. 2.

Tex., San Antonio—Bexar Co., Bureau Rds. approved grading, gravel and bituminous surfacing 2.23 mi. Highway 9, Medina-Atascosa Rd., Federal Aid Project 239, 16 and 18 ft. $51,366. R. E. Killmer, co. engr.

Tex., Silverton—Brisco Co. had plans prepared grading 35 mi. various roads. $160,000. Midwest Eng. Co., Silverton, engrs.

Ore., Bend—Deschutes Co. voted $15,180 for market roads. State will add like amount. R. W. Sawyer, chn. co. comrs.

Ore., Eugene—Lane Co. budget provides $148,694 bonds for roads and bridges, also $55,491 (to which State will add like amount) for market roads. L. N. Rooney, Cottage Grove, chn. co. comrs.

Calif., Chico—Having plans prepared and will take bids about first of year improving 56 blocks, 675,000 sq. ft. paving, 16,000 lin.ft. gutters. F. S. Robinson, city engr. Noted Sept. 14.

Calif., Dinuba—Had plans prepared improving Golden Way between 2nd and College Aves., 55,000 sq.ft. 1½ in. warrenite on 4 in. concrete, 3,300 lin.ft. concrete curb, 6,600 sq.ft. concrete gutter, 1,360 sq.ft. concrete walks, 1,500 cu.yd. excav., etc. C. E. Sloan, Santa Fe Bldg., San Francisco, engr.

Calif., Oakland—Had plans prepared improving Orion St. between 57th and 62nd Aves., 68,560 sq.ft. grading, 2,409 lin.ft. concrete curb, 4,998 sq.ft. concrete gutter, 33,362 sq.ft. oil macadam, 14,996 sq.ft. cement walks, etc. W. W. Harmon, city engr.

Ont., London — Preparing plans asphalt pavements. $250,000. Prices wanted on materials. H. A. Brazier, city engr.

BIDS DESIRED

N. Y., St. George—Dec. 15, by J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Bay St. from Hannah to Thompson Sts., granite block on present concrete and partly on new concrete.

N. Y., St. George—Dec. 11, by J. A. Lynch, pres. Richmond Boro, Boro Hall, concrete sidewalks on northeast side of Lincoln Ave. from Southfield Blvd. to point 4,637 ft. southerly therefrom; sanitary sewer in Quinlan Ave. from Richmond Turnpike to point 1,200 ft. southerly therefrom.

North Carolina—Dec. 14, by State Hy. Comn., Raleigh, grading and paving 4.77 mi. State Project 961, 12 ft., Macon Co., 4,000 cu.yd. excav., 34,170 sq.yd. water-bound or penetration macadam. C. M. Upham, state highway engr.

S. C., Allendale—Dec. 19, by Allendale Co., constructing 8.43 mi. State Route 28, between Martins and Barnwell Co. line, 54,629 cu.yd. excav., 20,675 cu.dy. sand clay surfacing, 514 lin.ft. rein.-con. pipe, 257 cu.yd. plain and rein.-con., 17,187 lb. reinforcing, etc.; also separate bids creosoted timber bridge, 14 x 14 ft. spans, 29,585 ft. treated timber, 1,410 lin.ft. treated piling, 2,132 lb. hardware and 394 sq.yd. paving. $40,000. J. E. Bryan, Allendale, engr.

Fla., Tampa—Dec. 12, by C. H. Brown, mayor, paving various streets with 2½ in. asphalt block, granite curb. $88,200. R. D. Martin, city engr.

Fla., Jacksonville — Dec. 14, by City Comn., paving various streets, with brick on 6 in. concrete with granite curb, relaying present brick on sand and putting on bituminous filler, brick on 7 in. limerock with granite curb, 2 in. asphaltic concrete on 6 in. concrete with concrete curb, 6 in. concrete with bituminous macadam and concrete curb, 2 in. bituminous macadam penetration on 6 in. limerock base and concrete curb, resurfacing brick with 1½ in. asphalt on bituminous binder. $724,149. W. E. Sheddan, city engr.

Ohio—Dec. 19, by Dept. Highways and Pub. Wks., at Southern Hotel, Columbus, grading, bridging and paving roads in following counties:

Ashland Co., Sect. "B-2", Ashland-Norwalk Rd, 1.0913 mi., rein.-con., $33,827, brick $39,579.

Clark Co., Sect. "B" Dayton-Lakeview Rd., 1.545 mi., rein.-con. $50,827, bituminous macadam, asphalt or tar $42,105.

Lake Co., Sect. "B" Cleveland-Buffalo Rd., 1.089 mi., brick $58,377.

Lake Co., Sect. "A", Painesville-Ravenna Rd., 3.42 mi., rein.-con. $88,457.

Lorain Co., Sect. "E" Medina-Norwalk Rd., 2.11 mi., bituminous macadam, asphalt or tar $54,408, rein.-con. $66,961.

Wood Co., Sect. "B" Perrysburg-Fostoria Rd., 1.549 mi., bituminous macadam, asphalt or tar $38,781. L. C. Herrick, dir. highways.

O., West Park—See "Sewers."

Ia., Mt. Ayr—Dec. 12, by Auditor Ringgold Co., grading 6 mi. Federal Aid Project 141, 69,046 cu.yd. excav.; 6 mi. Federal Aid Project 142, 111,868 cu.yd. excav. $30,000. S. E. Sime, Mt. Ayr, engr.

Minn., Duluth—Dec. 22, by W. H. Borgen, aud. St. Louis Co., improving Bong Lake Rd., Sects. 20 and 21, Twp. 63, Range 12 West, Job 4-2201; State Rd. 1, Twp. 63, Range 17, and Twps. 63 and 64, Range 18, from Constr. Station 80 to Constr. Station 546, Jobs 4-2202 and 4-2203 respectively, total length 6 mi. $40,000. R. W. Acton, co. engr.

Minnesota—Dec. 28, by State Hy. Dept., St. Paul, improving 2.4 mi. State Project 12-22, Federal Aid Project 310, 24 ft., 108,000 cu.yd. excav., portable culverts; Bridge 3697, 147 ft. long, steel and concrete, Bridge 3698, 30 ft. long, and Bridge 3699, 30 ft. long, Carver Co. $35,000. State Hy. Dept., 1246 University Ave., St. Paul, engrs. Noted Nov. 16.

Kan., Emporia — Dec. 19, by Comrs. Lyons Co. paving 10 mi. Federal Aid Project 30, Sects. C and D, 18 ft., concrete or brick. W. S. Ruggles, Emporia, engr.

Kan., Kansas City—Dec. 29, by Comrs. Wyandotte Co. concrete paving 1.027 mi. Golden Belt Rd., Federal Aid Project 129, 18 ft. $35,000. O. K. Williamson, co. engr.

Kan., Larned—Jan. 5, by Comrs. Pawnee Co. sand clay surfacing with necessary grading, etc. 13.419 mi. Santa Fe Trail, 18 ft. $80,000. V. Stuart, co. engr.

Mo., St. Louis—Jan. 2, by Bd. Pub. Serv., 208 City Hall, widening, etc. 7,200 ft. Chouteau Ave. from Bway. to Jefferson Ave., 56 ft., 13,800 lin. ft. granite curb, 4,000 cu.yd. concrete base, 32,000 sq.yd. recut granite block. $194,000. W. W. Horner, 301 City Hall, engr. Noted Oct. 26.

Neb., Harvard—Dec. 14, by C. R. Traut, city clk., 15,000 sq.yd. paving, 6,300 lin. ft. curbing, etc., in Dist. 1, concrete $60,810, asphalt $63,870 and brick $73,720. Grant, Fulton & Letton, 505 Bankers Life Bldg., Lincoln, engrs. Noted Sept. 14.

Tex., Hondo—Dec. 12, by R. J. Noona, judge Medina, Co., grading, gravel surfacing and topping 10.75 mi. State Highway 3 from here to Dunlay, 18 ft., 962.6 cu.yd. concrete, 103,326 sq.yd. 1 in. bituminous macadam, 31,659 cu.yd. gravel surfacing, 92,675 lb. reinforcing, $157,974; 11.55 mi. State Highway 3 from Bexar Co. line through Castroville, 16 ft., 1,347.4 cu.yd. concrete, 47,465 cu.yd. roadway and 31,204 cu.yd. borrow excav., 120,985 lb. reinforcing, 30,228 cu.yd. gravel surfacing, $179,977. Walton & Arneson, 418 Gunter Bldg., San Antonio, engrs.

Tex., Waco—Dec. 15, by G. P. Lester, judge, McLennan Co., grading, gravel surfacing and bituminous topping 3.7 mi. State Highway 7, McGregor Rd., 16 ft., 3,791 cu.yd. roadway excav., 16,402 gal. bituminous asphalt, 200 cu.yd. concrete, 787 cu.yd. cover material, 3,791 cu.yd. sledged stone. $32,075. M. Hannah, co. engr. Noted Sept. 28.

California—Dec. 18, by State Hy. Dept., Sacramento, grading 11.8 mi. highway between Nevada City and Little Deer Creek, Nevada Co., 7.4 mi. between point 3½ mi. southeasterly from Hueneme Rd. and Ridge Ranch, Ventura Co.; grading and paving with asphalt macadam 8.2 mi. between Morrisons Crossing and 1 mi. south of Marysville, Yuba Co., 8.2 mi. between Hollister and Pacheco Pass Rd., San Benito and Santa Clara Counties, 14.2 mi. road in Madera Co.; grading and paving with portland cement concrete 1.8 mi between Hercules and Rodeo, Contra Costa Co. A. B. Fletcher, state highway engr.

California—Dec. 26, by State Hy. Dept., Sacramento, grading 3.3 mi. road between

Streets and Roads (Continued)

Donner Summit and Donner Lake, Nevada Co.; grading and asphaltic concrete paving 9.4 mi. road between New County Well and Old County Well at Plank Rd., Imperial Co. A. B. Fletcher, state highway engr.

Calif., Arcata—Dec. 21, by City Trustees, improving various streets, 7,265 lin.ft. concrete curb, 11,330 sq.ft. concrete gutter, 308,070 sq.ft. grading, 255,580 sq.ft. 5 in. asphaltic concrete, 2 course. W. S. Farley, Monadnock Bldg., San Francisco, engr. Noted Oct. 26.

Quebec—Dec. 16, by J. L. Boulanger, deputy minister of highways, Quebec, graveling 11.97 mi. Rawdon-L'Assomption Highway in towns of Rawdon, St. Jacques, St. Alexis, Montcalm, St. Esprit, St. Roch and L'Epiphanie. M. Nectkar, ch. engr. This corrects report in Nov. 23 issue. Noted Nov. 23.

BIDS RECEIVED

New York—H. S. Sisson, comr. State Hy. Dept., Albany, improving 3.57 mi. Highway 8133, Hamilton Co., to C. J. Burgess Co., Marcy, $130,488, engrs. est. $134,118; 3.71 mi. Highway 8138, Orange Co., to H. Hull, Highland Mills, $138,792, engrs. est. $152,864; 2.67 mi. Highway 8137, Saratoga Co., to Malloy Constr. Co., 434 State St., Schenectady, $82,945, engrs. est. $91,930; 2.41 mi. Highway 1682, Suffolk Co., to R. W. S. Corp., 30 Church St., New York City, $85,668, engrs. est. $96,815; 0.09 mi. Highway 8066-A, Suffolk Co., to M. J. Rush, New York City (street address not available) $10,302, engrs. est. $11,449; 4.25 mi. Highway 8139, Chautauqua Co., to Greenfield Constr. Co., 89 Main St., Hornell, $153,872, engrs. est. $162,486; 4.27 mi. Highway 8141, Columbia Co., to Lane Constr. Corp., 37 Colony St., Meriden, Conn., $164,822, engrs. est. $165,865; 0.24 mi. Highway 1652, Nassau and Suffolk Counties, to C. Heling, Lindenhurst, $12,888, engrs. est. $13,600; 1.33 mi. Highway 1653, Saratoga Co., to Collins Bros., Mechanicville, $51,893, engrs. est. $54,453; 2.24 mi. Highway 8140, Wayne Co., to Ribstein-Holter Co., Inc., Rochester (street address not available) $74,218, engrs. est. $81,304; reconstructing 2.27 mi. Repair Contr. 3033, Broome Co., to A. Yesu & Son, 27 Carroll St., Binghamton, $65,648, engrs. est. $67,433; 3 mi. Repair Contr. 3029, Chemung Co. and 2.5 mi. Repair Contr. 3021, Steuben Co., to Wieberg Bros., Buffalo (street address not available) $98,738, engrs. est. $112,101 and $72,192 engrs. est. $80,942 respectively; 3.19 mi. Repair Contr. 3031, Clinton Co., to Hogeboom & Campfield, Inc., Kingston, $49,204, engrs. est. $56.596; 2 mi. Repair Contr. 3032, Otsego Co., to Morrell Vrooman, Inc., Gloversville, $73,294, engrs. est. $74,419; 2.36 mi. Repair Contr. 3035, Suffolk Co., to E. Gould, Brooklyn (street address not available) $68,761, engrs. est. $76,704; 2.67 mi. Repair Contr. 3034, Westchester Co., to Frederick Roeber Co., Inc., 507 5th Ave., New York City, $113,296, engrs. est. $124,701; 2.04 mi. Repair Contr. 3038, Onondaga Co., to C. D. Murray, 701 Westcott St., Syracuse, $63,912, engrs. est. $70,125; 1.43 mi. Repair Contr. 3039, Orange Co., to H. H. Smith, Middletown, $52,203, engrs. est. $58,471; 1.74 mi. Repair Contr. 3040, Orange Co., to B. C. Ackar, Troy (street address not available) $52,941, engrs. est. $55,409; 1.99 mi. Repair Contr. 3041, Tompkins Co., to O'Day & Ambrose, Binghamton (street address not available) $65,114, engrs. est. $67,443. Noted Nov. 2 and 9.

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, opened bids Nov. 29, paving (1) Eldert Lane, grading, curbing and flagging (2) 78th St. (3) Ave. I, laying cement sidewalks on (4) west side Flatbush Ave., from Sicilian Asphalt Paving Co., 41 Park Row, New York, (1) $22,002; Cranford Co., 52 9th St., (1) $22,086; Borough Asphalt Co., 1301 Metropolitan Ave., (1) $23,273; T. B. Scott, 671 Halsey St., (2) $1,787 (3) $2,167 (4) $655; F. Persicano, 350 Fulton St., (2) $1,964 (3) $2,167; P. Carbone, 95 Bay 25th St., (2) $2,078 (3) $2,450 (4) $686; A. E. Castle, 3313 Tilden Ave., (3) $2,111 (4) $522. Noted Nov. 23.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., opened bids Nov. 27, curbing, recurbing, flagging, reflagging and paving (1) Pleasant Ave. (2) 9th Ave. (3) West 192nd St. (4) West 173rd St. all above with sheet asphalt (5) West 100th St., granite block, from Asphalt Constr. Co., 2197 Madison Ave., (1) $5,198 (2) $3,861 (3) $4,049 (4) $12,769; Brusstar Constr. Co., Harlem River and 150th St., (1) $6,004 (2) $3,854 (3) $4,074 (4) $14,265; C. D. Beckwith, 2875 Bway., (1) $6,261 (2) $4,123 (3) $4,300 (4) $13,857; Burnside Contg. Co., 270 Burnside Ave., (5) $15,718; P. J. Kearns Contg. Co., 2306 Creston Ave., (5) $18,760. Noted Nov. 23.

N. Y., Richmond Hill—Park Bd. at office Dept. Parks., Municipal Bldg., New York, opened bids Nov. 29, improving main drive in Forest Park, Boro of Brooklyn, here, from Cleveland Trinidad Paving Co., Flushing, $106,510; H. E. Kordes Co., 2577 Cooper St., Brooklyn, $108,157; W. P. McDonald Constr. Co. 17 West 42nd St., New York, $108,775. Noted Nov. 23.

Pa., Phila.—Opened bids Dec. 1, grading (1) Lansdowne Ave. from 66th St. to Haverford Ave. (2) Churchview St. from Tower to Terrace Sts. (3) Bridge St. from Roosevelt Blvd. to Sumnerdale St., from Barber Asphalt Paving Co., Land Title Bldg., (1) $44,913; Eastern Paving Co., Colonial Trust Bldg., (1) $48,673; Byrne & Davis, 20th and Clearfield Sts., (2) $40,422; Ferrante & Cellecci, 16th and Dickinson Sts., (2) $45,235 (3) $36,780; R. B. Wenner, Phila. (street address not available) (2) $52,765; D. DeLisle, 4842 Lightgow St., (3) $25,212; T. L. Flannigan, 1204 East Montgomery Ave., (3) $32,752.

Louisiana — State Hy. Dept., Reymond Bldg., Baton Rouge, opened bids Nov. 28, 9.8 mi. Winnsboro-Rayville Highway, from W. H. Harris, Monroe, $50,280, Lawrence, Nixon & Philips, Jackson, Miss., $56,968, O'Neal Bros., c/o State Highway Comn., $65,328; 4.97 mi. Morgan City-Thibodaux Highway, incl. trestle and bridge work, from Picard Contg. Co., New Orleans, (street address not available) $141,659, L. A. Loustalot, Franklin, $176,525; 7.8 mi. Melville-Port Allen Highway, Sect. A, from S. A. Gano, Maison Blanche Bldg., New Orleans, $30,002, Vickman & Tercuit, Donaldsonville, $31,083, Laiche & Miller, c/o State Highway Comn., $32,266; 11.48 mi. Melville-Port Allen Highway, Sect. B, from C. and H. A. Tercuit, Donaldsonville, $22,243, Laiche & Miller, c/o State Highway Comn., $22,357, Pickett & Hollier, Opelousas, $23,403.

Ind., Evansville—Vanderburg Co. opened bids graveling 15,400 ft. E. I. Smith Rd., 16 ft., from R. W. Martin, Slaughter St., $25,577; M. Saunders, Mt. Vernon, $25,896. Engrs. est. $26,947. Noted Oct. 26.

Ind., Terre Haute—Vigo Co. opened bids paving 11,220 ft. A. Fromme Rd., 30 ft., 37,400 sq.yd. concrete on concrete, from Carpenter Constr. Co., Terre Haute (street address not available), $80,762, Foulkes Constr. Co., 705 Ohio St., $86,302, Premier Constr. Co., Terre Haute (street address not available), $89,860, engrs. est. $112,769; grading and graveling 8.5 mi. John N. White Rd., 30 ft., from Carpenter Constr. Co., Terre Haute (street address not available), $84,002, W. L. White, Terre Haute (street address not available), $95,160, Pfizenmeyer Constr. Co. (address not available), $98,066. Engrs. est. $110,983. Noted Oct. 19.

Tex., La Grange—Fayette Co. (a) grading and gravel surfacing, (b) rein.-con. drainage structures, on 12.87 mi. Highway 3-B, Federal Aid Project 286, 16 ft., from P. G. Burns, San Bernardino, (b) $67,169; L. Robertson, Schulenburg, (b) $74,186; W. T. Hutto & Sons Gonzales, (a) $69,825; M. M. Craven, Fredericksburg, (a) and (b) $167,297. Engrs. est. $162,565. Noted Nov. 16.

Tex., Sinton—San Patricio Co. surfacing with 1 in. limestone rock asphalt 15.06 mi. State Highway 9, 16 ft., from Uvalde Rock Asphalt Co., 1111-14 City Natl. Bank Bldg., San Antonio, $117,687; R. W. Coglazier, 910 Austin St., San Antonio, $118,698. Engrs. est. $125,000. Noted Nov. 16.

Wash, Seattle—Opened bids Nov. 24 grading and laying sewers in 16th Ave. N.W., 18,850 cu.yd. earth excav., 4,016 ft. 10-15 in. (a) clay or (b) concrete pipe, from J. A. Tomei & Co., 1017 East 66th St., (a) $30,298, (b) $29,730; V. Ramaglia, 4411 Corliss Ave., (1) $31,247, (b) $30,422; Hauge & Espaland, 1813 North 50th St., (a) $33,781, (b) $33,525. Engrs. ets. $32,703.

Calif., Fresno—Improving Moroa Ave. between Peralta Way and Olive Ave., 91,855 sq. ft. grading, 62,440 sq. ft. asphalt, 9,411 ft. concrete gutter, 5,213 ft. concrete curb, 9,889 ft. concrete walks, etc., from Thompson Bros., Divisadero and G Sts., $29,824; Federal Constr. Co., Call Bldg., San Francisco, $30,515; Califoria Road & Street Impvt. Co., Bank of Italy Bldg., $31,070.

Calif., Modesto—Improving (1) 16th St. between I and Burney Sts., (a) 89,675 sq. ft. grading (b) 84,577 sq. ft. 1½ in., warrenite on 2½ in., asphaltic concrete (c) 5,098 ft. concrete gutter (d) 3,387 ft. concrete curb (2) Poplar Ave. between Needham and Stoddard Ave., (a) 58,547 sq.ft. grading (b) 54,881 sq.ft. paving (c) 3,666 ft. gutters (d) 2,432 ft. concrete curb, etc., from Standard Paving Co., 141-9th St., (1b) $0.17 (1c) $0.20 (1d) $0.70 (2a) $0.05 (2b) $0.17 (2c) $0.20 (2d) $0.70; A. Teichert & Son, Oehsner Bldg., Sacramento, (1a) $0.049 (1b) $0.176 (1c) $0.22 (1d) $0.69 (2a) $0.049 (2b) $0.176 (2c) $0.22 (d) $0.69.

Calif., San Anselmo—Improving streets in Barber Tract, from Heafey-Moore-McNair, 2030 High St., Oakland, $28,923; J. A. Mero, Richmond (street address not available) $31,009; Blumenkranz & Vernon, Farmers and Merchants Bank Bldg., Stockton, $40,333. Noted Oct. 26.

CONTRACTS AWARDED

Connecticut—State Hy. Dept., Hartford, paving 8,270 ft. State St., 20 ft., in Hamden, rein.-con., to R. D. Daley & Co., 6 Church St., New Haven, $29,453 (cement and steel reinforcing furnished by state); 3,900 ft. Cornwall Hollow Rd., 18 ft., in Cornwall, 7 in. native stone macadam, to J. DeMichael & Bro., 58 High St., Torrington, $16,843. Noted Nov. 23.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg. grading, curbing and laying sidewalks on 101st. (Jerome) Ave., etc., to E. Bloch, Woodhaven, $12,990; paving 101st (Jerome) Ave., etc., permanent sheet asphalt on concrete, to Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, $17,805. Noted Nov. 23.

N. J., Cape May—Cape May Co. paving 8,123 sq.yd. Route 14, Sect. 6, to C. H. Earle, 173 Main St., Hackensack, $43,544.

N. J., Mays Landing — Atlantic Co., Guarantee Trust Bldg., Atlantic City, reconstructing Cedar and Landis Aves. from Mays Landing-Downstown Rd. in Richland to line between Atlantic and Cumberland Counties, to C. H. Earle, 173 Main St., Hackensack, $211,980. Noted Oct. 26.

N. J., Newton—Sussex Co., grading 1.87 mi. Fredon-Stillwater Rd., 36,000 cu.yd. rock excav., to Richards & Gaston, 110 South Bridge St., Somerville, $63,665. Noted Nov. 2.

Pennsylvania—State Hy. Dept., Harrisburg, 2,427 ft. Route 77, Beaver Co., to A. Dahl, 425 Wayne Ave., Ellwood City, $56,184; 2,893 ft. Route 77, Sect. 2, Lawrence Co., to Jameson & Narlee, Fredonia, $26,256; 5,812 ft. Application 1975, Lackawanna Co., to M. Rosato & Son Co., 1145 Sloan Ave., Scranton, $40,224. Noted Oct. 26.

N. C., Wilmington—Paving various streets, bitulithic, to P. McGuire, Norfolk, Va., (street address not available) $190,000. Noted Nov. 2.

S. C., Columbia—Richland Co., constructing 11.15 mi. Monticello Highway, to White Contg. Co., Chatham, Va., $56,161. Noted Nov. 9.

Georgia—State Hy. Dept., Atlanta, constructing 13.025 mi. Quitman-Madison Rd., Federal Aid Project 278, Quitman Co., to Smith & Hall, Elberton, $158,736, foregoing item noted in Oct. 19 issue; 8.738 mi. Atlanta-Newman Highway, Federal Aid Project 174, Campbell Co., to Davis Constr. Co., Walton Bldg., Atlanta, $155,199; 2 mi. road from Albany to Lee Co. line, Federal Aid Project 298, Dougherty Co., to Dougherty Co., Albany, $29,231; 5½ mi. road from Blue Ridge to Blairsville, Federal Aid Project 118, Fannin Co., to Dunn & Woodall Walton Bldg., Atlanta, $36,992; 8.09 mi. Moultrie-Tipton Rd., Federal Aid Project 244, Colquitt Co., to Shepherd & Wallace, Atlanta, (street address not available), $55,493; 9 mi. road from Blairsville to Murphy Rd., Federal Aid Project 290, Union Co., to M. H. Gardner, Columbus, $73,802; 8.7 mi. La Fayette-Summerville Highway, Federal Aid Project 263, Walker Co., and 3.44 mi. Cleveland-Blairsville Rd., Federal Aid Project 111, Union Co., to H. B. Hoppendeitzel, Casualty Bldg., Macon, $65,364 and $37,551 respectively.

Florida—State Hy. Dept., Tallahassee, surfacing with bituminous macadam 7.76 mi. road from Vero to Wabasso, Project 36, St. Lucie Co., to Maule Paving Co.; Ojus, $240,221; surfacing with plain concrete 10 mi. road from Pensacola to Roberts, Project 34, Escambia Co., to C. H. Turner Co., Pensacola, $250,808. Noted Nov. 23.

Fla., Clermont—Paving 23 blocks, to J. B. McCrary Constr. Co., 3rd Natl. Bank Bldg., Atlanta, Ga., $103,433.

Fla., Miami—Dade Co., constructing 18 mi. macadam road in 4th Dist., to T. B. McGahey, Miami, $1.85 per cu.yd.

Streets and Roads (Continued)

Louisiana—State Hy. Comm., Reymond Bldg., Baton Rouge, 16.1 mi. Winnsboro-Vidalia Highway, Franklin Parish, to W. H. Harris, Monroe, $91,780; 4.03 mi. Crowley-Kaplan Highway, Acadia Parish, to Howard Kenyon Dredging Co., Dallas, Tex., (street address not available) $25,252; gravel for Crowley-Kaplan Highway, Acadia Parish, to Fluker Gravel Co., Fluker, $11,354. Noted Nov. 2.

Ind., Lagrange—Lagrange Co., to Davidson & Stout, Akron, graveling 8.4 mi. County Unit Rd., 16 ft., $31,457, engrs. est. $35,000; 7 mi. Bontrager Rd., $25,878, engrs. est. $27,500.

Ind., Monticello — White Co., 16,000 ft. Burley Rd., 16 ft., stone, to Sell Bros., Wolcott, $25,780. Engrs. est. $27,500. Noted Oct. 26.

Ind., New Albany — Floyd Co., paving 11,180 ft. Mount Tabor Rd., 16 ft., stone macadam, to Atkins & Staebler, 1936 Ekin Ave., $25,000. Engrs. est. $27,500. Noted Oct. 26.

Ia., Sumner—For 58,000 sq.yd. warrenite bitulithic pavement and 34,000 ft. curb and gutter, to Bryant Asphalt Co., Waterloo, $209,936. Noted Nov. 2.

Kan., Arma—City Council and Comrs. Crawford Co., (Girard) 7 in. concrete pavement on 0.945 mi. Federal Aid Project 120, to Koss Constr. Co., 632-W-Box, Des Moines, Ia., 3,530 cu.yd. excav. $0.70 per cu.yd., 11,532 sq.yd. 7 in. concrete $2.59 per sq.yd., 9,806 lin.ft. curb and gutter $0.75, total $41,615; city portion 2,913.64 sq.yd. concrete pavement $2.54 per sq.yd., 566 cu.yd. excav. $0.70, etc., total $8,841. Noted Nov. 16.

Mo., St. Charles—St. Charles Co. regrading and repairing 12 mi. Marthasville Rd. from Booneslick Rd. to Callaway Twp. line, 16 ft. $35,000. Work will be done by force account under supervision of J. Jacoby, co. engr.

N. D., Carrington—Foster Co., grading 15 mi. highway between here and Melville, to North Dakota Constr. Co., Linton, $34,000.

Tex., Dallas—Paving, curbing and guttering Haskell St. from State to Cole Sts., bitulithic on concrete, to Central Bitulithic Co., Praetorian Bldg., $46,665. Noted Nov. 9.

Tex., Dallas—Paving, curbing and guttering 10th St. from Rosemont to city limits, Uvalde asphalt on concrete, to Uvalde Paving Co., Insurance Bldg., $50,406. Noted Nov. 9.

Tex., Ft. Worth—To Genl. Constr. Co., Cotton Exch. Bldg., paving 4,620 sq.yd. Ashland St., Arlington Heights, incl. 3,100 ft. curb and gutter, 9,700 sq.yd. West 21st St. from Clinton to Pearl Sts., incl. 5,400 ft. curb and gutter, 2,700 sq.yd. Hattie St. from Main to Jennings Sts., all foregoing 1 in. Uvalde rock asphalt $1, curb and gutter $1.10, 2,400 sq.yd. West 6th St. from Burnett to Throckmorton Sts., 2 in. Uvalde on 5 in. concrete base $3, 1,200 ft. curb and gutter $1.10, 5,000 sq.yd. Rio Grande St. 2 in. Uvalde top $3.10 or 1½ in. top $2.80; to West Texas Constr. Co., Cotton Exch. Bldg., bitulithic paving 1,675 sq.yd. Denver St. from 15th to 16th Sts., incl. 1,160 ft. curb and gutter, 37,420 sq.yd. Forest Park Blvd., incl. 17,940 ft. curb and gutter, 1,675 sq.yd. Clinton St. from Central to 12th Sts., 1,475 sq.yd. La Gonda St. from 14th to 15th Sts., 6,865 sq.yd. Macon St. from 5th to North Sts., all foregoing $3.18, and $1.10 for curb and gutter; to J. F. Wills, 115 Bryan St., 1,825 sq.yd. 3 in. vertcal fibre brck South Adams St. from Lowden to College Sts., $3, 230 ft. curb and gutter $1.10.

Tex., Pearsall—Frio Co. grading, gravel surfacing and 1½ in. cold rolled bituminous topping on 17.81 mi. Meridian Highway between here and La Salle Co. line 18 ft., to Uvalde Rock Asphalt Co., City Natl. Bank Bldg., San Antonio, $238,883; 17.2 mi. Meridian Highway from here north to Meridian Co. line, to Smith Bros., Crockett, $207,310. Noted Nov. 23.

Tex., Uvalde—Uvalde Co. grading and gravel surfacing 14 mi. Uvalde-Leakey Rd., 16 ft., 13,409 cu.yd. roadway and 6,650 cu. yd. borrow excav., 208 cu.yd. concrete, 4,496 lb. reinforcing, 31,003 cu.yd. gravel surfacing, to P. M. Skinner, Box 459, Marlin, $35,064. Engrs. est. $38,500 incl. 10% for engineering and contingencies.

Colorado—State Hy. Dept., Denver, improving 1.003 mi. road extending east on Union Pacific Highway from Aurora City limits, Federal Aid Project 225, Adams and Arapahoe Counties, national pavement, to Miller, Douglas & Haines, 100 South York St., Denver, $34,790; gravel surfacing 5.296 mi. Spanish Trail, Federal Aid Project 213B, La Plata and Montezuma Counties, 18 ft., to J. E. Hanson, Delta, engrs. est. $69,747. Noted Oct. 12.

Idaho—W. Osborn, dist. engr. State Hy. Dept., Lewiston, gravel surfacing 22 mi. between Genesee and Moscow, on North and South Highway, Federal Aid Project 18, Latah and Nez Perce Counties. 23,080 cu.yd. gravel, to Campbell & Barr, Colfax, Wash., $50,314. Noted Nov. 9.

Idaho—State Hy. Comn., Boise, grading and gravel surfacing 10.25 mi. Idaho-Pacific Highway, Federal Aid Project 65, from Georgetown to Caribou Bear Lake Co. Line, 77,000 cu.yd. excav., 21,000 cu.yd. gravel, 2,000 ft. 18-36 in. galvanized iron pipe, etc., to Taylor-Childs Constr. Co., 2420 Hudson Ave., Ogden, Utah. $74,028. Noted Nov. 9.

Utah—State Rd. Comn., Salt Lake City, grading and gravel surfacing 7.459 mi. Heber-Hailstone Rd., 18 ft., Wasatch Co., to Gilkerson Constr. Co., 217 Ness Bldg., Salt Lake City, $56,777. Noted Nov. 16.

Utah—State Hy. Dept., Salt Lake City, grading and surfacing 7.798 mi. road from Morgan to Peterson, 18 ft., 41, Morgan Co., to Western Eng. & Contg. Co., Templeton Bldg., Salt Lake City. 61,530 cu. yd. common excav. at $0.37, 240 cu. yd. solid rock excav. $2, 2,015 cu. yd. borrow $0.32, 12,050 sta. yd. overhaul $0.03, 15,115 cu. yd. gravel surface, loading, $0.58, 15,640 yd. mi. gravel surface, hauling, $0.38, 7.8 mi. gravel surface, placing, $500, 7,300 lb. reinforcing $0.02, 248 cu. yd. concrete $16.50, etc, total $49,434. Noted Oct. 26.

Wash., Seattle—Paving and trestle work on Railroad Ave., to Hauge & Espaland, 1813 North 50th St., $96,185. Noted Nov. 30.

Oregon—State Hy. Comn., Salem, crushed rock and gravel surfacing 12.1 mi. John Day Highway, Unit 2, Wheeler Co., to Metzger & Johnston, Roseburg, 45 cu.yd. Class A concrete, $30, 9,450 cu.yd. crushed gravel top, $1.85, 10,450 cu.yd. for base, $1.67, 600 cu.yd. for maintenance $1.75, etc., total $38,334.

Oregon — State Hy. Dept., Salem, and Portland Ry., Light & Power Co., Electric Bldg., Portland, grading 0.94 mi. Pacific Highway on perpendicular cliff, above car tracks and Willimette River, in Oregon City, Clackamas Co., to Rajotte & Winters, Inc., Realty Bldg., Spokane, Wash., $98,610.

Calif., Santa Rosa—Supervs. Sonoma Co. will improve 3.05 mi. Petaluma-Somona Highway, Sect. B; 13.35 mi. Guerneville-Jenner Highway; 1.79 mi. road from Sonoma to State Highway Rd.; 1.04 mi. Dry Creek Rd.; 0.58 mi. Geyserville-Kimtown Rd., Sect. A, between State Highway and Russian River, work will be done by day labor. Formerly bids rejected. E. A. Peugh, co. surv. Noted Oct. 26.

Industrial Works

PROPOSED WORK

N. Y., Alden—Erie Co., City Hall, Buffalo, having preliminary sketches made by W. A. Kidd, archt., 524 Franklin St., Buffalo, 1 story, 75 x 100 ft., rein.-con., brick and steel power house and refrigerating plant, here. To exceed $40,000. Noted June 1.

N. Y., Buffalo — Great Lakes Transit Corp., 223 Erie St., plans large brick storage building and warehouse, Erie St. $64,000.

N. Y., Jamestown—Clarke Baking Co., 809 North Main St., plans rebuilding major portion of bakery, Richmond Pl., recently destroyed by fire. $50,000. Architect not announced.

N. Y., New York—Dept. Parks, Municipal Bldg., having plans prepared 4 story service building, brick, steel and concrete, plain foundation, 77th St. and Columbus Ave. $500,000. Private plans.

N. Y., New York—Dept. Plants & Structures, Municipal Bldg., soon takes bids 2 story, 85 x 115 ft., brick, steel and concrete housing station, plain foundation, Horatio St. $100,000. Private plans. G. A. Whalen, comr. Noted June 22.

N. Y., White Plains—Dentermann & Son Ice Co., plans 1 story, 50 x 120 ft., addition to plant. $65,000. L. Block, 501 5th Ave., New York, engr.

Pa., Juniata — Pennsylvania R.R., Broad St. Sta., Phila. having plans prepared 45 x 150 ft. power house, here. A. C. Shand, ch. engr.

Pa., Lewistown—Amer. Refractories Co., Union Ave., Pittsburgh, purchased 68 acre site adjoining Pennsylvania R.R. tracks east of Lewistown Jct., and plans to build plant in spring.

Pa., Phila.—Franklin Sugar Co., 1045 North Delaware Ave., soon takes bids 1 and 2 story rein.-con. and brick shop, Delaware Ave. $50,000. Private plans.

Pa., Phila.—Ketterlinus Lithographic Mfg. Co., 4th and Arch Sts., will take new bids Jan. 1, for 8 story and basement, 5 x 140 ft. plant, 4th and Arch Sts. Former bids rejected. Ballinger Co., 12th and Chestnut Sts., archts. Noted Nov. 16.

Pa., Phila.—F. Nardy, 3840 Spring Garden St., soon takes bids 2 story and basement, 100 x 138 ft., brick and steel garage, plain foundation, 18th and Jackson Sts. $80,000. R. A. Schuman, 202 West State St., Trenton, N. J., archt.

Pa., Warren—Warren Garage Co., plans to remodel and build 2 story addition to garage.

Pa., Watsontown—Watsontown Door & Sash Co. plans generating plant in connection with factory. Cost to exceed $50,000.

Va., Richmond—The Corley Piano Co., 213 East Broad St., plans to rebuild plant recently destroyed by fire. $100,000. Total loss $235,000.

N. C., Cramerton—May's Mills, Inc., plans weave mill addition. $1,000,000. S. W. Cramer, pres.

N. C., Gastonia—H. H. Groves soon lets contract constructing cotton mill, capacity 15,000 spindles.

N. C., Raleigh—Carolina Power & Light Co., Raleigh, (street address not available), plans additions to various plants, substations, transmission lines, steam plants, equipment, etc. $6,000,000. P. A. Tillery, Capitol Apartments vice-pres. and genl. mgr.

Tenn., Nashville—Philips & Buttorf Mfg. Co., 3rd Ave. N., soon takes bids 1 story, 175 x 300 ft. brick, warehouse. $40,000. Marr & Holman, Stahlman Bldg., archts.

Tenn., Nashville—See "Miscellaneous."

Ky., Louisville—Gibbs-Inman, 825 West Bway., having plans prepared by A. Loomis, archt., 51 Todd Bldg., and takes bids in spring, 3 story and basement, 100 x 220 ft., rein.-con., brick, and terra cotta, 9th St. and Bway. $100,000.

O., Alliance—Machined Steel Castings Co., South Mahoning Ave., plans 1 story, 75 x 200 ft. factory. $100,000.

O., Cleveland—G. W. Deming, 3154 Redwood Ave., and O. G. Deming, 1269 Carlyon Rd., Cleveland Heights, having plans prepared by H. P. Whitworth, archt., 526 Hickox Bldg., 1 story, 40 x 54 ft. and 40 x 73 ft. garage and commercial building, Euclid Ave. and Chardon Rd. $40,000.

O., Cleveland—Union Terminal Bus Line Co., c/o Miller & James, archts., Erie Bldg., having plans prepared 2 story, 72 x 180 ft., brick, steel and concrete garage and service station, East 9th St. near Central Ave. $60,000.

O., Cleveland—H. E. Roth, 1604 East 117th St., had plans prepared by Christian, Schwarzenberg & Gaede, archts., 1900 Euclid Ave., 1 story and basement, 50 x 100 ft. and 30 x 40 ft., brick and concrete, factory, garage and office building, West 65th St. near Storer Ave. $50,000.

O, Columbus—Federal Ice & Refrigeration Co. had plans prepared by C. C. Coneby, archt. and engr., Cadillac Bldg., Cleveland, 1 story, 55 ft. high, 40 x 155 ft., brick and steel plant, 20th St. $150,000.

O., Springfield — Fairbanks Piano Plate Co., Kenton St., plans rebuilding portion of factory, recently destroyed by fire. $40,000.

O., Wadsworth—Ohio Match Co, having plans prepared by Christian, Schwarzenberg & Gaede, archts., 1900 Euclid Ave., Cleveland, 3 story, 120 x 200 ft., brick, steel and concrete factory. $150,000.

O., Wadsworth—Ohio Injector Co., c/o E. J. Young, pres., having plans prepared by Christian, Schwarzenberg & Gaede, archts., 1900 Euclid Ave., Cleveland, 3 story, 60 x 250 ft. factory addition, brick and reinforced flat slab concrete. $150,000.

Mich., Petoskey — Petoskey Portland Cement Co., having preliminary plans prepared by J. C. Buckbee Co., consult. engrs.,

Industrial Works (Continued)

38 South Dearborn St., Chicago, extending stock house, power plant and factory. $500,000. This corrects reports in Nov. 23 issue.

Ill., Chicago—Ford Motor Co., Highland Park (Detroit P. O.) Mich., had plans prepared by A. Kahn, archt., 1000 Marquette Bldg., Detroit, Mich., 1 story, 14 ft. high, 502 x 1,363 ft., assembly plant, with 100 x 100 ft. detached power house, brick, steel and rein.-con., plain foundation, Torrance Ave. and Calumet River, here.

Ill., Chicago—Peoples Gas Light & Coke Co., 122 South Michigan Ave., plans 2, 3 and 4 story repair shop, rein.-con., brick and steel, Homan and Division Sts. $300,000. H. Van Holst, 112 West Adams St., archt.

Ill., Taylorville—Hopper Paper Co. had plans prepared by Billingham & Cobb, archts., Kalamazoo, Mich., 2 story, 80 x 160 ft. factory addition, rein.-con., brick and steel. $60,000.

Wis., Eau Claire—K. N. Knudson, 307 North Farwell St., making plans 1 story and basement, 55 x 94 ft., brick and concrete garage, plain foundation, Farwell St. $40,000. Private plans.

Wis., Eau Claire—Paige-Ford Motor Car Co., Wisconsin and North Farwell Sts., making plans 2 story and basement, 58 x 90 ft., brick and concrete garage, plain foundation. $45,000. Private plans.

Wis., Madison—Heilprin & Co., c/o J. Heilprin, pres., West Mifflin St. having plans prepared by E. A. Tough, archt., Conklin Bldg., 2 story, 75 x 150 ft., cold storage warehouse, rein.-con., brick and steel, plain foundation, Bedford St. $90,000. Noted Nov. 16.

Wis., Madison—Madison Supply Co., 615 East Washington Ave., having plans prepared by R. A. Phillips, archt., 315 Beaver Bldg., 2 story, 50 x 60 ft., bottling works and warehouse, brick and rein.-con., plain foundation. $40,000.

Minn., Minneapolis—J. Leslie Paper Co., 3rd Ave. S and 5th St., having plans prepared by Bertrand & Chamberlain, archts., 616 Northwestern Bank Bldg., 1 or 2 story and basement, 100 x 150 ft. warehouse, rein.-con., brick and tile, 7th Ave. N, between 3rd and 4th Sts. $70,000 (if only 1 story).

Minn., Northfield—St. Olafs College having plans prepared by Collidge & Rogdon, archts., Corn Exchange Bldg., Chicago, 1 story power house, brick and concrete, at college. $50,000. P. O. Hann, business mgr. J. D. Small, 127 North Dearborn St., Chicago, engr.

Minn., Red Wing—Red Wing Sewer Pipe Co. having plans prepared by A. F. Gauger, archt., 302 Central Bank Bldg., St. Paul, 3 story, 75 x 275 ft. dry house, brick and concrete, to replace one destroyed by fire. $85,000.

Mo., St. Louis—Feb. 9, to vote on $1,000,000 bonds (Proposition 11) constructing and equipping municipal power and service building incl. machine shop, garage and laundry. W. W. Horner, 306 City Hall, engr.

Mo., St. Louis—Grace Sign & Mfg. Co., 425 South Main St., soon lets contract 1 story, 150 x 260 ft., rein.-con. factory, plain foundation, 2nd and President Sts. $100,000. Architect and engineer not selected.

Calif., Emeryville—Westinghouse Electric & Mfg. Co., 1st Natl. Bank Bldg., San Francisco, having plans prepared by their Eng. Dept., Union Bldg., Pittsburgh, Pa., group of buildings for manufacturing plant, on 12½ acre site, here. $1,000,000.

Calif., Fresno — Trewhitt-Shields Co., (owners, engineers and contractors), preparing plans 1 story, 130 x 150 ft., concrete and brick warehouse J and Los Angeles Sts. Work will probably be done by day labor.

Calif., Hayward—E. L. Macabee, mgr. Hunt Bros. Packing Co., Lower B St., and chn. of Cold Storage Plant Com. of Hayward Chamber of Commerce, backs movement to finance construction of cold storage plant. Plant will be constructed either by formation of local stock company or by corporation already established in Hayward. $100,000.

Calif., Sacramento — Sacramento Pipe Wks., R St. near 7th St., plans 2 buildings, each 148 x 230 ft., 16th and B Sts.

Ont., Bridgeburg—Natl. Brake Co., Ellicott Bldg., Buffalo, N. Y., plans plant here.

Ont., Collingwood—Canadian Postel Lock Nut Bolt Co., plans to build new factory in spring. $50,000. F. A. Bassett, mgr.

Ont., Mount Dennis—Electroplax Mfg. Co. plans concrete, brick and steel plant to replace one recently destroyed by fire. $100,000. Architect not selected.

Ont., Wiarton—G. Golden, Berford St., plans new garage and repair shop. $45,000.

BIDS DESIRED

N. Y., Sheepshead Bay (Brooklyn, P. O.) —Superior Ice Co., 50 East 42nd St., New York, brick, steel and rein.-con. plant, plain foundation Ave. Z and East 17th St., here. $250,000. Work will be done by separate contracts, under supervision of W. Mortensen, archt. and engr., 209 West 76th St., New York. Noted Nov. 23.

Pa., Phila.—Amer. Ice Co., 6th and Arch Sts., taking bids 1 story, 125 x 150 ft. rein.-con., brick and steel plant, plain foundation, 17th and Washington Aves. Private plans.

Pa., Phila.—I. W. Levine, archt., Victory Bldg., taking bids 3 story, 45 x 180 ft., rein.-con. and brick warehouse, plain foundation, 5th and South Sts., for P. Miller, 506 South St. $90,000.

Pa., Phila.—C. J. Gilmore, archt., Fuller Bldg., taking bids 1 story and basement, 62 x 155 ft. brick and steel garage, plain foundation, York Rd. and City Line Ave., for W. B. Margerum, York Rd. and Chelten Ave. $60,000.

Pa., Phila.—Smith-Hardican Co., 1606 Cherry St., taking bids 4 story and basement, 65 x 80 ft. rein.-con. and brick garage, plain foundation, 20th and Brandywine Sts. $120,000. Private plans.

Pa., Phila.—C. E. Wunder, archt., 1517 Spruce St., taking bids 5 story and basement, 173 x 200 ft., rein.-con. and brick plant, plain foundation, 34th and Market Sts., for S. Green Co., 15th and Arch Sts. $250,000.

Pa., Pittsburgh—Natl. Biscuit Co., 6400 Penn Ave., taking bids, 1 story, 60 x 120 ft. steel garage, Aurelia Ave. and Kaufman Way. Private plans.

Pa., Waynesburg—H. Cochrane, Dawson, will build 2 story and basement, 90 x 120 ft. rein.-con., brick and steel garage, Greene St., $60,000. Work will be done by separate contracts. H. W. Altman, Fayette Title & Trust Bldg., Uniontown, archt. Noted Nov. 16.

O., Cleveland—Bonar Realty Co., c/o P. F. Price, 307 Ulmer Bldg., taking bids 2 story and basement, 111 x 120 ft., brick and timber garage, commercial building, etc., East 114th St. and St. Clair Ave. $5,000. Allen-Osborn Co., 700 Rose Bldg., archts.

O., East Cleveland (Cleveland P. O.)—See "Buildings."

Wis., Cedarburg—Hansen Canning Machine Co., Port Washington, taking bids 1 story, 112 x 112 ft., brick, rein.-con. and steel factory, plain foundation. $45,000. Private plans.

Wis., Milwaukee—H. J. Esser, archt., 82 Wisconsin St, taking bids 2 story and basement, 85 x 150 ft., brick and concrete dairy, plain foundation, 11th St, for Cedarburg Dairy Co., c/o H. Berns, 1586 Prospect Ave. $75,000.

Wis., Milwaukee—H. C. Hengels, archt., 445 Milwaukee St., taking bids 2 story, 70 x 150 ft. addition to garage, brick and concrete, plain foundation, Grand Ave., for Welch Investment Co., 105 Wells St. $50,000.

Wis., Randon Lake—Krier Preserving Co., Belgium, taking bids 1 and 2 story, 50 x 240 ft., main factory building, warehouse, sheds and power house, brick and timber, plain foundation, here. $100,000. Private plans.

Wis., Wausau — Oppenhamer & Obel, archts., Spencer Bldg., taking bids 3 story and basement, 50 x 180 ft., brick and timber factory, plain foundation, for Marathon Shoe Co., 1st Ave. and Cedar St. $60,000.

Mo., St. Louis—Jan. 2, by Bd. Pub. Serv., 208 City Hall, 2 story, 54 x 225 ft., service building and power plant, rein.-con. and brick, plain foundation, for St. Louis Training School for Feeble-Minded, at Scott Farm. $150,000. L. R. Bowen, 304 City Hall, archt. and engr. Noted Oct. 5.

Idaho, Warren—Unity Gold Mines, Warren, receiving bids 1,000 hp. hydro-electric plant, incl. 10 mi. transmission line, etc. $75,000. Alexander Potter, 50 Church St., New York City, engr.

CONTRACTS AWARDED

Mass., Worcester—Reed & Prince Mfg. Co., Duncan Ave., 2 story, 60 x 400 ft. factory addition, brick and steel, and 1 story, 90 x 120 ft. annealing room, brick, Nixon Ave., to H. R. Kent & Co. 141 B'way., New York City. Archts. est. $150,000.

Conn., Hartford—Hartford Dispatch and Trucking Co., 105 Albany Ave., will build 1 story, 40 x 80 ft. garage and machine shop, by day labor, under supervision. Smith & Annable, Inc., archts., 145 State St., Springfield, Mass.

N. Y., Auburn—Lockwood, Greene & Co., archts. and engrs., 101 Park Ave., New York, new weave shed, machine shop and extensions to dyehouse and power plant, rein.-con., brick and steel, plain foundations, here to J. J. O'Leary, Lodi Rd., Passiac, N. J., for Firth Carpet Co., 62 South Division St. Archts. est. $150,000. Noted Nov. 16.

N. Y., Brooklyn—J. J. Aaron, c/o A. Goldberg, archt. and engr., 164 Montague St., 1 story, 100 x 150 ft., brick steel and concrete garage, plain foundation, Montgomery St., by day labor. $75,000.

N. Y., Buffalo—Citizens Safe Deposit Co., 5 story, 26 x 115 ft., fur storage plant, rein.-con., 565 William St., to Turner Constr. Co., 11 Goodell St.

N. Y., Buffalo—Swan Garage Co., Inc., 48 East Swan St., 3 story and part basement, 90 x 115 ft., brick and steel garage, to Turner Constr. Co., 11 Goodell St. Noted Nov. 16.

N. Y., Buffalo—Kittinger Bros., 1893 Elmwood Ave., 3 story, 80 x 112 ft., brick addition to furniture factory, to Harding & Crea, White Bldg. Archts. est. $40,000. Noted Nov. 30.

N. Y., Buffalo—Great Lakes Transit Corp., Marine Trust Bldg., brick storage building, Erie St., to Eastern Concrete Steel Co., 403 Morgan Bldg. Archts. est. $64,000.

N. Y., New York—C. D. Greenbaum, c/o Maximilian Zipkes, archt. and engr., 432 4th Ave., 2 story and basement, brick, steel and concrete warehouse, plain foundation, 180th St. and Amsterdam Ave., by day labor. $50,000.

N. Y., Vischer Ferry—C. L. Cadle, supt. Pub. Wks., Albany, power house at Vischer Ferry dam, Saratoga Co., here, Contr. B-3, to Amer. Pipe & Constr. Co., 112 North Broad St., Phila., $289,870. Noted Oct. 12.

Pa., Aspinwall — Humes Bros., Brilliant St., 1 story, concrete, brick and steel addition to garage, Brilliant St., to W. M. May, Eastern Ave. Archts. est. $40,000.

Pa., Bridgeport—James Lees & Sons Co., 5 story and basement, 43 x 64 ft. rein.-con., brick and steel mill, plain foundation, to Bowen Constr. Co., 1935 Chestnut St., Phila.

Pa., Freedom — Freedom Oil Wks., 2 2 story, 48 x 75 ft. rein.-con. addition to garage, to R. B. McDanel Co., New Brighton. Archts. est. $40,000. Noted Aug. 10.

Pa., Johnstown—E. Hahn Packing Co., Hickory St., 3 story and basement, 48 x 108 ft. and 24 x 112 ft. concrete and brick addition to plant, Hickory St., to W. H. Smith & Son, Johnstown.

Pa., Phila.—Bennett & Aspden Co., 3 story, rein.-con. and brick addition to mill, plain foundation, Krams and Pechin Sts., to W. Steele & Sons, 16th and Arch Sts. $80,000.

Pa., Phila.—Bush & Diamond, Jasper and Thayer Sts., 2 story and basement, rein.-con. and brick mill, plain foundation, Ontario and Jasper Sts., to Austin Co., Bulletin Bldg., $50,000.

Pa., Phila.—Phila. Inquirer, 1109 Market St., 6 story and basement, 163 x 397 ft., rein.-con. and brick storage plant, plain foundation, 15th and Callowhill Sts., to Roydhouse-Arey Co., 112 North Broad St. Archts. est. $500,000.

Pa., Pittsburgh—Fairmount Creamery Co., 301 Ferry St., 5 story and basement, 62 x 72 ft. warehouse and 1 story and basement, 38 x 72 ft. garage, 25th and Smallman Sts., to W. T. Grange Constr. Co., Keenan Bldg. Archts. est. $150,000. Noted Sept. 14.

Pa., Pittsburgh—Studebaker Sales Co., Baum Blvd., 2 story and basement, 87 x 112 ft. addition to garage and sales room, 4724 Baum Blvd., to Conley & DeMey, 127 North Highland Ave. Archts. est. $65,000. Noted Nov. 16.

Industrial Works (Continued)

D. C., Wash.—J. McReynolds c/o Studebaker Automobile Co., 819 14th St., N. W., showroom and service station at 14th and R Sts., to H. Wardman, 1430 K St., N. W. Archts. est. $150,000. Noted Sept. 28.

D. C., Wash.—C. H. Tompkins, 1612 Park Rd., N. W., will build garage by day labor. $250,000. Private plans.

O., Akron—Ohio Pump & Machine Co., 2nd Natl. Bldg., 1 and 2 story, 80 x 260 ft., steel plant, plain foundation, to Clemmer & Johnson, 406 Metropolitan Bldg., $50,000.

O., Cleveland—Grabler Mfg. Co., 6565 Bway., 1 story, 50 x 80 ft. annealing house and 3 story, 80 x 80 ft. factory, brick and steel, to A. A. Lane Constr. Co., 1869 East 55th St. Archts. est. $50,000. Noted Nov. 23.

Ill., Chicago—Douglas Bottling Co., 3523 Ogden Ave., 1 and 2 story, 23 x 75 ft. and 75 x 145 ft. factory, rein.-con., brick and steel, Ogden Ave. near South Ridgeway Ave., to B. Boches, 1608 South Central Park Ave. Archts. est. $40,000.

Ill., Chicago—The Fair Department Store, State and Adams Sts., 1 story, 157 x 313 ft., rein.-con., brick and steel garage, 2454-2520 Lawrence Ave., to H. D. Moreland Co., 3701 Sheffield St. Archts. est. $185,000. Noted June 8.

Ill., Chicago—D. P. Farrell, c/o M. O. Nathan, archt., 123 West Madison St., 1 story, 100 x 200 ft. factory, rein.-con., brick and steel, 4411-29 West Lake St., to Nelso-Wagstad-Carlson Co., 1743 North Crawford Ave. Archts. est. $40,000.

Wis., Milwaukee—Excel Mfg. Co., 3402 South Pierce St., 2 story, 60 x 180 ft. addition to factory, brick and timber, plain foundation, to Lupinski & Wolff, 82 Wisconsin St. Archts. est. $45,000.

Wis., Milwaukee — Eslien Sheet Metal Wks., 1001 30th St., will build 2 story, 35 x 42 x 135 ft., brick and steel warehouse, plain foundation, Pemberton St., by day labor. $42,000. Private plans.

Wis., Milwaukee—Harsh & Chapline Shoe Co., 694 Hanover St., 3 story and basement, 60 x 210 ft., brick and concrete factory, plain foundation, to W. W. Oeflein, Inc., 86 Michigan St. Archts. est. $110,000

Wis., Neenah—Kimberly-Clark Co., 2 story, 65 x 120 ft. paper mill, brick and timber, plain foundation, to C. R. Meyer & Sons Co., 50 State St., Oshkosh. $65,000. Private plans.

Wis., Plover—Whiting-Plover Paper Co., Stevens Point, 3 story, 40 x 108 ft., paper factory unit incl. heater room, brick, rein.-con. and steel, plain foundation, to C. R. Meyer & Sons Co., 50 State St., Oshkosh. Archts. est. $50,000.

Wis., Wausau — Hall Garage Co., 107 Scott St., 2 story, 50 x 60 ft., garage and repair shop, brick and rein.-con., plain foundation, to J. Larson, 627 Weile Ave. Archts. est. $40,000.

Wis., Waukesha—Spring City Auto Co., 220 West Main St., 1 story, 65 x 190 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, to Federal Bridge & Structure Co., Lincoln Ave. Archts. est. $40,000. Noted Nov. 23.

Wis., Wisconsin Rapids—Amer. Carbonic Mchry. Co. will build 2 story, 50 x 150 ft., brick, rein.-con. and steel factory, by day labor. $75,000. Private plans.

Minn., Hopkins — Hennepin Co. Sanatorium Comn., general contract 1 story and part basement, 12 and 32 ft. high, 45 x 108 ft., power house, brick, concrete and rein.-con., Glen Lake near here, to Pehrson Bros., 555 Temple Court, Minneapolis, $229,500. Noted Nov. 16.

Minn., Minneapolis—Bryant Investment Co., 1015 Plymouth Bldg., 2 story and basement, 42 x 92 x 125 ft. garage and service station, rein.-con., brick and tile, 3032 Hennepin Ave., to Mapes, Ahrns & Erstgaard, 600 Andrus Bldg., $105,000.

Kan., Wichita—J. Dold Packing Co., 21st St. and Lawrence Ave., refrigeration plant, to Carbondale Refrigeration Co., Carbondale, Pa. Engrs. est. $100,000.

Mo., Columbia—Boone Co. Milling Co., general contract rein.-con. and steel elevator and warehouse, 60,000 bu. capacity, to Monolith Builders, Inc., 509 Mutual Bldg., Kansas City, $50,000.

Mo., Kansas City—Hall Bros. Co., 5 story and basement, 100 x 115 ft., rein.-con., brick and terra cotta plant, 26th and Walnut Sts., to Frank Hill Smith, Inc., Winters Bldg., Dayton, O., $1,250,000.

Mo., St. Louis—Broderick & Bascom Rope Co., 805 North Main St., to Gamble Constr. Co., 620 Chestnut St., 2 story, 81 x 496 ft. warehouse, 4233-35 North Union Blvd., $67,200, 1 story, 143 x 496 ft. factory, 4239-51 North Union Blvd., $116,950 and 25 x 50 ft. building, $4,200, all rein.-con. and brick, plain foundations.

Mo., St. Louis—J. Cusamano, 910 Carleton Bldg., 1 story, 127 x 192 ft., concrete and brick garage, 1428-30 North 10th St., to C. N. Lund, Sawyer Bldg., $40,000.

Calif., Benicia—G. W. Hume Co., 311 California St., San Francisco, 1 story, 60 x 160 ft., frame and galvanized warehouse, pile foundation, here, to J. Pattison, 925 The Alameda, Berkeley.

Calif., San Francisco—F. W. Hess, 1342 Mission St., constructing 6 story, 87 x 137 ft., commercial depository and store building, concrete, Turk St. near Jones St., to J. H. Hjul, 1342 Mission St., $150,000.

Calif., Stockton—Natl. Paper Products Co., Church St. between McDougall and Stockton Sts., rein.-con. and brick factory additions, Church St., to Davis-Heller-Pearce Co., Delta Bldg.; cost between $100,000 and $150,000.

Ont., Toronto—Lawrason & Doughty, 42 Church St., 4 story and basement, 80 x 100 ft. concrete, brick and steel factory, to H. Walker, 230 Langley Ave., $150,000.

Ont., Windsor—See "Buildings."

Buildings

PROPOSED WORK

Mass., Norwood—Church—First Congregational Church of Norwood having plans prepared by J. Williams Beale Sons, archts., 62 Summer St., Chicago, for church. $125,000-$225,000, according to design selected.

Mass., Springfield—High School—School Bd. having plans prepared by E. C. and G. C. Gardner, archts., 33 Lyman St., 3 story, brick, Elliot St. $800,000.

R. I., Providence — High School — Public Building Dept. plans 2 story and basement wing, brick, Spring St. $200,000. Public Buildings Dept., City Hall, archts.

Conn., Middletown — School — Bd. Educ. plans 2 story and basement, brick and steel, Hotchkiss St. $150,000. Architect not selected.

N. Y., Brooklyn—Bank—East New York Savings Bank, Atlantic Ave., soon takes bids 2 story, brick, steel and stone, plain foundation, Atlantic and Pennsylvania Aves. $500,000. Holmes & Winslow, 134 East 44th St., New York, archts. and engrs

N. Y., Brooklyn—Exchange—McKenzie, Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., New York, soon let contract brick, steel and stone, plain foundation, 7701 3rd Ave., here, for New York Telephone Co., 15 Dey St., New York. $425,000. Noted Sept. 28.

N. Y., Brooklyn—High School—Bd. Educ. 500 Park Ave., New York, plans addition to Erasmus Hall High School, brick, steel and stone, plain foundation, Flatbush Ave., here, $750,000. C. B. J. Snyder, Flatbush Ave. extension and Concord St., archt. and engr.

N. Y., Buffalo—Cathedral—Buffalo Consistory A.A.S.R., 168 Delaware Ave., plans cathedral with 60 ft. proscenium arch, 1130 Delaware Ave. $500,000.

N. Y., Endicott—School—Voted $235,000 bonds and having plans prepared by A. T. Lacey, archt., Press Bldg., Binghamton, for school.

N. Y. Geneva—Theatre—N. A. Tallman, Titusville, Pa., plans brick and steel on opera house site here. $150,000. Architect not announced.

N. Y., Jamaica—Hospital—Mary Immaculate Hospital having plans prepared by W. J. Boegel, archt. and engr., 162 East 37th St., New York, 6 story and basement brick, steel and stone, plain foundation, Shelton Ave. $1,000,000.

N. Y. Jamestown—Office and Store—A. A. Rogers, Jamestown, (street address not available), plans 5 story brick and steel office and store building, Main St., to replace one recently destroyed by fire. Architect not announced.

N. Y. New York—Apartment—Springsteen & Goldhammer, archts. and engrs., 31 Union Sq., preparing plans 6 story, brick, steel and stone, plain foundation, Grand Ave. and 181st St. $400,000. Owner's name withheld.

N. Y., New York—Bank and Office—Chatham & Phoenix Bank, 149 Bway., having plans prepared by C. L. Calhoun, archt. and engr., 16 East 33rd St., 4 story, brick, steel and stone, plain foundation, Bowery and Grand St. $300,000.

N. Y., New York—Loft—Feder Bros., Inc., c/o G. H. McCabe, archt. and engr., 96 5th Ave., soon takes bids 6 story, 40 x 90 ft., brick, steel and stone, plain foundation, 230 West 38th St. $500,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., had plans prepared by C. B. J. Snyder, archt., and engr. Flatbush Ave., extension and Concord St., Brooklyn, 4-story, 35 x 175 ft., brick, steel and stone addition to P. S. 12, Frisby Ave., $350,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., having preliminary plans prepared by C. B. J. Snyder, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, 5 story, brick, steel and stone, plain foundation, Weeks Ave. $1,250,000.

N. Y., New York—Schools—Bd. Educ., 500 Park Ave., soon takes bids P. S. 11, 5 story, 20th St., between 8th and 9th Aves., $1,000,000; George Washington High School, 4 story 300 x 300 ft., 183rd St. and Amsterdam Ave. $1,750,000, both brick, steel and stone, plain foundations. C. B. J. Snyder, Flatbush Ave., extension and Concord St., Brooklyn, archt. and engr.

N. Y., Niagara Falls—Bank and Office—Niagara Falls Trust Co., 45 Falls St., soon takes bids on either low building as bank structure or tall building as bank and office building, 3 story or higher, 45 x 100 ft., brick, steel and stone, Falls and 1st Sts., Cost to exceed $150,000. Architect not selected.

N. Y. Rochester—Hospital—City and University of Rochester, University Ave., plan brick hospital. $500,000. Architect not announced. C. A. Poole, city engr.

N. Y., Theills—Assembly Hall, etc.—M. B. Patterson, pres. Bd. Mgrs. Letchworth Village, 7 Wall St., New York, rejected bids opened Nov. 14, for attendants home, assembly hall and industrial building, at Letchworth Village, here. Noted Oct. 26.

N. J., Camden—Y. W. C. A., c/o A. Parkhurst, Bway. and Stevens St., takes bids about Dec. 15, 4 story, cut stone and brick, plain foundation, Bway. and Stevens St. $300,000. Lockey & Hettle, 5 Hudson St., archts. Noted June 22.

N. J., Gloucester City—School—Bd. Educ. soon takes bids 2 story and basement, 175 x 325 ft., brick and steel, plain foundation, Cumberland and Ridgeway Aves. $350,000. Lackey & Hettle, 5 Hudson St., Camden, archts.

N. J., Haddon Heights—High School—Bd. Educ. having plans prepared by C. R. Beddell, archt., 136 South 4th St., Phila., 154 x 237 ft., rein.-con. and limestone, 1st, 2nd, Garden and High Sts. $350,000.

N. J., Princeton—Hotel—Princeton Inn Co., c/o A. J. Thomas, archt. and engr., 15 East 47th St., New York, having preliminary plans prepared, brick, steel and stone, plain foundation, Alexander St. $350,000. Noted Aug. 31.

N. J., Trenton—High School—Bd. Educ. plans Central High School, incl. group of buildings, Greenwood Ave. $1,000,000. Plans for 1st unit, costing $300,000 to be drawn soon. E. Sibley, Edgewood Lane, Palisade, archt.

N. J., Trenton—School—Bd. Educ. having plans prepared by E. Sibley, archt., Edgewood Lane, Palisade, and soon takes bids school on Dayton St. $1,000,000. W. A. Klemann, 1st Natl. Bldg., engr.

N. J. Woodbury—High School—Bd. Educ. plans 4 story and basement, stone and brick. $300,000. Architect not selected.

Pa., Phila.—Bank—Mutual Trust Co., 5th and Market Sts., soon takes bids 3 story and basement, limestone and granite, 4th and Market Sts. $250,000. Heacock & Hoakenson, 1218 Chestnut St., archts.

Pa., Phila.—College—Phila. College of Pharmacy, 145 North 10th St., plans 3 and 4 story, educational, administration and research buildings, cut stone and limestone, 43rd and Woodland Aves. $1,000,000.

Pa., Phila.—Laboratory—Franklin Institute, 15 South 7th St., takes new bids first of year, 4 story and basement, 57 x 110 ft. rein.-con., brick and stone, plain foundation, 19th and Cherry Sts. Former bids re-

Buildings (Continued)

jected. J. T. Windrim, Commonwealth Bldg., archt. Noted Oct. 26.

Pa., Phila.—Schools—Bd. Educ., 19th and Chestnut Sts., plans to expend $15,000,000 during 1923 for building new schools and improving old ones. Private plans.

Pa., Upper Darby (Phila. P. O.)—School—St. Alices Roman Catholic Church, plans 3 story and basement, brick, steel and stone, plain foundation, Copley Rd. and Walnut St. $150,000. P. F. Gertz, 1634 North 6th St., Phila., archt.

Pa., Williamsport—Church—West 4th St. Methodist Church, c/o W. W. School, 1416 West 4th St., having plans prepared by G. Savage, archt., Witherspoon Bldg., Phila., 1 story and basement, brick, steel and stone, plain foundation, 4th and Cemetery Sts. $150,000.

D. C., Wash. — High School — Dist. Comrs., 509 Dist. Bldg., rejected bids opened Nov. 22, for McFarland and Langley Junior High Schools. Plans are being revised and work will be readvertised. $250,000 each. Noted Nov. 30.

W. Va., Charleston—Hotel—Cass Gilbert, archt., 244 Madison Ave., New York City, preparing plans 14 story, 410 room, Capitol Sq., here. $2,000,000. Owner's name withheld.

Fla., Eustis—Hotel—L. N. Wiggins, c/o Hotel Rochester, Rochester, N. Y., plans to rebuild hotel, here, recently destroyed by fire. $200,000.

Ala., Birmingham — Church — Methodist Episcopal Church South conference of northern Alabama, voted $50,000 toward erection of church at Birmingham Southern College, 8th Ave. College is to furnish $50,000 and an additional $50,000 to be raised by private subscription. Address G. E. Snavely, pres. Birmingham Southern College.

Tenn., Memphis — High School, etc. — School Bd. making plans high school adjoining Guthrie School at Ayres and Chelsea Sts., $400,000; annex to Snowden School at McLemore St. and Parkway. L. C. Humes, pres.

Tenn., Nashville—City Hall and Court House—City and Davidson Co. plan combined city hall and court house. $1,000,000. F. Wilson, mayor. L. Hickman, co. judge. Architect not selected.

Tenn., Nashville — Schools — Bd. Educ. plans to expend $300,000 for additions and new schools, to be appropriated as follows; Hume Fogg High School addition $125,000; Central Grammar School $50,000; Morgan Park School $50,000; Negro School $25,000; Boscobel St. School $25,000; Fall School addition $25,000. Architect not selected.

Ky., Ormsby (Lakeland, P. O.)—Home—Louisville and Jefferson Co. Childrens Home, Louisville, plans group of 30 buildings, here. $1,000,000. A. Loomis, 51 Todd Bldg., Louisville, archt.

Ky., Valley Station—Hospital and Sanitarium-Waverly Hill Tuberculosis Hospital and Sanitarium plans fireproof construction hospital and sanitarium. $1,000,000. A. Loomis, 51 Todd Bldg., Louisville, archt.

O., Akron—City Hall—Plans city hall 8 story, brick and stone, South High St. $900,000 bonds voted. Architect not selected.

O., Cincinnati — Parochial School — St. Mary's Catholic Church, Hyde Park, having plans prepared by H. W. Germann, archt., Schwin Bldg., Dayton, 3 story, 60 x 300 ft., brick and Bedford stone, Erie Ave. $350,000.

O., Cleveland—Apartment—A. L. Atwater, 6007 Euclid Ave., plans 4 story and basement, brick and timber, on 50 x 172 ft. site, 1944 East 75th St. $200,000. Architect not selected.

O., Cleveland—High School—Bd. Educ., East 6th St. and Rockwell Ave., having plans prepared by W. R. McCornack, archt., East 6th St. and Rockwell Ave., 3 story, 45 room, brick, steel and concrete, Nottingham Dist. $1,000,000.

O., Cleveland—Office and Commissary—Clark Restaurant Co., 1954 East 6th St., had plans prepared by J. Gray, archt., 1658 High St., Boston, Mass., 2 story, 112 x 120 ft., brick, steel and concrete, East 23rd St. near Payne Ave. $150,000. Noted April 12.

O., Cleveland—Schools—Bd. Educ., East 6th St. and Rockwell Ave., having plans prepared by W. R. McCornack, archt., East 6th St. and Rockwell Ave., 2 story, 12 room addition to Harvard School, $150,000, Oliver Hazard Perry Elementary School, 2 story, 22 room, Nottingham Dist., $500,000, over age special elementary school, 2 story, 24 room, Woodland Ave., $600,000, all brick, steel and concrete.

O., Dayton—Business and Office—L. N. Conrad, vice pres. Cooper Medicine Co., East 1st St., plans 4 or 5 story, 60 x 100 ft., brick and rein.-con., 1st and Jefferson Sts. $175,000. Architect not selected.

O., Lakewood (Cleveland P. O.)—School—Bd. Educ. having preliminary plans prepared by C. W. Hopkinson, archt., Rose Bldg., Cleveland, additions to 2 schools, one at 2079 Dowd Ave., other at Athens and Lincoln Aves., both 2 story, brick, steel and concrete. $150,000.

O., Medina—High School—Bd. Educ. having plans prepared by T. R. Ridley, archt., 58 Merriman Rd., 2 story, brick, steel and concrete. $200,000.

O., Springfield Lake (near Akron)—Sanatorium—Summit Co. Court House (Akron), voted $300,000 bonds for additions to Springfield Lake sanatorium. Architect not selected.

O., Toledo—Bank and Office—Home Savings Bank, c/o M. Miller, pres., having sketches made by Walker & Weeks, archts., 1900 Euclid Ave., Cleveland, 10 story and basement, brick, steel and concrete, Huron and Madison Sts. $1,000,000.

O., Warren—Bank and Office—Trumbull Savings & Loan Co., 102 High St., had plans prepared by Watson Eng. Co., archts. and engrs., Cook Bldg., Cleveland, and soon takes bids 10 story 40 x 132 ft., steel and stone, North Park and High Sts. $400,000. Noted Nov. 16.

O., Warren—Bank and Office—Union Savings & Trust Co., having tentative plans prepared by Keich, O'Brien & Hosker, archts., Western Reserve Bank Bldg., 12 story, brick, stone, steel and terra cotta. East Market St. and Park Ave. $500,000.

O., Youngstown—Home—Salvation Army, 29 North Walnut St., plans home, brick. $150,000. Architect not announced.

Ind., Ft. Wayne — Temple — Masonic Temple Building Co., Wayne and Clinton Sts., having plans prepared by C. R. Weatherhogg, archt., Citizens Trust Bldg., 5 story (equal to 10), 90 x 130 ft., brick, steel and concrete. $1,000,000. C. C. French, Plymouth Bldg., Cleveland, O., consult. engr. Noted Jan. 12.

Mich., Detroit — Clubhouse—Army-Navy Club, 61 Cadillac Sq., plans 8 story and basement, 60 x 120 ft. rein.-con., brick and steel, plain foundation, Bagley Ave. $250,000. Architect's name withheld.

Mich., Kalamazoo—High School—R. A. Leroy, archt., Pratt Bldg., takes bids about February, superstructure for high school for Bd. Educ. Noted Aug. 17.

Mich., Lansing—Terminals—See "Railways."

Mich., Midland—Terminals—See "Railways."

Ill., Chicago — Office — Chicago Tribune, Madison and Dearborn Sts., having plans prepared by J. M. Howells, archt., 367 Lexington Ave., New York City, 100 x 135 ft., 410 ft. high, brick, steel and stone, plain foundation, 431-439 North Michigan Blvd. $7,000,000. Noted June 22.

Ill., Chicago—Store, Office and Hall—D. S. Klafter, archt., 64 West Randolph St., preparing plans 3 story, 145 x 200 ft., rein.-con., brick and steel, Milwaukee and Agatite Sts. $500,000. Owner's name withheld.

Ill., Oak Park—Apartment-Hotel—Weller & Rippel, archts., 140 South Dearborn St., Chicago, preparing plans 5 story apartment-hotel, Oak Park and Madison Sts., here. $800,000. Owner's name withheld.

Wis., Green Bay—Hotel—Hotel Wisconsin Co., c/o W. Schroeder, pres., 86 Michigan St., Wilwaukee, having plans prepared by M. Tullgren & Sons Co., archts., 425 East Water St., Milwaukee, 9 story and basement, 130 x 160 ft., brick and concrete, plain foundation, Adams St., here. $850,000.

Wis., Green Bay—Office—Wisconsin Public Service Co., 559 Marshall St., Milwaukee, plans brick and concrete, plain foundation, South Washington St., here. $150,000. Architect not selected.

Wis., Pulaski—Church—Polish Catholic Congregation plans 2 story, 75 x 190 ft., church and auditorium, brick, rein.-con. and steel, plain foundation. $150,000. Architect not selected.

Wis., Wauwatosa — Seminary—Lutheran Synod of Wisconsin, c/o H. Ebert, secy., 1116 29th St., Milwaukee, plans 3 story, brick and concrete, plain foundation, Spring Ave., here. $200,000. Architect not selected.

Ia., Des Moines—Office and Store—Silverberg & Lince, S & L Bldg., having plans prepared by Boyd & Moore, archts., Fine Arts Bldg., 6 story and basement, 67 x 130 ft. concrete, brick and stone, concrete foundation, 5th and Walnut Sts. $240,000.

Ia., Mason City—Home—Independent Order Odd Fellows, c/o W. F. Knight, chn. Homes Comn., Des Moines, having plans prepared by Proudfoot, Bird & Rawson, archts., 810 Hubbell Bldg., Des Moines, 3 story and basement, 60 x 160 ft. rein.-con., brick, tile and stone addition to Old Folk's Home, here. $150,000.

Ia., Oelwein — High School — Bd. Educ. having plans prepared by W. Gordon, archt., 319 Hubbell Bldg., Des Moines, 3 story and basement, rein.-con., brick, tile and stone. $300,000. G. A. Kidd, secy.

Ia., Tipton—School—Dec. 11, to vote on $300,000 bonds for 2 story and basement, rein.-con. and brick, for Bd. Educ. W. Gorden, 317 Hubbell Bldg., Des Moines, archts.

Minn., Edina — School — School Dist. 17 plans 2 story and basement, rein.-con., brick and tile. $150,000. H. J. Hall, clk. Sund & Dunham, 512 Essex Bldg., Minneapolis, archts.

Kan., Topeka — Office — Kansas Life Insurance Co., 701 Jackson St., takes bids about Dec. 15, 2 story and basement, rein.-con., brick, steel and stone. $175,000. T. W. Williamson & Co., 312 Central Natl. Bank Bldg., archts. Noted Nov. 9.

Kan., Topeka — Office — Security Benefit Mutual Assn., had plans prepared by W. E. Grover, archt., Stormont Bldg., and soon takes bids 3 story, 110 x 130 ft., 7th and Harrison Sts. $200,000.

Kan., Wichita—Hotel—O. S. Shirk, 205 Schweiter Bldg., plans 100 x 140 ft., rein.-con. and brick, plain foundation, Topeka and 2nd Sts. $250,000. Architect not selected.

Kan., Wichita—Jail—S. B. Kernan, chn. Comrs. Sedgwick Co. receiving competitive sketches until Dec. 20, for county jail on Market St. $200,000 bonds voted.

Kan., Winfield—School—School Bd. having plans prepared by J. M. Fuller, archt., Winfield, for school. $200,000. Noted Nov. 30.

Neb., Lincoln — Hospital — City having plans prepared by Davis & Wilson, archts., 515 Security Bldg., and takes bids in December, 2 story and basement, 43 x 230 ft. $250,000. Noted Feb. 23.

Neb., Omaha—College—Brownell Hall, c/o Bishop Shaylor, 1716 Dodge St., having plans prepared by G. B. Prinz, archt., 1037 Omaha Natl. Bank Bldg., for first of 6 buildings, brick and stone, 20th and Davenport Sts. $150,000.

Neb., Omaha—Church—First Methodist Episcopal Church, c/o F. D. Wead, chn. building com., 310 South 18th St., having plans prepared by G. L. Fisher, archt., 1604 City Natl. Bank Bldg., addition to church, 60th and Underwood Sts. $200,000.

Mont., Great Falls—Church—First Methodist Episcopal Church, c/o G. Mecklenburg, Great Falls, plans brick church to replace one destroyed by fire. $150,000. Architect not announced.

Mo., Aurora — Hospital — Owner c/o Chamber of Commerce, plans 4 or 5 story, rein.-con. and brick, plain foundation, Main St.

Mo., Kansas City — Apartment — W. L. Elson, 307 Commerce Bldg., having plans prepared by N. E. Peters, archt., Merriam, Kan., two 3 story and basement, 40 x 120 ft., brick. $90,000 each.

Mo., Kansas City — Bank and Office — Kansas City Joint Stock Bank having preliminary plans prepared by Keen & Simpson, archts., 402 Reliance Bldg., 10 story and 2 basements, 34 x 140 ft., rein.-con., brick, steel and stone, 15 West 10th St. $300,000.

Mo., Kansas City—High School—Bd. Educ. having plans prepared by C. A. Smith, archt., 600 Finance Bldg., and takes bids about March 1, 4 story and part basement, 300 x 325 ft., rein.-con., brick and stone. $1,400,000.

Mo., Kansas City—Home—Interdenominational Home for Girls, 2940 Highland

UNIT PRICES ON PITTSBURGH SCHOOLS 1921-1922

			General Work		Heating and Ventilating		Plumbing		Electrical		Total		Landscaping and Abnormal Foundation	Total Cost
		Cubage	Amount	Per Cu.Ft.	Amount	Per Cu.Ft.	Amount	Per Cu.Ft.	Amount	Per Cu.Ft.	Amount	Per Cu.Ft.	Amount	Amount
1921	Greenfield Elementary	1,590,000	$481,181	$0.3026	$64,801	$0.0407	$28,140	$0.0177	$10,878	$0.0068	$585,000	$0.3679	$17,819	$602,819
1921	Perry Elementary	1,625,000	432,043	.2658	61,453	.0378	26,910	.0165	9,899	.0060	530,305	3263	20,480	550,785
1921	Langley High	1,654,473	491,402	.2970	62,388	.0377	27,017	.0163	19,500	.0117	600,307	3628	52,960	653,267
1922	Fairywood Elementary	107,392	31,506	.2934	3,653	.0340	2,880	0268	724	0667	38,763	3609	2,166	40,929
1922	John Morrow Annex No. 2	251,000	74,872	2983	10,865	.0434	3,374	0134	1,850	0773	90,961	3624	5,000	95,961
1922	Gladstone Addition	485,790	139,805	,2878	24,771	.0510	7,320	0151	3,522	0072	175,418	3611	12,000	187,418
1922	South High Junior-Senior Annex	1,547,500	442,400	.2859	68,782	.0444	37,791	.0244	16,430	0106	565,403	3653	10,000	575,403
1922	Beechwood Elementary School Addition	980,479	300,796	.3068	37,278	.0380	21,473	.0219	7,215	.0073	366,762	.3740	48,500	415,262

* Board of Education Statistics.

Buildings (Continued)

Ave., takes bids about Dec. 15, 3 story and basement, 60 x 210 ft., rein.-con. and brick, 63rd St. and Swope Parkway. $150,000. C. A. Smith, 600 Finance Bldg., archt. Noted Nov. 2.

Mo., Kansas City—Hotel and Kitchenette—Regent Investment Co., 507 Ridge Bldg., having plans prepared by Greenbaum, Hardy & Schumacher, archts., 216 Scarritt Bldg., 6 story and basement, 100 x 135 ft., rein.-con., brick and stone. $225,000.

Mo., St. Louis—Armory—Feb. 9, to vote on $1,000,000 bonds (Proposition 19) for armory, Grand and Clark Sts., for National Guard.

Mo., St. Louis—Auditorium—Feb. 9, to vote on $5,000,000 bonds (Proposition 13) for acquisition of site and erection of municipal auditorium and community center.

Mo., St. Louis—Bath Houses—See "Miscellaneous."

Mo., St. Louis—Court House—Feb. 9, to vote on $4,000,000 bonds (Proposition 5) for new court house and site.

Mo., St. Louis—Engine House—Feb. 9, to vote on $285,000 bonds (Proposition 15) $35,000 for Southampton engine house and $250,000 for repairs to old houses.

Mo., St. Louis—Hospitals, etc.—Feb. 9, to vote on $4,500,000 bonds (Proposition 12) additions to Koch, City and Isolation hospitals and sanitarium, new hospital for colored people and new morgue, manual training school at Bellefontaine Farm for Boys, building at farm for delinquent girls, enlarging, extending and additions to farm for feeble-minded.

Mo., St. Louis—Markets—Feb. 9, to vote on $1,250,000 bonds (Proposition 20) reconstructing present public markets or constructing new markets.

Mo., St. Louis—Office—Missouri State Life Insurance Co., 1501 Locust St., had plans prepared by A. B. Groves, archt. and engr., 320 North 4th St., 5 story, 103 x 155 ft. top addition, rein.-con., brick and steel, Locust and 15th St. $500,000.

Mo., St. Louis—Office—J. M. Robertson, Pierce Bldg., having plans prepared converting Planters Hotel, 10 story and basement, steel, into office building, 4th and Pine Sts. $750,000. Architects name withheld.

Mo., Sedalia—High School—Dec. 8 to vote on $500,000 bonds 3 story, rein.-con. and brick, plain foundation. Architect's name withheld. Noted Dec. 22.

Tex., Amarillo—Lodge—Masonic Temple Co. plans new masonic temple here. $200,000. Architect not selected.

Okla., Okmulgee—Convention Hall—City had plans prepared by Senter & Smith, archts. and engrs., Commerce Bldg., 2 story, 120 x 140 ft., brick and terra cotta, North Alabama St. Proposition placed before various civic organizations; if approved election will be called to vote on $175,000 bonds.

Colo., Denver—Hotel—H. W. Bennett and associates, 1010 16th St., plans to remodel and build 2 story addition to Brown Palace Hotel, Bway. and 17th St. $500,000. Architect not definitely selected but will probably be H. W. J. Edebrook, Tabor Grand Bldg.

Nev. Gerlach—Hotel, etc.—Pacific Portland Cement Co., Pacific Bldg., San Francisco, Calif., having plans prepared by Weeks & Day, archts., California Insurance Bldg., San Francisco, Calif., for rein.-con. hotel, cottages, auditorium, etc., here. $150,000.

Ariz., Tucson—High School—Lyman & Place, archts., 79 North Stone Ave., take bids about Dec. 15, 3 story, 200 x 285 ft., rein.-con. and brick, plain foundation, for Bd. Educ. $750,000.

Wash., Seattle—Lodge—Seattle Elk Lodge 2 receiving plans (from Seattle architects) for lodge on 4th Ave. between Madison and Spring Sts. $1,100,000. A. Glasser, member building com. Noted Aug. 31.

Calif., Livermore—Sanitarium—City and San Francisco Co. having plans prepared by H. H. Meyers, archt., Kohl Bldg., San Francisco, 2 story, frame addition, Arroyo Sanitarium Grounds, here. $150,000. Work will be financed by city and San Francisco Co. and maintained by Alameda Co. under five year leases to be granted from time to time.

Calif., Modesto—Schools—Modesto School Dist. election Dec. 19, to vote on $175,000 bonds for school improvements. Architect not selected.

Calif., Oakland—Auditorium—City plans 300 x 600 ft. addition. To exceed $150,000. E. R. Sturgis, clk.

Calif., Oakland—Store and Office—Ambassador Realty Co., headed by G. Ebe, c/o Fulton Playhouse, 1518 Franklin St., take bids in about 2 weeks, 7 story and basement, rein.-con. and terra cotta, pressed brick facing, 17th St. near Bway. $165,000. C. W. McCall, Central Bank Bldg., archt.

Calif., Oakland—Theatre and Apartment—Roos Bros., c/o Weeks & Day, archts., California Insurance Bldg., San Francisco, having plans prepared, probably 10 story, 90 x 230 ft., rein.-con., Grand Ave. near Bway. $500,000.

Calif., Piedmont — School — Piedmont School Dist. election Dec. 15, to vote on $240,000 bonds for school. H. A. Haas, clk. W. H. Weeks, 369 Pine St., San Francisco, archt.

Calif., San Diego—Hotel—J. D. Spreckels, (street address not available) plans 6 story, rein.-con. and steel addition to Hotel San Diego. $300,000.

Calif., Visalia—Courthouse—Tulare Co. plans court house. To exceed $500,000. G. R. Prestidge, clk.

Ont., Hamilton—Hospital—Bd. .Control plans wing addition to hospital. $150,000. G. C. Coppley, chn. Architect not selected.

BIDS DESIRED

Mass., Boston—Police Station—Dec. 12, by Public Buildings Dept., City Hall, 10 story, 65 x 90 ft., brick and steel, plain foundation, Milk and Sears St. Former bids rejected. J. Purdon, 8 Beacon St., archt. B. Brown, 88 Broad St., engr. Noted Nov. 23.

New York — See "Miscellaneous under Flushing, N. Y."

N. Y., Central Islip—Kitchen and Dining Room, etc.,—Dec. 12, by State Hospital Comn., Albany, kitchen and dining room building and connecting corridor, at Central Islip Hospital, here. L. F. Pilcher, Albany, state archt.; adv. this issue.

N. Y., Flushing—Dormitories, etc.—Dec. 11, by C. B. J. Snyder, supt. School Buildings of Bd. Educ., Flatbush Ave. extension and Concord St., Brooklyn, dormitories, masters' house, barns, etc. for Parental School on westerly side of road between here and Jamaica, about 1,700 ft. south of North Hempstead Turnpike, here.

N. Y., New York—Apartment—Gold Cross Constr. Co., c/o E. M. Crumley, archt. and engr., 355 East 149th St., 5 story, 65 x 150 ft., brick, steel and stone, plain foundation, Union Ave. $750,000. Work will be done by separate contracts under supervision of architect.

N. Y., New York—Apartment—Tremil Realty Corp., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., 6 story, 85 x 125 ft., brick, steel and stone, plain foundation, University Ave. $200,000. Work will be done by separate contracts under supervision of architect.

N. Y., New York—Loft—Frank & Frank Contg. Co., c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., 9 story, brick, steel and stone, plain foundation, 226 West 40th St. $400,000. Work will be done by separate contracts.

N. J., Bordentown—High School—Dec. 11, by Fowler & Seaman, archts., Broad St. Bank Bldg., Trenton, 2 story and basement, 92 x 121 ft., brick and steel, here, for Bd. Educ. $150,000. Noted Oct. 12.

Pa., Phila. — Museum — Dec. 9, by University of Pennsylvania, 34th and Spruce Sts., 2 story, concrete, brick, steel and stone, 34th and Spruce Sts. $750,000 Day & Klauder, Commercial Trust Bldg., archts.

Pa., Phila.—Lodge—Lachman & Murphy, archts., Drexel Bldg., taking bids 4 story and basement, 50 x 150 ft. brick, steel and stone, plain foundation, 19th and Addison Sts., for K. of P., c/o G. B. Collier, 415 South 19th St.

Md., Baltimore—School—Dec. 13, by Bd. of Awards, at office of R. Gwinn, City Register, City Hall, School Project 8, 3 story and basement, 100 x 270 ft., brick and hollow tile, Central Ave. and Lexington St. Buckler & Fenhagen, 325 North Charles St., archts.

N. C., Asheville—Store—W. L. Stoddart, archt. and engr., 9 East 40th St., New York City, receiving bids and opens same about Dec. 20, 4 story, brick, steel and stone, for Letinskys Dept. Store, here. $400,000. Noted Nov. 16.

Ala., Albany—High School—Dec. 19, by Bd. Educ., 3 story, 80 x 300 ft., alternate bid on terra cotta, tile and stucco superstructure or terra cotta, tile and face brick, Main St. $160,000. W. B. Ittner, 911 Locust St., St. Louis, Mo., archt.

Tenn., Nashville — War Memorial and Capitol Annex—Jan. 10, by H. McAllister, chn., State Capitol, soldiers war memorial and capitol annex, for State, Davidson Co. and City. $1,400,000. McKim, Mead & White, 101 Park Ave., New York City, and E. Daugherty, Stahlman Bldg., Nashville, archts. Noted Aug 31.

O., Cleveland—Commercial and Apartment—Bonar Realty Co., c/o P. F. Price, 307 Ulmer Bldg., taking bids 3 story and basement, 110 x 112 ft., brick and timber, East 129th St. and St. Clair Ave. $160,000. Allen-Osborn Co., 700 Rose Bldg., archts.

O., East Cleveland (Cleveland P. O.)—Apartment, etc.—L. Duchon, 3045 Essex Rd., Cleveland Heights, taking bids 2 story and basement, 106 x 125 ft., brick and timber apartment house and garage, Elderwood and Wymore Aves., here. $150,000. A. F. Janowitz, Permanent Bldg., Cleveland, archt.

Mich., Detroit—Apartment—Island View Apartments, c/o J. W. Wilson, archt., 17 Campus Martius, taking bids 7 story and basement, 115 x 155 ft. rein.-con., brick and steel, plain foundation, Jefferson and Marquette Aves.

Mich., Detroit—Apartment—J. I. Weinberg, archt., 401 Congress Bldg., taking bids and opens same about Dec. 15, 4 story and basement, 60 x 140 ft. rein-con., brick and steel, plain foundation, Selden Ave., for Wildre & Rubin, c/o archt. $175,000.

Mich., Highland Park (Detroit P. O.)—Apartment—A. Kahn, archt., 1000 Marquette Bldg., Detroit, taking bids and opens same about Dec. 15, 4 story and basement, 44 ft. high, 135 x 206 ft. rein.-con., brick and steel, plain foundation, Woodward and Ferris Aves., for L. Harmon, 300 Real Estate Exch. Bldg., Detroit.

Ill., Chicago — Apartment — Ronneberg, Pierce & Hauber, archts., 10 South LaSalle St., receiving bids 5 story, 75 x 120 ft., rein.-con., brick and steel, 105 Fullerton Parkway. $250,000. Owner's name withheld.

Buildings (Continued)

Ill. Chicago—Store, Office and Apartment—R. R. Cenek, archt., 118 North La Salle St., receiving bids 3 story, 100 x 125 ft., rein.-con., brick and steel, 71st and Jeffrey Sts. $175,000. Owner's name withheld.

Mo., St. Charles—High School—Dec. 28, by School Bd., 400 North 6th St., 3 story, 130 x 150 ft., brick, plain foundation, 6th St. $160,000. W. B. Ittner, 911 Locust St., St. Louis, archt.

Mo., St. Louis—Club-Hotel—Dec. 14, by Bd. Directors, City Club, 911 Locust St., 12 story 60 x 122 ft., rein.-con. and brick, 11th and Locust Sts. $700,000. Will be let on fixed fee basis. T. P. Barnett Co., 1559 Arcade Bldg., archts. Noted Oct. 5.

Calif., Santa Clara—Science Hall—J. J. Donovan, archt., Pacific Bldg., Oakland, receiving bids 3 story, rein.-con., for University of Santa Clara. $200,000.

B. C. Victoria—Bank—Dec. 14, by Bank of Nova Scotia, Bank of Nova Scotia Bldg., Vancouver, 2 story and basement, 56 x 60 ft., and 1 story, 35 x 56 ft., rein-con., steel and stone, Douglas and Yates Sts. $150,000. A. A. Cox, 718 Granville St., Vancouver, archt.

BIDS RECEIVED

N. Y., New York—Armory—Armory Bd., City Hall, opened bids Nov. 27, general contract reconstructing Squadron A, 95th St., from W. W. Constr. Co., 51 East 42nd St., $209,250, C. L. Dooley Co., Inc., 257 Adelphi St., Brooklyn, $232,849; heating from Federal Heating Co., 300 Madison Ave., $27,992, Austin Eng. Co., 121 West 42nd St., $28,471, Almirall & Co., Inc. 1 Dominick St., $28,500. Noted Nov. 23.

N. Y., New York—Bath House—Bd. Estimate, Municipal Bldg., opened bids Nov. 27, general contract public bath building, 35 West 134th St., from Lustig & Weil, 103 Park Ave., $236,690, T. A. Reilley Co., 48 East 41st St., $278,575, M. F. Kelley Co., 51 East 42nd St .,$280,945; altering, heating and ventilating plants in above, from Federal Heating Co., 300 Madison Ave., $22,100, Austin Eng. Co., 124 West 42nd St., $25,891, Shevlin Eng. Co., 110 West 34th St. $26,943. Noted July 13.

Pa., Butler—Hospital—E. L. Tilton, archt., 141 East 45th St., New York City, opened bids Nov. 15, (1) main hospital building, (2) power house, Brady St., for Butler Memorial Hospital, from W. M. Sutherland Constr. Co., Commerce Bldg., Erie, (1) $414,827, (2) $74,763; Cuthbert Bros., Bessemer Bldg., Pittsburgh, (1) $427,149, (2) $73,758; Amsterdam Bldg. Co., 138 East 44th St., New York City, (1) $442,287, (2) $75,086. Noted Oct. 26.

O., Bowling Green—Dormitory—Bd. Trustees State Normal College, opened bids Nov. 25, 3 story and basement, 46 x 150 ft., brick, concrete and stone, from Watts-Suhrbier Co., 1235 Miami St., Toledo, $138,138; J. F. Barnes, Logansport, Ind., $145,904; S. Q. Henke & Sons, Gallipolis, $148,490. Noted Nov. 2.

O., Cleveland—School—Bd. Educ., East 6th St. and Rockwell Ave., general contract 2 story, 160 x 300 ft., brick, steel and concrete, East 140th St. and Darley Ave., from Moore-Lamb Constr. Co., Stambaugh Bldg., Youngstown, $378,433, Tenbusch-Parker Constr. Co., Union Bldg., $378,494, W. Moore Co., 1276 West 4th St., $380,420; steam heating plant from Feldman Bros., 10309 Barrett Ave., $53,225.

Minn., Minneapolis—Schools—Bd. Educ. opened bids Nov. 23, general contract 3 story and unfinished basement, 45 x 250 x 300 ft. with 1 story, 60 x 300 ft. wing, rein.-con., brick and tile, 5th St. S. E. and 13th Ave., from J. E. Nelson & Son, 915 East Bway., $503,000. Pehrson Bros., 555 Temple Court, $509,600; general contract, 3 story and unfinished basement, 45 x 250 x 300 ft. with 1 story, 60 x 80 ft. wing, rein.-con., brick and tile, 26th St. and Emerson Ave., from Standard Constr. Co., 1101 Plymouth Bldg., $358,450, Madsen Constr. Co., 848 Builders Exchange Bldg., $373,178. Noted Oct. 26.

Tex., San Antonio—Masonic Temple—Scottish Rite Lodge, opened bid 2 story, brick and steel, concrete footings, Ave. E and 4th St., from J. DePuy, Bedell Bldg., $663,984. Noted Nov. 2.

Calif., Redwood City—High School—Sequoia Union High School Dist., opened bids high school, general contract from R. Trost, 26th and Howard Sts., San Francisco, $210,704, Beck & Kohn, 180 Jessie St., San Francisco, $223,241, Hannah Bros., 142 Sansome St., San Francisco, $229,000; plastering from J. Greenback, 371 Waller St., San Francisco, $39,600, A. Knowles, Call Bldg., San Francisco, $42,250, L. Bosch, 180 Jessie St., San Francisco, $42,320; plumbing from Christensen & Anderson, 167 Hamilton Ave., Palo Alto, $36,128, Burnham Plumbing Co., 1220 Webster St., San Francisco, $36,217, Palo Alta Eng. & Constr. Co., Palo Alto, $36,502; heating and ventilating from J. F. McGowan, 3786 Mission St., San Francisco, $33,997, W. H. Picard, 5656 College Ave., Berkeley, $34,372, J. E. O'Mara, 443 Minna St., San Francisco, $35,990. Noted Oct. 26.

CONTRACTS AWARDED

Mass., Boston—Office—Insurance Building Corp., c/o Coolidge & Shattuck, archts., 122 Ames Bldg., 11 story, 194 x 216 ft. and 106 x 161 ft., limestone and marble, wood pile foundation, concrete sub-foundation, Milk, India, Broad and Central Sts., to G. A. Fuller Co., 710 Bd. of Trade Bldg. $3,000,000.

N. Y., Buffalo—Dining Room—State Hospital Comn., Albany, general contract additional accommodations for patients at Buffalo State Hospital, here, to Peckham Constr. Co., Niagara Life Bldg., $124,221. Noted Oct. 19.

N. Y., New York—Apartment—Avoca Realty Co., c/o G. A. Bagge & Sons, archts. and engrs., 299 Madison Ave., 5 story, 114 x 130 ft., brick, steel and stone, plain foundation, University Ave., by day labor. $200,000. S. Ball, pres.

N. Y., New York—Apartment—Gairo Realty Co., c/o G. F. Pelham, archt. and engr., 200 West 72nd St., 14 story, 75 x 80 ft., brick, steel and stone, plain foundation, 159 West 54th St., by day labor. $600,000.

N. Y., New York—Apartment—Glick-Fein Building Corp., c/o D. S. Lang, archt. and engr., 110 West 34th St., 5 story, 100 x 100 ft., brick, steel and stone, plain foundation, 74 Audubon Ave., by day labor. $250,000.

N. Y., New York—Apartment—Jonah Realty Co., Inc., c/o Goldner & Goldner, archts. and engrs., 47 West 42nd St., 6 story, 115 x 115 ft., brick, steel and stone, plain foundation, Grand Concourse, by day labor. $300,000.

N. Y., New York—Apartment—J. Kleiner, c/o D. S. Lang, archt. and engr., 110 West 34th St., 5 story, 100 x 100 ft., brick, steel and stone, plain foundation, Hoe Ave., by day labor. $150,000.

N. Y., New York—Apartment—Ratner & Bandes Bros., c/o Goldman & Goldner, archts. and engrs., 47 West 42nd St., 5 story, 105 x 120 ft., brick, steel and stone, plain foundation, Bryant Ave., by day labor. $175,000.

N. Y., New York—Apartment—Sedgwick Realty Co., c/o G. F. Pelham, archt. and engr., 200 West 72nd St., 5 story, 75 x 100 ft., brick, steel and stone, plain foundation, 511 West 151st St., by day labor. $150,000.

N. Y., New York—Apartment—L. Shiren, c/o D. S. Lang, archt. and engr., 110 West 34th St., 5 story, 100 x 125 ft., brick and steel and stone, plain foundation, East 176th St., by day labor. $225,000.

N. Y., New York—Apartment—S. & L. Building Corp., c/o E. Roth, archt. and engr., 119 West 40th St., 14 story, 102 x 142 ft., brick, steel and stone, plain foundation, Bway. and 82nd St., by day labor. $1,200,000.

N. Y., Olean—School—Church of St. Marys of the Angels, general contract 3 story, 68 x 120 ft., brick, tapestry limestone, etc., to Dean, Duffy & Lichte, Olean, $237,500.

N. Y., Patchogue—High School—Bd. Educ., brick, steel and stone, plain foundation, to Burke Bros. Constr. Co., 1476 Bway., New York. Archts. est. $500,000. Noted Oct. 19.

N. J., Atlantic City—Apartment—H. Potamkin, 3 story and basement, cut stone and brick, caisson foundation, Maine Ave. and Beach, to Shabin Constr. Co., Guarantee Trust Bldg. $200,000.

Pa., Barnesboro—Bank and Apartment—First Natl. Bank, 3 story and basement, 49 x 83 ft. brick and limestone, to Hoggson Bros., 485 5th Ave., New York City. Archts. est. $200,000.

Pa., Carrick (Pittsburg P. O.)—School—Bd. Educ. let following contracts for school here, brick masonry to J. Bick, 2211 Arlington Ave., Pittsburgh, $122,975; concrete work to D. McNeil Co., Jenkins Arcade, Pittsburgh, $83,500; carpenter and mill work, to Lythe Campbell Co., 1007 Forbes St., Pittsburgh, $98,650; cut stone, to P. H. McMahon, 256 Lombard St., Pittsburgh, $79,980; fireproofing to Toupet Bldg. Co., 5814 Ellsworth Ave., Pittsburgh, $82,984; plastering to Schuchbert Bros., 116 Allen Ave., Pittsburgh, $48,250; heating and ventilating, to R. T. Withers & Sons Co., New Castle, $62,880; plumbing, to G. H. Soffel, 127 4th Ave., Pittsburgh, $31,055. Noted Oct. 19.

Pa., Phila.—Bank—Wayne Junction Trust Co., c/o A. Scanlon, 3 story and basement, 40 x 110 ft. rein.-con., brick and steel, plain foundation, Germantown and Roberts Aves., to Simon, Brittain & English, 929 Chestnut St. Archts. est. $250,000. Noted Sept. 21.

Pa., Phila.—Hospital—Bd. Pub. Health, City Hall, 4 story, 34th and Pine Sts., to J. B. Kelley Co., 2313 Walnut St., $246,987. Noted Nov. 16.

Pa., Phila.—Loft—C. A. Kahn, Morris Bldg., 3 story and basement, 137 x 165 x 214 ft. rein.-con. and brick, plain foundation, 32nd and Turner Sts., to Wills-Bills Co., 1706 Sansom St. Archts. est. $350,000.

Pa., Phila.—Office—D. B. Bassett, 7 story and basement, 40 x 52 ft., brick, stone and steel, plain foundation, 1518-1520 Locust St., to F. G. Stewart, 1619 Sansom St. $150,000.

Pa., Phila.—Office—Employees Liability Insurance Co., London, England, 5 story and basement, 46 x 119 ft. rein.-con., brick, steel and stone, plain foundation, 311-313 Walnut St., to Wark & Co., 231 South Broad St. Archts. est. $200,000.

D. C., Wash.—Theatre and Office—Cosmos Theatre Co., 10 story, 100 x 200 ft., 13th and 3 Sts., N. W., to Longacre Eng. Co., 562-5th Ave., New York City. $1,000,000. Noted Oct. 26.

Ga., Atlanta—Store—M. Rich & Bros. Co., 52 Whitehall St., 6 story and basement, 177 x 199 ft., rein.-con., steel, concrete, stone, brick and tile, to Selden Breck Constr. Co., Healey Bldg., $1,250,000. Noted Nov. 2.

O., Cleveland—Apartment—Miramer Development Co., c/o J. H. MacDowell, archt., 510 Bulkley Bldg., 6 story and basement, brick, steel and concrete, Detroit Rd. and Blount St., to W. Dunbar Co., 8201 Cedar Ave. Archts. est. $1,000,000.

Ill., Chicago—Apartment—C. Barkman, 1522 Carmen Ave., 3 story and basement, 100 x 120 ft., rein.-con., brick and steel, 1618-24 Columbia Ave., to E. N. Edlund, 6520 North Artesian Ave. Archts. est. $165,000.

Ill., Chicago—Apartment—M. A. Morrissey, 140 South Dearborn St., 3 story and basement, 125 x 300 ft., rein.-con., brick and steel, 910-38 Oakdale Ave., to Anderson & Winblad, 6235 South Michigan Ave. Archts. est. $400,000. Noted Nov. 23.

Ill., Chicago—Apartment—Realty Building and Constr. Co., 177 North State St., 3 story and basement, 10 x 202 ft., rein.-con., brick and steel, 3740-48 Pine Grove Ave., to A. T. Herlin, 6117 Evans Ave. Archts. est. $275,000.

Ill., Chicago—Apartment—A. E. and L. A. Strohm, 1360 Greenleaf Ave., 3 story and basement, 100 x 170 ft., rein.-con., brick and steel, 1642-50 Estes Ave., to J. Anderson & Sons, 5717 Hermitage Ave. Archts. est. $250,000. Noted Oct. 26.

Ill., Chicago—Bank and Office—S. W. Straus & Co., 565 5th Ave., New York City, 22 story, 161 x 171 f.t, brick, steel and stone, plain foundation, Michigan and Jackson Blvds., here, to Thompson-Starrett Constr. Co., Insurance Exch. Bldg. Archts. est. $7,000,000.

Ill., Chicago—Church—K. M. Vitzthum & Co., archts., 605 North Michigan Blvd., 1 story and basement, 125 x 180 ft., rein.-con., brick and steel, 5100 West Madison St., to Duffy & Noonan, 140 South Dearborn St. Archts. est. $250,000. Owners name withheld.

Ill., Chicago—Hotel, Store and Hall—Kendall & Lund, c/o L. Steif & Co., archts., 64 West Randolph St., 6 story, hotel, store and dance hall, 64th St. and Cottage Grove Ave., to F. A. Siebold, Jr., 3130 Sheffield St., $1,200,000.

Ill., Chicago—Store and Office—P. Kearney, 111 West Washington St., 2 story, 150 x 161 ft., rein.-con., brick and steel, 7516-30 Sheridan Rd., to Johnson-Anderson Co., 7170 Evans Ave. Archts. est. $200,000.

Ill., Forest Park—Store, Office and Apartment—R. C. Hain, Forest Park, 3 story, 60 x 147 ft., rein.-con., brick and steel, Madison and Marengo Sts., to W. F. Peterson, 118 North La Salle St., Chicago. Archts. est. $150,000.

Ia., Des Moines—Hospital—Polk Co. Hospital Assn., general contract 3 story and basement, 66 x 219 ft., rein.-con., brick and tile, Prospect and Hickman Rds., to Sugarman Constr. Co., 7th and Tuttle Sts., $137,214. Noted Nov. 9.

Ia., Ft. Dodge—Hotel—Hotel Wahkonsa, 8 story and basement, 140 x 180 ft. addition, rein.-con. and terra cotta, to W. J.

Buildings (Continued)

Zitterell, Webster City, $700,000. Noted Oct. 26.

Minn., Minneapolis—Institution—Bethany Home, 3719 Bryant Ave., S., general contract, 3 story and basement, 44 ft. high, L-shaped, one wing 41 x 142 ft., other 41 x 172 ft., rein.-con., brick and tile, 3719 Bryant Ave., S., to Madsen Constr. Co., 848 Builders' Exchange Bldg., $110,935. Noted Nov. 16.

Tex., Georgetown—School—For 1 and 2 story brick and stone, concrete footings, to Wattinger Bros., Austin, (street address not available). $126,958.

Tex., Laredo—Hotel—M. Little, concrete frame for 6 story, rein.-con., brick and steel hotel, to J. C. Diehlman, 306 East Commerce St., San Antonio, $35,000. Total cost $200,000. Noted Nov. 23.

Wash., Longview — Store and Office — Long-Bell Lumber Co., 2 story and basement, 120 x 150 ft., mill construction, faced with brick and terra cotta, to Westlake Constr. Co., Ry. Exch. Bldg., St. Louis, Mo. Archts. est. $150,000.

Wash., Seattle—Apartment Hotel—Simpson-Wilson Co., University Way, 6 story, 103 x 144 ft., 47th St. and University Way, to Puget Sound Bridge & Dredging Co., Central Bldg., Archts. est. $750,000.

Calif., San Francisco — Office — E. N. Fritz, Jr., c/o Apartment House Owners & Managers Assn., Claus Spreckels Bldg., 6 story brick and stone, concrete footings, to near Montgomery St., to Cahill Bros., 110 Sutter St., $250,000.

Calif., Visalia—Bank and Office—Bank of Italy, Powell and Market Sts., San Francisco, 5 story, rein.-con., here, to J. Furlong, Monadnock Bldg., San Francisco, $107,000. Noted Nov. 9.

Que., Montreal — Pathological — McGill University, Sherbrooke St. W., 4 story, 51 x 77 x 243 ft. rein.-con., brick, steel and stone, Pine Ave., to J. Quinlan & Co., Greene Ave., $282,000.

Ont., Kitchener—City Hall—Schmalz & Jones, archts., 15 Queen St., 2 story and basement, concrete, brick, steel, stone and tile, general contract to P. H. Secord & Sons Constr. Co., Ltd., 133 Nelson St., Brantford, $250,000; heating and plumbing, to Ruppel & Co., 31 King St. W.; electric work, to Star Electric Co., 91 King St. W. Total est. $300,000. Noted Oct. 26.

Ont., Windsor—Office—A. H. McPhail, archt., McGregor Blk., 3 story and basement, concrete, brick and steel office and plant, to S. E. Dinsmore, McGregor Bldg., for Border Cities Star, 104 Sandwich St. W. $200,000. Noted Oct. 12.

Ont., Windsor—School—Bd. Educ., general contract 3 story and basement, 30 room, concrete, brick, steel, stone and tile, to S. E. Dinsmore Co. Ltd., McGregor Bldg., $300,000. Noted Nov. 2.

Bermuda, Hamilton—Hotel — Hamilton Hotel Corp., 6 story, 200 x 250 ft., brick, steel and stone, plain foundation, to J. Stewart Co., 30 Church St., New York City. Archts. est. $1,000,000.

Federal Government Work

PROPOSED WORK

N. J., Lake Denmark—Standpipe, etc.—Spec. 4759—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans standpipe and mains, here.

Pa., Pittsburgh—Houses—U. S. Engineer, Pittsburgh, plans lockkeepers houses at Lock 6, Monongahela River.

N. C., Fayetteville—Lock and Dam—U. S. Engineer, Wilmington, plans third lock and dam on Cape Fear River about 15 mi. below here. O. O. Kuentz, dist. engr.

Ala., Florence—Cement—U. S. Engineer, Florence, plans to purchase 400,000 lb. portland cement.

Wash., Yakima—Irrigation—U. S. Recl. Service, Yakima, plans to irrigate 1,500 acres Snipes Mountains, east of Granger, with water from Sunnyside Canal. Project includes syphon, canals, etc. $225,000. J. S. Moore, dist. engr.

Calif., Eureka—Stone—U. S. Engineer, Custom House, San Francisco, soon receives bids furnishing stone for construction Humboldt jetties, here. Placing rock will be done by day labor.

Calif., San Diego—Barracks—Spec. 4765—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans 2 barrack buildings at Marine Corps Base, here.

Calif., San Diego—Quarters—Spec. 4762—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans 9 quarters, here.

SHAFT—BROOKLYN, N. Y.

Following are lowest three bids opened by Bd. Estimate & Apportionment, City Hall, New York City, Nov. 24, for Shore Rd. Shaft of The Narrows Tunnel between boroughs of Brooklyn and Richmond, Contr. No. 2, (A) P. McGovern, Inc., 50 East 42nd St., New York City; (B) Keystone State Constr. Co., 210 South 13th St., Phila.; (C) Mason & Hanger Co., Inc., 52 Vanderbilt Ave., New York City. The unit bids were as follows:

	A	B	C
1200 cu.yd. earth excavation above mean sea level	$20.00	$7.00	$15.00
9100 cu.yd. earth excavation below mean sea level	23.00	19.00	15.00
10 cu.yd. rock excavation below men sea level under compressed air	20.00	19.00	25.00
3,850 cu.yd. concrete in caisson shaft, walls and floor, normal air	15.00	13.50	18.00
600 cu.yd. concrete in caisson shaft floor, under compressed air	20.00	25.00	30.00
300 bbl. mortar batches used in placing concrete	4.60	4.00	7.00
10 bbl. 1:1 portland cement grout–normal air	7.80	6.00	6.00
10 bbl. 1:0 portland cement grout–normal air	6.70	6.00	5.00
100 bbl. 1:1 portland cement grout–under compressed air	9.80	9.00	9.00
10 bbl. 1:0 portland cement grout–under compressed air	8.20	8.00	7.00
Waterproofing, treated woven fabric, including brick, under compressed air 325 sq.yd. four-ply	5.35	6.00	6.00
5 cu.yd. brick in asphalt mastic, with one-ply fabric, under compressed air	47.50	60.00	60.00
10 sq.yd. six-ply	7.05	6.25	8.00
1,345 ton steelwork for shaft, except rods and bars	121.00	166.00	186.00
2 ton steel rods and bars	90.00	140.00	120.00
4,000 lb. furnishing and placing w.i. or steel pipe (threads, couplings and caps included)	.10	.15	.08
3 ton furnishing and placing 12 in. c. i. pipe in bottom of shaft	160.00	200.00	120.00
Engineer's field office-building, equipping and maintaining (lump sum)	20,000.00	30,000.00	23,000.00
15 m. B.ft. temporary timber over shaft, (incl. placing steel roof girders in pockets)	140.00	150.00	100.00
250 lin.ft. building a tight board fence around shaft, if required	3.00	2.00	2.50
Extended totals	$494,539	$510,578	$523,775

Calif., San Diego—Quarters—Spec. 4763—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans quarters for Commander-General, here.

Calif., San Diego—Roads—Spec. 4766—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans concrete roads at Marine Corps Base, here.

Calif., San Diego—Sewers, Mains, etc.—Spec. 4764—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans sewers, mains, etc. at Marine Corps Base here.

H. T., Pearl Harbor—Extension—Spec. 4761—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans extension for battery storage and overhaul, here.

H. T., Pearl Harbor—Storage Facilities—Spec. 4760—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans additional storage facilities, here.

BIDS DESIRED

N. Y., Tupper Lake—Equipment, etc.—Spec. 4720—Dec. 28 (change of date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., refrigerating equipment, etc., at U. S. Veterans Hospital, here. Noted Oct. 19.

N. Y., Tupper Lake — Hospital — Spec. 4718—Dec. 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., for U. S. Veterans Hospital, here, as follows: Part 1, general construction, Part 2, plumbing, Part 3 heating and steam distributing, Part 4 lighting system, etc., Part 5 boiler house equipment, etc.; adv. this issue. Noted Nov. 23.

N. Y., Tupper Lake—Radial Brick Stack—Spec. 4722—Dec. 28 (change of date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., for radial brick stack, at U. S. Veterans Hospital, here. Noted Oct. 19.

N. Y., Tupper Lake—Water Tank—Spec. 4724—Dec. 28 (change of date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., for steel tank, tower, etc., at U. S. Veterans Hospital, here. Noted Oct. 19.

Va., Leesburg—Post Office—Dec. 27 by Treas. Dept., Wash., D. C., U. S. Post Office, complete incl. mechanical equipment, here. J. A. Wetmore, acting superv. archt.

W. Va., Huntington — Power House — Dec. 30, at office U. S. Engineer, Huntington, power house at Dam 30, Ohio River; adv. this issue.

Ala., Florence—Dredging Pump—Dec. 30 at office U. S. Engineer, Florence, dredging pump for dredge Pettus; adv. this issue.

O., Cincinnati—Dredge—Jan. 5, at office U. S. Engineer, Cincinnati, for one 24 in. pipe-line dredge; adv. this issue.

Ill., Rockford—Remodeling—Dec. 26, by Treas. Dept., Wash., D. C., remodeling and enlarging U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

Calif., San Diego—Covering Railroad Track—Spec. 4737—Dec. 27 by Bureau Yards & Docks, Navy Dept., Wash., D. C., covering railroad tracks at Marine Barracks, here. Former bids rejected. Noted Nov. 2.

BIDS RECEIVED

Mo., St. Louis — Remodeling — Treas. Dept., Wash., D. C., remodeling second floor, etc., U. S. Custom House, here, from G. E. Wright, Monadnock Blk., Chicago, $3,440; W. McDonald Constr. Co., 428 Odd Fellows Bldg., $3,542. Noted Nov. 9.

Okla., Chandler — Post Office — Treas. Dept., Wash., D. C., for U. S. Post Office, here, from C. Weitz Sons, 713 Mulberry St. Des Moines, Ia., $43,900 (12 months); W. D. Lovell, 1415 8th St., S. E., Minneapolis, Minn., $46,897 (12 months); Shallenberger Constr. Co., 4th and Boston Sts., Tulsa. $51,682 (12 months). Noted Oct. 26.

CONTRACTS AWARDED

W. Va., Huntington—Horses and Props—U. S. Engineer, furnishing horses and props for Dam 32, Ohio River, Contr. 24,956, to Amer. Bridge Co., Frick Bldg., Pittsburgh, Pa. Noted Oct. 26.

Miscellaneous

PROPOSED WORK

Grain Elevator—Phila., Pa.—City plans 3,250,000 bu. grain elevator, $3,000,000. G. F. Sproul, Chestnut St. Wharf, engr.

Grain Elevator—Phila., Pa.—Phila. & Reading R.R., Reading Terminal Bldg., plans 3,000,000 bu. grain elevator, Port Richmond Ave. $2,850,000. S. T. Wagner, Reading Terminal Bldg., archt.

Heating System—Phila. Pa.—Bureau of Health, 516 City Hall, soon takes bids addition to heating system and constructing concrete tunnels for same, at Byberry Hospital. $160,000. P. H. Johnson, 1716 Samson St., archt.

Drilling—Tidioute, Pa.—Queen Sand Oil Co., Titusville, plans extensive oil and gas drilling here. $25,000. R. E. Feely, pres.

Coal Tipple—Glen White, W. Va.—E. E. White Coal Co. plans steel coal tipple. $50,000.

Transmission Lines—Raleigh, N. C.—See "Industrial Works."

Transmission Line, etc.—Nashville, Tenn.—Nashville Ry. and Light Co., Watkins Bldg., had plans prepared high voltage lines, new turbine generator, switchboards, stoker equipment for power plant, 5 substations, also new paving and track improvements to present system. $500,000. E. C. Edgar, genl. mgr.

Car Barns—Cleveland, O.—Cleveland Ry. Co., Hanna Bldg., having plans prepared by D. W. Morrow, archt., 4500 Euclid Ave., 1 and 2 story, brick, steel and concrete car barns, West 117th St. and Lorain Ave. $500,000. J. H. Alexander, vice pres.

Train Terminals — Lansing, Mich. — See "Railways."

Train Terminals — Midland, Mich. — See "Railways."

Road Machinery—Ashland, Wis.—Ashland Co. appropriated $10,000 for road machinery, incl. 12 ft. blade grader with ditcher, small and large trucks. W. E. Dillon, comr.

Road Machinery—Hurley, Wis.—Iron Co. appropriated $10,000 for road machinery. F. B. Goodman, comr.

Road Machinery—La Crosse, Wis.—La Crosse Co. appropriated $15,000 for road machinery. J. Hintgen, comr.

Road Oil—La Crosse, Wis.—See "Streets and Roads."

Road Machinery—Montello, Wis.—Marquette Co. Bd. appropriated $2,000 for road machinery, incl. light trucks. H. Schmitz, comr.

Miscellaneous (Continued)

Road Machinery—Phillips, Wis.—Price Co. Bd. appropriated $9,000 for road machinery, incl. crushing plant and patrol graders. B. M. Griffin, comr.

Navigation, etc.—Orange, Tex.—Orange Co. election Dec. 23 to vote on $250,000 for completing deep waterways to 30 ft. E. C. McCarver, co. judge.

Transmission Line—Warren, Idaho—See "Industrial Work."

School Athletic Grounds, etc. — Kansas City, Mo.—C. A. Smith, archt., 602 Finance Bldg., wants information on school athletic grounds and stadiums, same to be built in near future.

Aquarium — St. Louis, Mo. — Feb. 9, to vote on $400,000 bonds (Proposition 10) for aquarium in Forest Park. W. W. Horner, 300 City Hall, engr.

Electric Lights—St. Louis, Mo.—Soon takes bids installing 287 concrete standard electric lights with necessary cables, glassware, etc., on Alaska Ave. from Primm to Schirmer Sts., Schirmer St. from Alaska Ave. to Idaho St., Bradley St. from Watson Rd. to Ivanhoe St., Goodfellow St. from Roosevelt Pl. to Bircher St., Natural Bridge Rd. from Union St. to city limits, Tilden St. from Iron St. to Kingshighway, Iron St. from Tilden to Carlsbad Sts., Kingshighway from Manchester to Oakland Sts., Kingshighway from Arsenal to McRee Sts., Oakland St. from Billon to McCausland Sts., Walsh St. from Morganford St. to tracks of Missouri Pacific R.R., also from Minnesota to Michigan Sts. and 3 small park installations. $53,000. R. Toensfeldt, 325 City Hall, engr.

Elimination of Grade Crossings — St. Louis, Mo. — See "Bridges."

Memorial Plaza, etc.—St. Louis, Mo.—Feb. 9, to vote on $7,000,000 bonds (Proposition 14) $6,000,000 for site and $1,000,000 for soldiers' memorial.

Parks, etc.—St. Louis, Mo.—Feb. 9, to vote on $2,500,000 bonds (Proposition 8) for acquisition of land for public parks, playgrounds, recreation fields, swimming pools, and 4 bath houses; $1,300,000 bonds (Proposition 9) improving existing parks, playgrounds, etc., incl. equipment, wading pools, locker buildings at O'Fallon, Fairground, Forest and Carondelet Parks, incinerating plant and restaurant at Forest Park, stadium at Carondelet Park, repairing and installing heating plants, laying sidewalks, repairing old and making new roads and bridges, grading and landscape work, extensions to Christy, Penrose, Manchester and Francis Parks, property formerly known as Industrial School site, Buder recreation farm and Kingshighway southeast through Carondelet Park, comfort stations, dressing room at Fairground Park, and constructing Marquette pools.

Park—St. Louis, Mo.—Preparing plans triangular park from Bremen Ave. to Salisbury St. and 9th to 11th Sts. with two 60 ft. roadways leading from bridge into 11th St. Plans also include playground and swimming pool. $175,000. H. Bartholomew, Municipal Court, engr.

Sprinkling Trucks—St. Louis, Mo.—Bd. Pub. Serv., 314 City Hall, plans to purchase 60 sprinkling trucks. $150,000. Will let contract about Jan. 15 or Feb. 1.

Station Plaza—St. Louis, Mo.—Feb. 9, to vote on $2,600,000 bonds (Proposition 2) for acquisition of land in city blocks 894 and 903 for public plaza opposite the Union Station, on Market St. from 18th to 20th Sts.

Street Lighting System—St. Louis, Mo.—Feb. 9, to vote on $8,000,000 bonds (Proposition 4) to purchase and install equipment for electric street lighting system. W. W. Horner, 300 City Hall, engr.

Levee—Athens, Tex.—Attorney Generals Dept., Austin, approved $50,000 bonds for levees in Dist. 1, Henderson Co. C. C. O'Neil, co. engr.

Port Facilities—Houston, Tex.—Harris Co. election Dec. 30, to vote on $4,000,000 bond issue for extending port facilities on ship channel. Address C. H. Bryan, co. judge.

Tunnel — Oregon — Oregon - California-Strahorn R.R. Co., c/o D. H. McCarthy, genl. mgr., Klamath Falls, plans 1,500 ft. tunnel. Work will probably be done by day labor.

Street Lighting System—Eagle Rock, Calif.—Plans election to vote on $25,000 bonds for street lighting system.

Park Improvements — Eureka, Calif. — Plans election to vote on $100,000 bonds to purchase land and improve same for park purposes.

Rails and Equipment—Eureka, Calif.—Plans election to vote on $100,000 bonds for new rails and equipment for Municipal Railway System, etc. H. H. Hannah, city engr. J. Griffiths, city supt. of pub. wks.

Road Levee—Redwood City, Calif.—San Mateo Co. having plans prepared road levee over Dean Hollow, to be used for storage dam, 12,000 cu.yd. fill. G. A. Kneese, co. surv.

Pier — San Francisco, Calif. — State Bd. Harbor Comrs., Ferry Bldg., take bids in about 6 weeks, enlarging Pier 42, involving considerable pile work. $100,000. F. G. White, ch. engr.

Electrification of Railways — Ontario — Canadian Natl. Rys., 27 Wellington St. E., Toronto, having plans prepared for electrifing former Canadian Northern Ry., and Toronto Eastern Ry., so as to give an electric radial service from Toronto to Port Hope, distance of 75 mi. $3,000,000. A. F. Stewart, ch. engr.

Grain Elevator—Goderich, Ont.—Goderich Elevator & Transit Co., plans rein.-con. addition to grain elevator. $250,000.

Grain Elevators—Port Arthur, Ont.—Parrish & Heimbecker Ltd., 614 Grain Exch. Bldg., Winnipeg, Man., plans addition to grain elevators rein.-con. $300,000.

BIDS DESIRED

Steel—Flushing, N. Y.—Dec. 14, by Transit Comn., 49 Lafayette St., New York, furnishing and erecting steel for elevated portion of Rapid Transit R.R., Flushing Route, extending over and along Roosevelt Ave., private property, and intersecting streets from Alburtis to Riverside Aves.

Portland Cement — New York, N. Y. — Dec. 14, by H. Bruckner, pres. Bronx Boro, Tremont and 3rd Aves., furnishing and delivering 2,500 bags Portland cement and 6,000 gal. motor gasoline.

Crane—Pittsburgh, Pa.—Heyl & Patterson, Inc., 51 Water St., taking bids 1 ladle crane for pig casting purposes.

Crane — Pittsburgh, Pa.—Carnegie Steel Co., Carnegie Bldg., taking three 125 ton ladle cranes.

Stone Washer and Crushing Machine—Chattanooga, Tenn. — Gager Lime & Mfg. Co., James Bldg., receiving bids stone washer and crushing machine, 200 ton capacity. M. P. Kennedy, secy.

Pipe—Joplin, Mo.—Rothschild Iron & Metal Co., 7th and Missouri Sts., taking bids carload 1-6 in. pipe. J. Rothschild, purch. agt.

Bridge Material, etc.—Corydon, Ia.—Dec. 20 by Auditor Wayne Co., bridge and culvert material, incl. 141,966 ft. timber, 1,000 lb. cement, 100,000 lb. reinforcing steel, 4,700 ft. corrugated culvert metal, 5,000 lin.ft. wood piling, etc. D. L. Thomas, Corydon, engr.

Culvert—Riverdale, Ark.—Dec. 21, by Bd. Dirs. D. D. 7, Poinsett Co., at their office at Marked Tree, rein.-con. culvert, here. Pride & Fairley, Blytheville, dist. engrs. Elliott & Harman Eng. Co., Memphis, Tenn., consult. engrs.; adv. this issue.

Stadium—Berkeley, Calif.—Dec. 14, by Regents of University of California, grading, culverts, etc., for stadium, (Group 1 Contract), incl. general and detail excavations, embankments, concrete culverts, tunnels, retaining walls, foundations and piers. This work will probably exceed $200,000. Total $1,000,000. Baker & Carpenter, 58 Sutter St., San Francisco, consult. engrs. J. G. Howard, 1st Natl. Bank Bldg., San Francisco, university archt. Noted Nov. 23.

Ties and Timber—Montreal, Que.—Dec. 15, by M. P. Fennell, secy. Harbor Comn., ship building timber and British Columbia fir railway ties. W. F. Harvie, Harbor Comrs., engr.

Road Graders—Charlottetown, P. E. I.—Dept. Pub. Wks, taking bids large and small road graders, Martin ditchers. C. W. Crosby, purch. agt.

BIDS RECEIVED

Refined Asphalt, etc.—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, opened bids Nov. 29, furnishing and delivering (1) 60,000 gal. refined asphalt in liquid form (2) 700 cu.yd. binder stone (3) 2,000 cu.yd. asphalt sand (4) 600 net ton limestone dust or other suitable inorganic dust (5) 2,000 cu.yd. paving sand (6) 3,500 bbl. Portland cement (7) 3,300 cu.yd. 1½ in. gravel or 3,300 cu.yd. 1½ in. broken stone, from Warner Quinlan Co., 79 Wall St., New York (1) $3,600; Standard Oil Co., 26 Bway., New York (1) $3,780; Calvin Tompkins Co., 30 Church St., New York (2) $1,421; Hygrade Builders Supply Co., 6th St. and 2nd Ave. (3) $4,620 (5) $2,580 (6) $10,238; J. Davison (3) $4,800 (7) $9,669; E. Meyer Co., 25 Church St., New York (4) $3,270; New York Trap Rock Co., 101 Park Ave., New York (4) $3,804 (7) $9,[illegible]; T. E. McCormick, 791 East New York Ave. (5) $2,350; [illegible] T. Cunningham (5) $2,[illegible] (7) $9,207; Burroughs Building Material Co., Johnson Ave and Newtown Creek, (6) $10,080; M. M. Cantor (6) $10,080; Suberno Products Co., (6) $10,640. Noted Nov. 23.

Railings and Stairs—Phila., Pa.—F. H. Caven, dir. pub. wks., City Hall, opened bids Nov. 29, metal railing and stairs at Northeast sewage plant, from T. E. and E. Auble, 2503 Germantown Ave., $33,104; G. B. Clopp, 3717 Filbert St., $57,359; Acme Machine Co., 316 North 17th St., $62,757.

Lumber—New Orleans, La.—Bd. Port Comrs., Court Bldg., opened bids furnishing creosoted timber and piling, from Hattiesburg Creosoted Timber Co., Hattiesburg, Miss., timber $13,718, piles $12,342; Creosoted Materials Co., Queen and Crescent Bldg., timber $13,262; Gulfport Creosoted Co., Gulfport, Miss., timber $13,377. Noted Nov. 16.

CONTRACTS AWARDED

Grandstand — Buffalo, N. Y.—Buffalo Baseball Club, 101 East Ferry St., 1 story, steel and concrete grandstand, 15,000 seating capacity, to Mosiers-Summers Co., 1266 Seneca St. Archts. est. $300,000. Noted Sept. 28.

Underpasses—North Carolina—State Hy. Comn., Raleigh, grading underpasses and building substructures under Southern R.R. at Gibsonville and Four Mile Siding, State Project 532, Guilford Co., to L. M. Lowdermilk, Route 4, Greensboro, $25,000. Noted Nov. 30.

Steel Shed—New Orleans, La.—Bd. Port Comrs., New Court Bldg., furnishing, erecting and painting structural steel for 7th St. shed and sacking plant, to St. Louis Structural Steel Co., Bank of Commerce Bldg., St. Louis, Mo., $73,295. Noted Oct. 26.

Foundation — Kalamazoo, Mich. — Bd. Educ., foundation for high school, to Miller-Boyer Co., Pratt Bldg., $25,000.

Dock and Warehouse—Milwaukee, Wis.—Huron Portland Cement Co., 1525 Ford Bldg., Detroit, Mich., pile substructure for 222 ft. rein.-con. dock, 7 and 5 ft. thick, 63 ft. 8 in. wide at widest point, 21 ft. wide at narrowest point, brick warehouse, etc., to Great Lakes Dredge & Dock Co., 216 West Water St. Owner making plans for concrete work. Engrs. est. $250,000.

Transmission Line—Stratford, Wis.—Stratford Light and Power Co. will build transmission line from here to Wausau, also construct substation, here, by day labor. $25,000. Private plans. Noted Nov. 2.

Retaining Wall—Des Moines, Ia.—For 180 ft. rein.-con. retaining wall, 40 ft. high, along east bank Des Moines River, north of University Ave., to J. Horrabin & Co., 1422 Walnut St., $24,600. Noted Nov. 30.

Lumber—Dallas, Tex.—For 10 cars, approximately 200,000 ft. 3 in. x 12 in. x 20 ft., 90% rough heart long leaf yellow pine, to Trinity Lumber Co., 3705 Main St., $52 per M ft.

Retaining Wall, etc.—Seattle, Wash.—Associated Oil Co., c/o A. J. McNeil, resident engr., 2,500 cu.ft. rein.-con. retaining wall, base will be 12 ft. below surface and 21 ft. above ground, also system of pipe conduits between piers and tank system, main conduit will be of concrete, 10 to 20 ft. wide, 4 ft. deep, to Stewart Constr. Co., Amer. Bank Bldg., $40,000.

Oil Storage Tanks—Martinez, Calif.—Associated Oil Co., 2nd and Mission Sts., San Francisco, one 55,000 bbl. capacity, three 5,000 bbl., two 2,000 bbl. and three 3,000 bbl. oil storage tanks, steel, to Western Pipe & Steel Co., 444 Market St., San Francisco.

Road Grader — San Jose, Calif. — Santa Clara Co. furnishing and delivering 1 Austin Mammoth Junior road grader, to Austin-Western Road Machine Co., 20 Fremont St., San Francisco, $1,360.

Heating System, etc.—London, Ont.—Western University, central heating system, ventilating and plumbing, to W. G. Edge Co., 142 Bank St., Ottawa, $50,000.

Memorial Tower—Toronto, Ont.—University of Toronto, Queens Park, stone war memorial tower to connect Hart House with main building, stone and general contract to Page & Co., Weston, $185,000. Noted Nov. 23.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by **10 A. M.**, Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a **Line** an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: **Dec. 19.**

Highway Work

Albany, N. Y.

Sealed **proposals will be received** by the **undersigned at their office, No. 55 Lancaster Street, Albany, N. Y.,** at **one** o'clock P.M., on **Tuesday,** December 19, 1922, for the **improvement of highways** in the following counties:

Albany	(one highway: 0.23)
Cattaraugus	(one highway: 0.15)
Monroe	(one highway: 0.12)
Ontario	(one highway: 0.41)
Otsego	(one highway: 0.48)
Steuben	(one highway: 4.24)
Suffold	(two highways: Gravity Concrete Retaining Wall)

Also **for the reconstruction** of the following:

Montgomery...	(two contracts: 1.50 & 2.50)
Niagara	(one contract: 5.13)
Steuben	(one contract: 3.00)
Suffolk	(one contract: 4.50)
Tioga	(one contract: 3.18)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved or reconstructed. The addresses of the Division Engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.
State Commission of Highways.
J. C. FINCH,
Secretary.

Bids: **Jan. 5** (Date of closing extended).

Reservoir Dam

Bluefield, W. Va.

Sealed **proposals or bids for the construction of a clay or earthen dam, containing about 40,000 cubic yards of material, to be sluiced into place, will be received at the** office of the **BLUEFIELD WATER WORKS** & **IMPROVEMENT COMPANY, at** Bluefield, **West Virginia, until three o'clock** P.M., **on the 5th day of January, 1923, when** they **will be publicly opened and read. All** proposals **shall be enclosed in an envelope** furnished **by the above styled company and** shall **be accompanied by a certified check** on some **national bank, in the sum of five** (5%) **per cent of the amount of the pro**posed **bid. The contractor to whom the** award **is made will be required to furnish** surety **company bond in the sum of thirty** five **(35%) per cent of the amount of the** contract, **within thirty days after official** notice **of the award of contract and in ac**cordance **with the terms of the specifica**tions. **The right is reserved to reject any** or all **bids. Drawings, specifications and** blank **forms of proposals may be consulted** at the **office of company, 601 Princeton** Avenue, **Bluefield, West Virginia, or they** will be **forwarded by mail upon request if** $4.00 **accompanies the order. This amount** will be **refunded upon return of the plans** and **specifications in reasonably good order.**

BLUEFIELD WATER WORKS & IMPROVEMENT COMPANY.
WM. McCARTHY,
Superintendent.

November 23rd, 1922.

OFFICIAL PROPOSALS

Bids: Dec. 19.

Mt. Prospect Conduit

CONTRACT 196

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 A.M., Eastern Standard time, on Tuesday, December 19, 1922, for Contract 196, for the construction of the Mt. Prospect conduit, a portion of the City conduits of the Catskill aqueduct, extending from Shaft 24 of the City tunnel in Fort Greene park, along Cumberland Street, Lafayette, Washington and Flatbush Avenues to Clarkson Avenue, in the Borough of Brooklyn, New York City.

The conduit will consist of about 10,530 linear feet of 72-inch and 6,270 linear feet of 66-inch steel pipe, about 360 tons of cast-iron pipe and special castings of various sizes, a Venturi meter, valves and other appurtenances, all of which will have to be maintained for one year.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, etc., can be obtained at the office of the Secretary at the above address, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer at the above address.

GEORGE J. GILLESPIE,
President.
JAMES P. SINNOTT,
PHILIP F. DONOHUE,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: Dec. 12.

State Hospital Work

Central Islip, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work—Kitchen and Dining Room Building and Connecting Corridor, at the Central Islip State Hospital, Central Islip, N. Y., will be reecived by the State Hospital Commission, Capitol, Albany, N. Y., until three o'clock P.M. on Tuesday December 12, 1922, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract, and in accordance with the terms of Specifications Nos. 3965, 3966, 3967 and 3968. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Central Islip State Hospital, Central Islip, N. Y., at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.

Dated: November 23, 1922.

OFFICIAL PROPOSALS

Bids: Jan. 1.

Road Bed, Bridges and Culverts

Kelso, Wash.

Sealed proposals for the construction of roadbed, bridges and culverts for approximately eight and one-half (8½) miles of railroad in Cowlitz County, Washington, will be received by the Longview, Portland & Northern Ry. Company at its offices at Kelso, Washington, up to 2 o'clock P.M., January 1st, 1923, when they will be opened and read, such eight and one-half (8½) miles being regarded by the company as the first unit of contemplated construction expected to total twenty-six (26) miles, contract expected to be let early in 1923.

Drawings, specifications and form of proposal, contract and bond are on file in the office of the Chief Engineer, Kelso, Washington, and may be inspected by prospective bidders; or same will be furnished to interested parties on deposit of Ten Dollars ($10.00), which will be refunded upon return of papers in good condition.

Bids must be made on proposal forms to be furnished by the company and in the manner designated therein, same to be inclosed in sealed envelope bearing the name and address of the bidder and to be marked "Bid for Railroad Construction."

The principal quantities involved are approximately as follows:

153,580	cubic yards common excavation.
39,300	cubic yards loose rock excavation.
59,300	cubic yards solid rock excavation.
222,660	cubic yards embankment borrow.
649,710	station yards overhaul.
924	lin. feet 18 in. concrete culvert pipe.
672	lin. feet 24 in. concrete culvert pipe.
60	lin. feet 30 in. concrete culvert pipe.
380	lin. feet 36 in. concrete culvert pipe.
70	lin. feet 42 in. concrete culvert pipe.
43,860	lin. feet piling.
514,500	ft. B.M. lumber for trestles.

Each proposal must be accompanied by a certified check payable to the Longview, Portland & Northern Ry. Company for not less than five (5) per cent of the total amount of the bid as a guarantee that contract will be entered into if awarded.

The person or persons, if any to whom the contract is awarded will be required to file a bond in a sum not less than 50 per cent of the total amount bid, with good and sufficient sureties, to guarantee the faithful performance of the contract.

Special attention of the bidder is called to "Information for Bidders" included in the proposal forms.

The right is reserved to reject any and all bids.

LONGVIEW-PORTLAND & NORTHERN RY. COMPANY.
By WESLEY VANDERCOOK,
Chief Engineer.

Bids: Dec. 29.

Garbage Incinerator

Portland, Ore.

Sealed proposals will be received at the office of the Purchasing Agent of the City of Portland, Oregon, until 2.00 o'clock P.M., Friday, December 29, 1922, for the construction of a garbage incinerator according to specifications on file.

A certified check for 10 per cent of the amount must accompany each bid.

Specifications and additional information may be obtained from

O. LAURGAARD,
City Engineer.

OFFICIAL PROPOSALS

Bids: Dec. 14.

Steel Truss Bridge

Hamburg and Evans, N. Y.

Sealed proposals will be received by the joint Town Board of Towns of Hamburg and Evans, Erie County, N. Y., at the office of the Town Clerk, Hamburg, N. Y., on Thursday, December 14th, at 2:00 P.M., for the construction of a steel truss highway bridge, 180-ft. span and 24-ft. roadway, on the Lake Shore State Highway, across the Eighteen Mile Creek.

Plans, specifications and bidding sheets may be obtained at the office of George C. Diehl, County Engineer, 577 Ellicott Sq., Buffalo, N. Y. Said plans and specifications are on file with the Town Clerks of the Towns of Hamburg and Evans, as follows:

Jos. E. Leach, for Hamburg, Main St., Hamburg, N. Y.

Edward F. Johns, for Evans, Angola, N. Y.

Each proposal must be accompanied by a certified check for at least 5 per cent of the amount of the proposal, and shall be made payable to George B. Abbott, Supervisor, Town of Hamburg.

Each proposal must also be accompanied by an affidavit from a surety or bonding company, duly qualified under the laws of the State of New York, stating that in case this bidder be awarded the contract for the work covered in the bid, said surety or bonding company will furnish the required bond within ten (10) days of the award of the contract.

The joint Town Board of Hamburg and Evans reserves the right to reject any or all proposals.

JOSEPH E. LEACH,
Town Clerk of **Hamburg.**
EDWARD F. JOHNS,
Town Clerk **of Evans.**

Dated, November 20, 1922.

Bids: Dec. 18.

Refuse Incinerator

Allentown, Pa.

Sealed proposals will be received by the undersigned at his office, Room 301, City Hall until 9:30 o'clock A.M., Monday, December 18, 1922, for the construction of a Refuse Incinerator.

The work to be done consists of the furnishing, installing, and testing ready for operation, on foundations to be constructed by the City of Allentown a refuse incinerator with all appurtenances, of a capacity of 70 tons per 24 hours. The City of Allentown will construct under separate contracts the building, foundations for incinerator and appurtenances and chimney from plans submitted by the successful bidder.

All proposals must be made upon forms provided therefor and accompanied by a certified check for the sum of Five Thousand ($5,000.00) Dollars.

Specification and forms may be obtained at the office of the City Engineer, City Hall, Allentown, Pennsylvania, upon depositing the sum of Fifty ($50.00) Dollars which amount will be returned upon the return of the specifications.

The City of Allentown reserves the right to reject any or all bids.

M. W. GROSS,
Mayor.

H. F. BASCOM,
City Engineer.

Bids: Dec. 11.

Labor-Material Percentage Contract

New Orleans, La.

Sealed proposals will be received at the Sewerage and Water Board, Room 401, No. 526 Carondelet Street, New Orleans, La., up to 12 o'clock noon of Monday, December 11th, 1922, on Labor-Material Percentage Contract for year 1923.

Specifications and blank forms of proposal may be obtained at the office of the Board.

The right is reserved to reject any or all bids.

October 12th, 1922.

A. G. MOFFAT,
Secretary.

GEO. G. EARL,
General Superintendent.

¶When you figure a contract you base your figures on getting the greatest amount of efficiency out of every department. ¶You demand the maximum in results at the minimum of cost and then keep yourself busy as a bird dog to see that you get it. ¶Why treat the matter of a Contract Bond with any less sincere attention?

SWART 92 William St.
New York

OFFICIAL PROPOSALS

Bids: Dec. 21.

Reinforced Concrete Culvert

Marked Tree, Ark.

Bids will be received by the Board of Directors of Drainage District No. 7, Poinsett County, Arkansas, at their office at Marked Tree, Arkansas, until 11:00 a.m., Thursday, December 21, 1922, for the construction of a reinforced concrete culvert at Rivervale, Arkansas.

The work will require about 2,800 lineal feet of Wakefield Sheet piling, 7,700 cubic yards concrete, 230 tons of reinforcing steel and 5,500 square yards of block revetment.

Plans and specifications are on file and may be seen at the office of the Board of Directors, Marked Tree, Arkansas, at the office of Pride & Fairley, District Engineers, Blytheville, Arkansas, and at the offices of Elliott & Harman Engineering Co., Consulting Engineers, Memphis, Tenn., and Peoria, Illinois. An Engineer will be furnished by appointment with Pride & Fairley to visit the site of the work with prospective bidders.

Certified check, cash deposit or Bidder's bond for the amount of 10% of the bid will be required with each bid. The right is reserved to reject any and all bids.

Bids: Dec. 18.

Street Paving and Draining

Earlington, Ky.

Sealed proposals will be received up to 2 o'clock p.m., December 18, 1922, by the Mayor of the City of Earlington, Ky., for the paving and draining the several streets in the City of Earlington, Ky., with warrenite bitulithic pavement or vitrified brick pavement on a rolled stone base, the type to be selected by the City Council after the bids have been opened and compared.

ESTIMATED QUANTITIES

Earth excavation	23,570 cu.yd.
Paving surface	46,300 sq.yd.
Crushed stone	13,840 cu.yd.
Curb and gutter	22,840 lin.ft.
Storm sewers, 12-in. to 42-in. in sizes	4,776 lin. ft.
Manholes	23
Inlets	62
Concrete:	
1:2½:5	162.44 cu.yd.
1:2:4	84.02 cu.yd.
1:2:3	1.27 cu.yd.
Reinforcing steel	10,215 lb.

These quantities being subject to modification.

The City Council reserves the right to reject any or all bids, or to award the contract to the lowest and best bidder. Each bid must be accompanied by a certified check for $250.00, payable to the Mayor of the City of Earlington, Ky. Checks of the unsuccessful bidders will be returned as soon as the contract is awarded or the bids rejected.

Plans and specifications on file at the office of R. C. Giffin, Civil and Mining Engineer, Madisonville, Ky., and may be inspected there or a copy obtained upon the deposit of $15.00, which deposit will be returned upon the return of the plans in good condition.

(Signed) C. B. JOHNSON, M.D.,
Mayor.

Bids: Jan. 24.

Garbage Incinerator Plant

Fargo, N. D.

Sealed proposals will be received at the office of the City Auditor until 10 A.M. on the 24th day of January, 1923, for the erection and construction of a complete plant for the incineration of all garbage collected by the City of Fargo, having a capacity of thirty-five (35) tons per twenty-four hours. The plant shall be completed, tested and ready for acceptance by the City of Fargo on or before July 1st, 1923. Bidders will submit detailed plans and specifications of their plan of construction including the cost for such a plant, completed and tested ready for operation and showing the method of incineration and the cost of operation per ton. Bidders shall also guarantee that no obnoxious gases or odors will be created in the operation of the plant.

Proposals must be accompanied by a certified check payable to the order of the City of Fargo in amount equal to five (5) per cent of the total cost of the plant, conditioned that the successful bidder will enter into a contract and give bond for the construction of the plant, according to the proposal.

The City of Fargo reserves the right to reject any and all bids.

A. R. WATKINS,
City Auditor.

Dated at Fargo, N. D.,
November 29, 1922.

OFFICIAL PROPOSALS

Bids: Dec. 14.

Grading and Bridges

Raleigh, N. C.

Sealed bids for the construction of the following Projects will be received by the North Carolina State Highway Commission at Raleigh, N. C., until 10:00 A.M. on the 14th day of December, 1922, when they will be opened and read:

Grading Project, including drainage pipe structures, etc.

Project No.	County	Length
201	Carteret	14.14
BRIDGE PROJECTS		
138-B	Northampton	(a) 1 350 ft. steel span with 265 20 ft. timber spans or timber piles, or (b) same on pre-cast R.C. piles, (c) or same as (a) except timber superstructure on I beams, (d) same as (c) except pre-cast concrete piles for substructure.
256	Lenoir	3 bridges, 2 30 ft. R.C. Thru Girders, 3 30 ft. R.C. Thru Girders, and 4 40 ft. R.C. Thru Girders.

Specifications, proposal forms, etc., may be obtained from the State Highway Commission at Raleigh, N. C.

Plans may be seen in the Raleigh office or in the offices of the District Engineers.

Bridge plans may be obtained from the State Highway Commission at Raleigh N. C., upon *payment* of five ($5.00) dollars per set.

The right is reserved to reject any or all bids.

By order of the North Carolina State Highway Commission.

Bids: Dec. 19.

Thru Plate Girder Bridge No. 543.3

Trenton, N. J.

The Board of Freeholders of Mercer County will receive bids on Tuesday, Dec. 19th, 1922, at 2:30 o'clock in the afternoon at their regular place of meeting, Court House, Trenton, New Jersey, for:

Constructing a thru plate girder bridge over Shipetaukin Creek on the Brunswick Pike, known as Bridge No. 543.3, with a clear span of 49 ft. 3 inches.

The estimated quantities on the principal items follow:

300 cubic yards of foundation excavation.
300 cubic yards of concrete.
50 tons of structural steel.
15 tons of reinforcing steel.
Construction of a temporary bridge.

Prospective bidders are referred to plans and specifications covering the above work on file in the office of Harry F. Harris, Mercer County Engineer, at the Court House, Trenton, New Jersey, and in the office of J. A. L. Waddell, Consulting Engineer, 35 Nassau Street, New York City. Copies of said plans and specifications may be obtained from either of the above offices upon deposit of the sum of ten dollars, which will be refunded if the plans and specifications are returned in good condition within 48 hours after the bids are opened.

Each proposal must be accompanied by a certified check in an amount equal to at least 10% of the bid, payable to Edgar G. Weart, County Collector, also by a proposition from a surety company fulfilling the requirements of Section 507, Chapter 185, P. L., 1918.

The right is reserved to reject any or all bids and to waive any immaterial defect or informality in any bid should it be in the interest of the County to do so.

CHARLES H. REICHERT,
Director of Department of Bridges.

Bids: Dec. 28.

Resurfacing Streets

Mobile, Ala.

Bids will be received by the Board of City Commissioners of the City of Mobile for resurfacing with either Asphalt, Warrenite Bitulithic Asphaltic Concrete, Type No. 1 and Asphaltic Concrete, Type No. 2, until noon, December 28th, 1922, 45,868 square yards of one and half inch surface, 45,868 square yards of one inch binder.

Plans and specifications can be had at the office of the City Engineer. The right is reserved to reject any or all bids.

R. V. TAYLOR, Mayor.
WRIGHT SMITH, City Engineer.

Bids: Dec. 28.

Sewage Disposal Plant

DIVISION III—SECTION 4

Indianapolis, Ind.

Sealed proposals will be received by the Board of Sanitary Commissioners, Sanitary District of Indianapolis, at its office in the City Hall, Indianapolis, Indiana, until 10 A.M., December 28th, 1922, at which time bids will be publicly opened and scheduled and awards made as soon thereafter as practicable, for furnishing and erecting mechanical equipment of Section 4, Division III, for the Sewage Disposal Plant of the Sanitary District of Indianapolis, in accordance with plans and specifications on file at the office of the board. This construction and equipment consists of the following items:

4-a. Cast Iron Pipe and Specials.
4-b. Low Pressure Gate Valves.
4-c. Power Plant Piping.
4-d. Standard and High Pressure Valves.
4-e. Air Washing Equipment.
4-f. Electric-Centrifugal Pumping Units.
4-g. Electric Wiring and Fixtures.
4-h. Rotary Dryers, Stokers and Conveying machinery.
4-i. Sludge Filters.

Each bidder shall be required to deposit with his bid a certified check in the amount as provided in said specifications and information to bidders, to secure the execution of the contract for which bid is made.

Copies of plans and specifications and general information may be obtained at the office of Charles H. Hurd, Consulting Engineer, 1405 Merchants Bank Building, Indianapolis, Indiana.

The board reserves the right to reject any and all bids.

BOARD OF SANITARY
COMMISSIONERS.
JAY A. CRAVEN, President.
JOHN L. ELLIOTT, Vice-Pres.
LUCIUS B. SWIFT.

Bids: Dec. 19.

Bridges and Road Work

Charleston, W. Va.

Sealed proposals will be received by the State Road Commission of West Virginia at its office in Charleston, West Virginia, until 10 o'clock a.m. on the 19th day of December, 1922, and said proposals will be opened and read immediately thereafter at the Kanawha County Court House, Charleston, W. Va., for the construction of the following bridges and sections of State Road:

Project 3045, Monroe County—5 miles of the Union-Rock Camp road for grading and draining. Certified check for $3,000.

Project 3047-B, Nicholas County—6 miles of the Gilboa-Drennen Road for grading and draining. Certified check for $3,500.

Project 3182-A, Pocahontas County—6 miles of the Sunset-Frost Road for grading and draining. Certified check for $3,000.

Project 3102, Raleigh County—6 miles of the Shady Springs-Summers County Line Road for grading and draining Certified check for $3,000.

Project 3059, Five Block Bridge No. 856, Logan County over Spruce Fork—130-ft. steel through truss superstructure, concrete or Ashlar masonry substructure. Separate proposal will be received for substructure. Certified check $500, and superstructure certified check for $500.

Project 3188, Wayne County—5.5 miles of the Marrowbone-Crum Road for grading and draining. Certified check for $4,000.

Project 3061, Echo Bridge No. 811, Wayne County, over Twelve Pole Creek—120-ft. steel through truss superstructure, concrete or Ashlar masonry substructure. Separate proposals will be received for substructure. Certified check $500 and superstructure certified check $500.

Project 3078-A, Pleasants County—3 miles of the River Road, St. Marys to Belmont, for grading, draining and gravel surfacing. Certified check for $2,000.

Project 3082, Wetzel County—3 miles of the River Road, New Martinsville, north, for grading, draining and gravel surfacing. Certified check for $1,200.

Project 3157, Braxton County—8.3 miles of the Gassaway-Frametown Road for grading and draining. Certified check for $7,500.

Project 3160, Doddridge County—8.2 miles of the Northwestern Turnpike, West Union-Ritchie County Line, for grading and draining. Certified check for $4,000.

Project 3170-B, Clay County—3 miles of the Dull Creek-King Shoals Road for grading and draining. Certified check for $1,500.

Project 3026, Jefferson County—7 miles of the Charlestown-Kearneysville Road for grading, draining, and waterbound macadam surface course. Certified check for $5,000.

Project 122-A, Mineral County—8 miles of the Claysville to Grant County Line Road for grading and draining. Certified check for $3,500.

Project 3014, Pendleton County—7 miles of the Petersburg-Franklin Road for grading and draining. Certified check for $3,000.

Project 3033, Randolph County—12 miles of the Valle Head-Webster County Line Road for grading and draining. Certified check for $7,500.

Proposals will be received only upon State standard forms in accordance with plans, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates may be obtained from the office of the Division Engineer in whose territory the proposed construction is located, or from the office of the State Road Commission at Charleston, W. Va.

Each proposal must be accompanied by a certified check for the amount noted.

The right is reserved to reject any and all proposals.

THE STATE ROAD COMMISSION,
OF WEST VIRGINIA.
E. B. CARSKADON, Secretary.

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Its distribution among the contractors of any one state is in proportion to the number of contractors situated in that state. The Official Proposal Colums of *Engineering News-Record* offer precisely the same efficient service to municipalities, counties, and state and government departments in every section of the United States.

Bids: Dec. 28

Reinforced Concrete Highway Bridge

Sterling, Ill.

Notice is hereby given that sealed bids will be received by the Road and Bridge Committee of Whiteside County, Illinois, at the City Hall, in the City of Sterling, Illinois, until 10:30 o'clock a.m. December 28, A.D. 1922, and opened and publicly read immediately thereafter.

Bids will be received on the "State of Illinois" plan, the "Marsh" plan, or any other plan that may be submitted by any contractor, at the time of the letting. The bridge will be about 1,000 feet long, across Rock River at First Avenue, in the City of Sterling, Illinois, and must have 28 foot roadway and seven foot sidewalks, and have a concrete floor and electric lighting system complete. Plans submitted must show all details and quantities of concrete and steel.

The nearest railroad station, Sterling, 600 feet. Concreting matrial must be shipped in. The existing structure of iron, 6 spans, of 166 feet, is to become the property of the contractor.

Work to be completed on or before November 15, 1923, and all proposals shall be sealed, and be accompanied by a certified check for One Thousand Dollars ($1,000.00), made payable to the Chairman of the Road & Bridge Committee of Whiteside County, Illinois.

The above Committee reserve the right to reject any or all bids for any reason they deem sufficient. All work to be in accordance with the State of Illinois, General Specifications for Bridge Work, Edition of April, 1920, and plans must be approved by the Illinois State Highway Department, the Illinois State Division of Waterways, and the War Department of the United States.

Whiteside County Road
& Bridge Committee,
By EDW. O. HILLS,
County Superintendent of Highways.

Bids: Dec. 27.

Dock Wall

TERMINAL CONTRACT NO. 53-B.

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Wednesday, December 27th, 1922, at which place and hour they will be publicly opened and read, for the construction of barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and amendatory laws, and Chapter 402 of the Laws of 1920, as follows:

TERMINAL CONTRACT NO. 53-B.

For constructing certain portions of the dock-wall at Ohio Basin, Buffalo.

Contract plans, sheets 1 to 3, inclusive.

Plans may be seen and detailed specifications, engineers' estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works, at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE,
Superintendent of Public Works.
November 23rd, 1922.

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Engineering News-Record is a consolidation of the three leading publications in the engineering and construction field—Engineering News, Engineering Record and The Contractor. It has a circulation of over 30,000 copies weekly—several times that of any other paper in the field—and includes among its readers almost every worthwhile contractor, engineer, manufacturer and dealer in the country interested in bidding on work outside his own vicinity.

Engineering News-Record is the one nationally recognized medium through which prospective bidders on work outside of their immediate localities keep regularly informed of the newest work on which bids are desired. Many rely entirely upon the announcements in this paper and, therefore, do not see those advertised elsewhere.

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For Official Proposals

The Dominant Paper

0163

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Dec. 18	Akron, O.	Dec. 14
Dec. 19	Houma, La.	Nov. 23
Dec. 19	Brooklyn, N. Y. Adv. Nov. 30 to Dec. 14.	Nov. 30
Dec. 20	Drumheller, Alta.	Dec. 7
Dec. 21	Wheeling, W. Va. Adv. Dec. 14.	Dec. 14
Dec. 21	Corinth, Miss. Adv. Dec. 14.	Dec. 14
Jan. 15	Cyril, Okla.	Dec. 14
Feb. 1	Spokane, Wash.	Nov. 16

SEWERS

Bids Close		See Eng. News-Record
Dec. 18	Oakley, Kan.	Dec. 14
Dec. 19	Sand Springs, Okla.	Dec. 14
Dec. 21	Corinth, Miss. Adv Dec. 14.	Dec. 14
Dec. 23	Lincoln, Neb.	Dec. 14
Dec. 28	Indianapolis, Ind. Adv. Dec. 7 and 14.	Dec. 7
Jan. 2	Wilkes Barre, Pa. Adv. Dec. 14.	Dec. 14

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Dec. 18	Allentown, Pa.	Nov. 23
Dec. 29	Portland, Ore.	Nov. 30
Jan. 24	Fargo, N. D. Adv. Dec. 7 and 14.	Dec. 7

BRIDGES

Bids Close		See Eng. News-Record
Dec. 19	West Virginia	Nov. 30
Dec. 19	Trenton, N. J.	Dec. 7
Dec. 19	Boston, Mass.	Dec. 14
Dec. 19	Colorado Springs, Colo.	Dec. 14
Dec. 21	Coquille, Ore.	Dec. 7
Dec. 21	Illinois	Dec. 14
Dec. 26	California	Dec. 7
Dec. 28	Sterling, Ill.	Dec. 7
Dec. 28	Minnesota	Dec. 7
Dec. 28	Windom, Minn.	Dec. 14
Jan. 23	Spokane, Wash.	Sept. 21
Apr. 1	Wilkes-Barre, Pa.	Dec. 14
Sept. 1, 1923,	Sydney, New South Wales, Australia	Aug. 3

DAMS

Bids Close		See Eng. News-Record
Jan. 5	Bluefield, W. Va. Adv. Nov. 30 to Dec. 14.	Nov. 30

RAILWAYS

Bids Close		See Eng. News-Record
Jan. 1	Washington Adv. Nov. 30 to Dec. 14.	Dec. 7

EXCAVATION, DRAINAGE, IRRIGATION

Bids Close		See Eng. News-Record
Dec. 30	Greenfield, Ind. Adv. Dec. 14.	Dec. 14
Jan. 9	Glencoe, Minn.	Dec. 14

STREETS AND ROADS

Bids Close		See Eng. News-Record
Dec. 18	California	Dec. 7
Dec. 18	Cincinnati, O.	Dec. 14
Dec. 19	Ohio	Dec. 14
Dec. 19	Topeka, Kan.	Nov. 23
Dec. 19	New York Adv. Nov. 30 to Dec. 14.	Nov. 30
Dec. 19	West Virginia	Nov. 30
Dec. 19	Ohio	Dec. 7
Dec. 19	Emporia, Kan.	Dec. 7
Dec. 19	Allendale, S. C.	Dec. 7
Dec. 19	Maiden, N. C.	Dec. 14
Dec. 19	St. George, N. Y.	Dec. 14
Dec. 20	Kentucky	Dec. 14
Dec. 20	San Angelo, Tex.	Dec. 14
Dec. 21	Brooklyn, N. Y	Dec. 14
Dec. 21	Clarksville, Tex.	Dec. 14
Dec. 21	Arcata, Calif.	Dec. 7
Dec. 21	Illinois	Dec. 14
Dec. 22	Spokane, Wash.	Nov. 2
Dec. 22	Eldorado, Kan.	Nov. 23
Dec. 22	Duluth, Minn.	Nov. 30
Dec. 22	Duluth, Minn.	Dec. 7
Dec. 22	Ohio	Dec. 14
Dec. 23	Mound City, Kan.	Nov. 30
Dec. 26	California	Dec. 7
Dec. 26	Santa Rosa, Calif.	Dec. 14
Dec. 26	Penns Grove, N. J. Adv. Dec. 14.	Dec. 14
Dec. 27	Chaska, Minn.	Dec. 14
Dec. 27	Pennsylvania	Dec. 14
Dec. 28	Mobile, Ala. Adv. Nov. 30 to Dec. 14.	Nov. 30
Dec. 28	Minnesota	Dec. 7
Dec. 28	Louisiana	Dec. 14
Dec. 28	Olivia, Minn.	Dec. 14
Dec. 29	Kansas City, Kan.	Dec. 7
Dec. 30	Quebec	Nov. 23
Dec. 30	Quebec	Nov. 2
Dec. 30	Quebec	Nov. 9
Dec. 30	Quebec	Nov. 16
Dec. 30	Quebec	Nov. 30
Jan. 2	St. Louis, Mo.	Dec. 7
Jan. 5	Larned, Kan.	Dec. 7
Jan. 7	Duluth, Minn.	Sept. 28
Jan. 24	Faribault, Minn.	Dec. 14

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Dec. 18	Shelbyville, Ill.	Dec. 14
Jan. 2	St. Louis, Mo.	Dec. 7
Jan. 4	Delaware, O.	Dec. 14

BUILDINGS

Bids Close		See Eng. News-Record
Dec. 18	Bakersfield, Calif.	Nov. 16
Dec. 18	Santa Barbara, Calif.	Nov. 30
Dec. 18	Port Huron, Mich.	Dec. 14
Dec. 19	Albany, Ala.	Dec. 7
Dec 20	Binghamton, N. Y.	Nov. 23
Dec. 20	Raleigh, N. C.	Dec. 14
Dec. 20	Holmesburg (Phila. P. O.), Pa.	Dec. 14
Dec. 21	Hancock, Mich.	Nov. 30
Dec. 22	McCombs, O.	Nov. 30
Dec. 24	Kansas City, Mo.	Dec. 14
Dec. 28	Kenosha, Wis.	Nov. 30
Dec. 28	St. Charles, Mo.	Dec. 7
Jan. 2	Olean, N. Y.	Nov. 9
Jan. 2	Duluth, Minn.	Nov. 23
Jan. 2	Lawrence, Kan.	Dec. 14
Jan. 3	Cleveland, O.	Dec. 14
Jan. 4	Arlington, O.	Dec. 14
Jan. 4	Baker, La.	Dec. 14
Jan. 5	Bath, N. Y. Adv. Dec. 14.	Dec. 14
Jan. 10	Nashville, Tenn.	Dec. 7
Jan. 11	Elizabeth, N. J. Adv. Dec. 14.	Dec. 14
Mar. 23	Shreveport, La.	Nov. 9

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Dec. 18	Buildings, Electrical Work, etc. —Livermore, Calif.	Nov. 23
Dec. 20	Barges—Milwaukee, Wis. Adv. Dec. 7 and 14.	Nov. 23
Dec. 20	Lock Gates — Pittsburgh, Pa. Adv. Nov. 23 to Dec. 14.	Nov. 23
Dec. 20	Excavating Cut-offs—Wilmington, Del. Adv. Nov. 23 to Dec. 14.	Nov. 23
Dec. 20	Repairs—San Diego, Calif.	Nov. 23
Dec. 20	Pier Extension—Puget Sound, Wash.	Nov. 23
Dec. 20	Riprapping Dike—Mare Island, Calif.	Nov. 23
Dec. 20	Quarters, etc. — El Paso, Tex. Adv. Nov. 30 to Dec. 14.	Nov. 30
Dec. 21	Breakwater—Phila., Pa.	Nov. 23
Dec. 26	Barge—Wilmington, N. C. Adv. Nov. 30 to Dec. 14.	Nov. 30
Dec. 26	Remodeling—Rockford, Ill.	Dec. 7
Dec. 26	Scows—Portland, Ore.	Dec. 14
Dec. 26	Fuel Oil—Phila., Pa.	Dec. 14
Dec. 27	Post Office—Leesburg, Va. Adv. Dec. 7 and 14.	Dec. 7
Dec. 27	Quarters—Edgewood Arsenal, Md. Adv. Dec. 14.	Dec. 14
Dec. 27	Covering Railroad Track—San Diego, Calif.	Dec. 7
Dec. 28	Hospital — Tupper Lake, N. Y. Adv. Dec. 7 and 14.	Dec. 7
Dec. 28	Equipment, etc.—Tupper Lake, N. Y.	Dec. 7
Dec. 28	Radial Brick Stack—Tupper Lake, N. Y.	Dec. 7
Dec. 28	Water Tank—Tupper Lake, N. Y.	Dec. 7
Dec. 28	Remodeling—Phila., Pa.	Dec. 14
Dec. 28	Drainage System—Tupper Lake, N. Y.	Dec. 14
Dec. 28	Roads, etc.—Tupper Lake, N. Y. Adv. Dec. 14.	Dec. 14
Dec. 29	Changes — Birmingham, Ala. Adv. Dec. 14.	Dec. 14
Dec. 30	Power House — Huntington, W. Va. Adv. Dec. 7 and 14.	Dec. 7
Dec. 30	Dredging Pump—Florence, Ala. Adv. Dec. 7 and 14.	Dec. 7
Jan. 3	Piers—Pearl Harbor, H. T.	Nov. 16
Jan. 3	Drainago System—Del Rio, Tex.	Dec. 14
Jan. 5	Dredge—Cincinnati, O. Adv. Dec. 7 and 14.	Dec. 7
Jan. 15	Pipe Line Dredge—Cincinnati, O.	Dec. 14
Jan. 16	Hospital—Tacoma, Wash. Adv. Dec. 14.	Dec. 14
Jan. 24	Refrigerating and Ice-Making Plant—Pearl Harbor, H. T.	Dec. 14

MISCELLANEOUS

Bids Close		See Eng. News-Record
Dec. 16	Crushed Stone, etc.—Phila., Pa.	Dec. 14
Dec. 17	Portland Cement—St. Louis, Mo.	Dec. 14
Dec. 18	Coal Handling Plant — Melbourne, Victoria, Australia	Sept. 21
Dec. 19	Wood Paving Blocks — New York, N. Y.	Dec. 14
Dec. 20	Bridge Material, etc. — Corydon, Ia.	Dec. 7
Dec. 21	Culvert—Riverdale, Ark.	Dec. 7
Dec. 21	Portland Cement—Brooklyn, N. Y.	Dec. 14
Dec. 22	Pier—San Diego, Calif.	Dec. 14
Dec. 22	Subway—Brooklyn, N. Y.	Dec. 14
Dec. 22	Pile Driving — Milwaukee, Wis. Adv. Dec. 14.	Dec. 14
Dec. 26	Bulkhead, etc. — Mineola, N. Y. Adv. Dec. 14.	Dec. 14
Dec. 27	Dock Wall—Buffalo, N. Y. Adv. Nov. 30 to Dec. 14.	Nov. 30
Dec. 28	Crane—Kilgard, B. C.	Dec. 14
Jan. 1	Transmission Line—Spokane, Wash.	Nov. 9
Jan. 15	Pumping Machinery—Esquimalt, B. C.	Dec. 14

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Rochester—Lake Shore Water Dist. having preliminary plans prepared 10 mi. of 6½ in. mains. $180,000. R. E. Gaskin, 207 Cutler Bldg., engr.

N. C., Davidson — Plan reservoir, steel tank and pumping equipment. Supply will be obtained from wells or creek. $60,000. W. H. Thompson, clk. Mees & Mees, Kinney Bldg., Charlotte, engrs.

N. C., Roxboro—Plans new water supply system. To exceed $25,000. Ludlow Engineers, Winston-Salem, engrs.

La., Plaquemine—Voted $150,000 bonds for waterworks and electric light system.

O., Columbus—See "Streets and Roads."

Ia., Laurel—Making plans waterworks and sanitary sewerage systems. $40,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Tex., Elgin.—Voted $40,000 bonds for waterworks improvements. Address Mayor. Noted Nov. 16.

Tex., Greenville—See "Streets and Roads."

Okla., Woodward—Soon takes bids new water plant and distribution system. $175,000. Black & Veatch, 701 Mutual Bank Bldg., Kansas City Mo., engrs. Noted Dec. 7.

Colo., Grand Junction—Dec. 22, to vote on $190,000 bond issue for waterworks improvements, incl. filtration plant. Burns & McDonnell, Interstate Bldg. ,Kansas City, Mo., engrs.

Idaho, Lewiston—City retained Burns & McDonnell, engrs., Inter-State Bldg., Kansas City, Mo., to investigate and report on proposed improvement and enlargement of municipal water supply, Investigation will include all possible sources of supply, processes of purification, filtration and distribution systems. Cost $175,000 to $350,000 depending on system adopted. Noted Nov. 16.

Waterworks (Continued)

Ont., Ingersoll—Election in January to vote on $25,000 bonds for repairing waterworks plant, and extensions.

BIDS DESIRED

W. Va., Wheeling—Dec. 21, (change of date), for pumpage and power machinery for new waterworks plant. C. H. Dowler, city mgr.; adv. this issue. Noted Nov. 16.

Miss., Corinth—Dec. 21, by M. T. Sharp, city clk., improvements to waterworks system. Fuller & Beard, Title Guaranty Bldg., St. Louis, Mo., consult. engrs.; adv. this issue. Noted Oct. 12.

O., Akron—Dec. 18, by B. J. Hill, purch. agt., for 170 ton 12 in., 20 ton 8 in., 280 ton 6 in., 10 ton 6 in. and 10 ton 4 in. Class "B" pipe, 45 ton standard special castings under 6 in. and 1 ton standard special castings over 6 in.

O., Delaware—See "Industrial Works."

Mo., St. Louis—See "Miscellaneous."

Okla., Cyril—Jan. 15, by City Clerk, elevated tank, 1 mi. 6 in. and 2 mi. 4 in. pipe, 1 deep well pump. $31,000 bonds voted. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Nov. 23.

BIDS RECEIVED

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, opened bids Dec. 5, mains in Astoria St., here, from F. L. Paino, 572 1st St., Brooklyn, $39,731; Marino Paino Co., $40,305; N. Peduto, $43,215. Noted Nov. 30.

Que., Montreal—R. Bauset, city clk., opened bids distribution control building for new pumping station on Atwater Ave., from E. G. M. Cape & Co., Cathcart St., $167,000; Quinlan Robertson & Janin Co., 52 Duluth Bldg., control building and appurtanences, $79,000, steel pipe and appurtanences, $79,000, total $167,700; J. Quinlan Co., Green Ave., control building and appurtanences, $80,354, steel pipe and appurtanences, $79,855, total $170,307.

CONTRACTS AWARDED

N. C., Kings Mountain — Constructing 500,000 gal. concrete reservoir, pumping station, concrete sewerage sedimentation tank, 2 mi. 6 to 14 in. water line and 2 mi. sewer line, to Guion & Withers, Gastonia, $59,770. Noted Nov. 16.

N. C., Newton—Constructing filtration plant, 7 mi. water and sewer lines, to Electrical Constr. Co., 26 West 5th St., Charlotte, $75,000. Noted July 20.

Tenn., Memphis — Artesian Water Co. pumping station, 400,000 gal. reservoir, etc: Contr. 7, superstructures, main building, part of equipment and outside work, to Ganger-Korsmo Co., 301 Endicott Bldg., St. Paul, Minn., $474,815; Contr. 8 coal and ash handling system, to **Link-Belt** Co., 910 South Michigan Ave., Chicago, $26,800; Contr. 9 secondary pumping units, to Worthington Pump & Mchy. Co., 115 Bway., New York City, $8,700; Contr. 10, engines, generators and switch boards, to Chase Engine & Mfg. Co., Memphis, (street address not available) $22,272. Noted Oct. 26.

O., Cleveland—Cuyahoga Co. 2,690 ft. 12 in. c. i. mains in Ridge Rd. north of Linndale Rd., to Gantose Constr. Co., Columbia Bldg., $15,338. Noted Dec. 7.

O., Cleveland—For 2,700 ft. 36 and 48 in. c.i. mains in Park Lane, Carnegie and Frank Aves., Baldwin-Fairmount Project, Contr. 17, to D. Lowensohn, Davis & Farley Bldg., $234,690.

Tex., Pampa—For 14,700 ft. 6-8 in. c.i. Class B pipe, 14,000 ft. 2 in. galvanized iron pipe, 25 fire hydrants, 22 gate valves, etc., in place, to R. Frick, Plainview, $25,992. Noted Nov. 23.

Sewers

PROPOSED WORK

N. Y., Saranac Lake—Sewer and Water Bd. rejected bids opened Nov. 27, furnishing two 3,000,000 gal. horizontal double-acting duplex plunger type pumps and chain drive equipment for each pump. Noted Nov. 23.

N. J., Newark—Plans prepared for additional storm water drains to relieve flooded conditions during heavy storms in sewer districts in southeast section of city, principally along Pennsylvania R.R. tracks and Frelinghuysen Ave. $292,000. Alexander Potter, 50 Church St., New York City, civil engr.

Pa., Berwick—Plans new sewers. $80,000. Alexander Potter, 50 Church St., New York, consult. engr. This corrects report in Nov. 30 issue.

Pa., Lewistown—See "Miscellaneous" under Bids Desired.

N. C., Davidson—Plans sewerage system. $30,000. W. H. Thompson, clk. Mees & Mees, Kinney Bldg., Charlotte, engrs.

O., Akron — Plans to issue $1,200,000 bonds for trunk sewers in various parts of city, incl. North Hill, East Akron, South Akron and West Hill. This is part of $3,000,000 bonds recently voted. J. E. Root, Delaware Bldg., engr. Noted Nov. 23.

Mich., Highland Park (Detroit P. O.)—Had plans prepared 1,518 ft. Sects. 1 and 2, public sewers, 2 and 3 ring brick, 194 ft. 60 in. pipe and 1,324 ft. 48 in. pipe. L. C. Whitsit, 28 Gerald Ave., Highland Park, engr.

Mich., Holland—Had surveys made for rein.-con. sewage disposal plant. $50,000. Pearse, Greeley & Hansen, West Adams St., Chicago, engrs.

Ill., Champaign—See "Urbana."

Ill., Urbana—Urbana-Champaign Illinois Sanitary Dist. having plans prepared for intercepting sewers and sewage disposal plant. $500,000. Pearce, Greeley & Hansen, 39 West Adams St., Chicago, engrs.

Ia., Laurel—See "Waterworks."

Kan., Pittsburg—Soon takes bids sewage disposal plant. $125,000. Black & Veatch, 701 Mutual Bank Bldg., Kansas City, Mo., engrs. Noted Nov. 30.

Kan., Wichita—Making plans 13 blocks storm water sewers. $120,000. P. L. Brockway, city engr.

Mo., Gallatin—Soon takes bids new sanitary sewerage system. $60,000. Shockley Eng. Co., 800 Graphic Arts Bldg., Kansas City, engrs.

Mo., Neosho—Plans election soon to vote on $120,000 bonds for new sanitary sewerage system. Black & Veatch, 701 Mutual Bank Bldg., Kansas City, engrs.

Tex., Greenville — See "Streets and Roads."

Wash., Pullman—Having plans prepared sanitary sewage disposal system. $63,000. Green & Green, Spokane, (street address not available), engrs. Noted Oct. 19.

Ont., Ft. Erie—Plans sewage disposal plant. $45,000. W. C. Redfern, c/o James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Milton—Plans sewerage system. $50,000. G. A. Hemstreet, clk.

BIDS DESIRED

Pa., Wilkes-Barre—Jan. 2, by F. H. Gates, city clk., brick or segmental block sewer. B. K. Finch, city engr.; adv. this issue.

Miss., Corinth—Dec. 21, by M. T. Sharp, city clk., improvements to sewerage system. Fuller & Beard, Title Guaranty Bldg., St. Louis, Mo., consult. engrs.; adv. this issue. Noted Oct. 12.

Wis., Milwaukee—See "Miscellaneous."

Kan., Oakley—Dec. 18, by K. W. Davis, city clk., sanitary sewerage system and disposal works, incl., 25 flush tanks, 63 manholes, 260 lin.ft. 12 in. c.i. pipe, 24,710 lin.ft. 8-12 in. vitr. clay pipe, 26,889 lin.ft. trenching, 5,000 lin.ft. ¾ in.-2 in. W S pipe, 42 in. covering. C. A. Hoskins, 517 Finance Bldg., Kansas City, Mo., consult. engr. Noted Nov. 16.

Neb., Lincoln—Dec. 23, by Bd. Trustees Sanitary Dist. 1, Lancaster Co., for labor on c.i. pipe, and material and labor on other metal for sprinkling sewage filter. Bids also on 27,000 cu.yd. crushed stone in place in said filter. W. C. Israel, secy. Grant, Fulton & Letton, Bankers Life Bldg., engrs.

Okla., Sand Springs — Dec. 19, sanitary sewer outlet and storm sewers, bids on pre-cast concrete monolithic and segment block sewer pipes. Sanitary sewers include 3,050 ft. 12 in., 3,100 ft. 24 in. and 620 ft. 30 in. pipe; storm sewers include 2,650 ft. 12 to 30 in. and 4,500 ft. 36 to 72 ft. pipe. $90,000. Holway Eng. Co., 505 New Wright Bldg., Tulsa, engrs. Noted Aug. 31.

BIDS RECEIVED

N. J., Newark—Passaic Valley Sewerage Comrs., 128 Market St., opened bids Dec. 5, local sewer connections at Bridge and Orange Sts., from H. L. Harrison, Newark (street address not available), $29,800; Culp Co., Inc., 412 East 37th St., Paterson, $29,858; Arnolt-More, Inc., 45 Clinton St., $32,500.

Mich., Springwells—B. P. Esper, village clk., opened bids Nov. 28, sewers, (1) Sect. 20, incl. 430 ft. 36 in., 344 ft. 54 in., 978 ft. 39 in., 340 ft. 60 in., 1,953 ft. 42 in., 580 ft. 66 in., 335 ft. 48 in. pipe (2) Sect. 21 incl. 305 ft. 27 in., 468 ft. 72 in., 408 ft. 36 in., 626 ft. 54 in., 653 ft. 63 in. pipe, from C. R. Lennane, 2631 Woodward Ave., Detroit, (1) $74,618, (2) $42,541; W. Blanck & Co., 823 Ford Bldg., Detroit, (1) $76,984; J. Porath, 745 Griswold St., Detroit, (1) $77,065, (2) $42,283; Detroit Drainage Constr. Co., 5099 Lemay Ave., Detroit, (2) $40,854. Noted Nov. 23.

CONTRACTS AWARDED

Pa., Mt. Lebanon—Sanitary sewerage system, incl. 2,500 lin.ft. 10 in. and 7,000 lin. ft. terra cotta pipe, Sunset Hills, to M. Ott & Co., 412 Warrington Ave., Pittsburgh. Engrs. est. $25,000.

N. C., Newton—See "Waterworks."

Wis., Madison—Wisconsin Hospital Assn., sewage disposal plant incl. equipment, to T. S. Willis & Co., 328 Hayes Blk., Janesville. Noted Nov. 23.

Mo., St. Joseph—For Black-Snake Main Sewer, to Reinert Bros. Constr. Co., 1208 North 5th St., and Pub. Wks. Co.

Mo., St. Louis—See "Streets and Roads."

Wash., Seattle—Bd. Pub. Wks., sewers and grading in 16th Ave. N.W., et al., 4,016 ft. 10-15 in. clay pipe, 18,850 cu.yd. grading, to J. W. Tomei & Co., 1017 East 66th St., $30,298.

Calif., Oakland—Sewers in Melrose Acres, to W. J. Schmidt, 2025 Shattuck Ave., 17,960 ft. 8 in. vitr. pipe at $1.50, 36 manholes $100, 21 standpipes $10, 63 lampholes $10. Noted Oct. 26.

Calif., Santa Ana—Cities of Santa Ana, Orange, Anaheom and Fullerton, constructing outfall sewer line to ocean, to J. Chutuk, Bullard Bldg., Los Angeles $138,855. Noted Nov. 16.

Waste Disposal

PROPOSED WORK

Fla., Tapa—Plans incinerator and repairs to present one. $30,000. R. D. Martin, city engr.

Bridges

PROPOSED WORK

N. Y., Elma—Had plans prepared by G. C. Diehl, 577 Ellicott Sq., Buffalo, and takes bids within month for Porterville Bridge over Buffalo Creek on town line between here and Marilla, Erie Co., to have 140 ft. steel truss span, concrete abutments about 14 ft. high, 20 ft. clear roadway, rein.-con. floor.

Wis., Antigo—See "Streets and Roads."

Wis., Black River Falls—Wisconsin Hy. Comn., Madison, plans 8 span truss bridge, here. $130,000. C. Burlow, state bridge engr.

Wis., Black River Falls—See "Streets and Roads."

Wis., Darlington — See "Streets and Roads."

Wis., Elkhorn—See "Streets and Roads."

Wis., Friendship — See "Streets and Roads."

Wis., Hayward—See "Streets and Roads."

Wis., Jefferson—See "Streets and Roads."

Wis., Lancaster—See "Streets and Roads."

Wis., Medford—See "Streets and Roads."

Wis., Milwaukee — See "Streets and Roads."

Wis., Oconto—See "Streets and Roads."

Wis., Richland Center—See "Streets and Roads."

Ia., Northwood—Worth Co. had plans prepared for four I-beam and 3 pony truss bridges, 49 culverts and extensions, 1,974 cu.yd. rein.-con., 85.85 ton steel, 124,095 lb. reinforcing. $59,538. F. R. Lyford, Northwood, engr.

Okla., Bartlesville—Washington Co. had plans prepared rein.-con. bridge over Caney River on 7th St., 300 ft. arch, 24 ft. roadway. $50,000, Wood & Witten, 245 Lynch Bldg., Tulsa, engrs.

Ont., Collingwood—Simcoe Co. plans to rebuild Edenvale Bridge, 160 ft., concrete or steel, near here. $50,000. R. J. Fletcher, Barrie, co. clk.

B. C., Courtenay—Dept. Pub. Wks., Victoria, having plans prepared and takes bids about January, steel bridge, concrete piers and abutments, 250 ft. long incl. approaches, over Courtenay River. $30,000. P. Philip, c/o Dept. Pub. Wks., Victoria, engr.

BIDS DESIRED

Mass., Boston—Dec. 19, by J. A. Rourke, comr. Pub. Wks. Dept., City Hall, one 110 ft. span, steel and concrete girder bridge, 100 ft. wide, over Boston & Albany R.R. on Beacon St. $100,000. J. E. Carty, City Hall, bridge engr.

Pa., Wilkes-Barre—April 1, concrete and iron bridge over South St. $500,000. Greiner Eng. Co., Fidelity Bldg., Baltimore, Md., consult. engrs. Noted Oct. 19.

Ohio—See "Streets and Roads"..

Illinois—Dec. 21, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, 2 rein.-con. bridges, one 22 ft. span and one with two 50 ft. spans, Route 1, Sect. 13-B, Wabash Co.; one rein.-con. two 50 ft. spans, Route 1, Sect. 15-B, Lawrence Co.; 2 rein.-con., 1 with eleven 40 ft. spans, 1 with twenty-two 40 ft. spans, also substructure for steel bridge with three 150 ft. spans, Route 1, Sect. 16-B, Lawrence Co.; super-

Bridges (Continued)

structure for 1 steel, three 150 ft. spans, Route 1, Sect. 16-C, Lawrence Co.; 1 steel bridge with three 150 ft. spans, Route 1, Combination Z, Lawrence Co.; 3 rein.-con., 1 with two 50 ft. spans, 1 with twenty-two 40 ft. spans, 1 with eleven 40 ft. spans, also substructure for 1 steel with three 150 ft. spans, Route 1, Combination A-1, Lawrence Co.; 5 rein.-con. bridges, 1 with one 22 ft. span, 2 with two 50 ft. spans, 1 with twenty-two 40 ft. spans, 1 with eleven 40 ft. spans, also substructure for 1 steel with three 150 ft. spans, Route 1, Combination C-1, Wabash-Lawrence Co.; 5 rein.-con., one with one 22 ft. span, 2 with two 50 ft. spans, 1 with twenty-two 40 ft. spans, 1 with eleven 40 ft. spans, also 1 steel with three 150 ft. spans on Route 1, Combination D-1, Wabash-Lawrence Co.; 2 rein.-con., 1 with two 12 ft. spans and 1 with two 55 ft. spans, Route 26, Sect. 1-B, Stephenson Co.; 3 rein.-con., 1 with one 50 ft. span, 1 with three 40 ft. spans and 1 with three 60 ft. spans, Route 42, Sect. 112, Cook Co.; repairing 1 rein.-con., with one 20 ft. span, Route 9, Sect. W-1, Cook Co. C. H. Older, ch. highway engr.

Illinois—See "Streets and Roads."

Minn., Windom—Dec. 28, by State Hy. Dept., St. Paul, Bridge 3799 over Des Moines River, here, three 40 ft. concrete spans, 24 ft. roadway, two sidewalks, $25,000. J. T. Ellison, state bridge engr.

Colo., Colorado Springs—Dec. 19, by State Hy. Dept., Denver, steel and timber bridge on Hoffman Crossing of San Creek about 5 mi. east of here, El Paso Co., 379,200 lb. structural steel, 47,500 ft. b.m. creosoted lumber, 1,400 cu.yd. borrow fill. $26,399. L. D. Blauvelt, state highway engr.

BIDS RECEIVED

Alabama—State Hy. Dept., Montgomery, constructing concrete bridges, girder and slab type, on Sects. A and B, Birmingham-Montgomery Highway, Shelby Co., from J. W. Gwin, Jefferson Co. Bank Bldg., Birmingham, $80,447; Estes, Williams, Ragsdale Co., Scimitar Bldg., Memphis, Tenn., $81,189; F. M. Dobson & Son, 107 Pine St., Montgomery, $81,260. Noted Nov. 16.

Colorado—See "Streets and Roads."

Wash., Seattle—Bd. Pub. Wks. opened bids Dec. 8, bridge over West Waterway, West Spokane St., from Jahn & Bressi, Thompson Bldg., Strauss design $444,923, City design $460,700. Combination bid submitted by 3 contractors as follows: furnishing and delivering steel at bridge site, from Bethlehem Shipbuilding Corp., Morris Bldg., Phila., $260,863; erecting steel, from Gerrick & Gerrick Co., Central Bldg., $105,400; electrical equipment, from Butte Electric and Mfg. Co., 534 Folsom St., San Francisco, Calif., $24,422. Noted Nov. 16.

CONTRACTS AWARDED

N. J., Cape May—Cape May Co., bridge across Grassey Sound Channel, incl. Strauss bascule draw span, etc., on line of North Wildwood to Burleigh Rd. in Middle Twp., to C. R. Camp, 10 South 18th St., Phila., $167,260. Noted Nov. 16.

N. J., Freehold—Monmouth Co., Court House, reconstructing Grand Ave. bridge N-14, over Sunset Lake, consisting of three 40 ft. spans, etc., to O. J. Melee, 72 Branchport Ave., Long Branch, $19,059. Noted Nov. 16.

Mich., Dearborn—State Hy. Dept., Lansing, Bridge 820304, pony pratt truss, 86 ft. long, 27 ft. roadway, two 5 ft. walks, incl. 223,000 lb. steel, to Standard Eng. & Constr. Co., Toledo, O., (street address not available), $31,067.

Colorado—See "Streets and Roads."

Dams

PROPOSED WORK

Pa., Phila.—Takes bids in spring constructing concrete dam. $600,000. C. E. Davis, City Hall, engr.

N. H., Bristol — Utilities Power Co., Meredith, having plans prepared by Jackson & Moreland, archts. and engrs., 387 Washington St., Boston, Mass., 55 x 1,200 ft. dam, and 1 story hydro-electric power plant, on Pemigewassett River, Ayers Island. $600,000. Noted Sept. 28.

Ind., Ft. Wayne—Bd. Pub. Wks. having plans prepared by C. Brossman, engr., 1503 Merchants Blk. Bldg., Indianapolis, and takes bids within 60 to 90 days, collapsible dam, near Walton Ave. Bridge. Cost not to exceed $200,000. F. Randall, city engr.

Tex., Laredo—R. W. Morrison plans new power dam across river, 5 mi. from here, 30 ft. high to develop 5,000 hp.

Calif., Wendel—See "Excavation, Drainage and Irrigation."

B. C., Cloverdale—Surrey Dyking Comrs. sold $25,000 bonds to repair Nicomeke Dam, here.

Railways

PROPOSED WORK

Pa., Phila.—See "Miscellaneous."

Washington — Biles-Coleman Mill Co., Okanogan, having surveys made constructing standard gage logging road from Lumber mill to Omak Creek. $40,000. M. D. Mohler, Okanogan, ch. engr.

Ontario—Waterloo Wellington Ry., King St., W., Kitchener, seeking franchise to run into Guelph, 15 mi. electric line. W. H. Breithaupt, pres.

Excavation, Drainage, Irrigation

PROPOSED WORK

Utah, Price—Price River Conservation Water Dist. plans irrigation system. $750,000. Engineer not selected.

Wash., Granger—Granger Irrigation Dist. adopted plans of Reclamation Service for irrigating 1,500 acres of land near here. $225,000.

Calif., Wendel—J. J. Fleming plans to organize district to irrigate 20,000 acres, incl. 30 mi. canal, 15 ft. on top, 10 ft. wide at bottom, concrete diversion dam, 5 ft. high, 50 ft. long, storage dam to store 65,000 ac.ft., concrete or earthfill construction. $350,000. C. R. Caudel, Wendel, engr.

Ont., Owen Sound—Dept. Pub. Wks., plans dredging operations in harbor to deepen channel. $25,000. S. H. Craig, Royal Bank Bldg., London, engr.

BIDS DESIRED

Ind., Greenfield—Dec. 30, at Surveyors Office, Room L, Court House, constructing George W. Putterbaugh et al Ditch. C. Boone, Greenfield, engr.; adv. this issue.

Minn., Glencoe—Jan. 9, by McLeod Co., Co. Ditch 36, Hale Twp., 15,000 lin.ft. open ditch, 72,373 cu.yd. excav., 4,000 lin.ft. lateral, 14,839 cu.yd. excav., 20,000 lin.ft. 6-16 in. tile. $25,000. J. J. Leasman, co. aud. C. Madson, Hutchinson, engr.

CONTRACTS AWARDED

Wis., Mauston — Farm Drainage Bd. Juneau Co. 26,500 ft. open ditch, 80,070 cu.yd., 8 ft. deep, 11,390 ft. 12 in. tile drain, to J. Corbett, Babcock. Engrs. est. $25,000.

Calif., Knights Landing (Grafton P. O.)—Sacramento River West Side Levee Dist., Mills Bldg., San Francisco, enlarging 6 mi. levee, 175,000 cu.yd. earthwork, to D. McDonald, Box 170, Sacramento, $35,875.

Streets and Roads

PROPOSED WORK

N. Y., Richmond Hill—Park Bd. at office Dept. Parks, Municipal Bldg., New York, rejected bids opened Nov. 29, improving main drive in Forest Park, Boro of Brooklyn, here. Will readvertise. Noted Dec. 7.

N. C., Davidson—Plans hard surfacing various streets. $30,000. W. H. Thompson, clk. Mees & Mees, Kinney Bldg., Charlotte, engrs.

N. C., Henderson—Plans paving various streets. $100,000.

N. C., Reidsville—City sold $300,000 bonds for street and sidewalk paving.

Fla., Eustis—Plans curbing and paving Woodward Ave., 2 in. sheet asphalt on 6 in. compressed Ocala limestone. $27,000. J. R. Ashmore, clk.

La., Monroe—Plans to expend $500,000 for paving work. J. S. Reynolds, city engr.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids which were to be opened Dec. 19, grading, bridging and paving 1,549 mi. Sect. "B" Perrysburg-Fostoria Rd., Wood Co., bituminous macadam $38,781; also bids which were to be opened Dec. 22 for concrete beam bridge on Sect. "B" Mansfield-Millersburg Rd., Holmes Co., $6,320. Noted Dec. 7.

O., Cincinnati — Plans repaving Gilbert Ave. viaduct, 2,400 lin.ft. steel curb, 1,000 sq.ft. sidewalk, 6,500 sq.yd. vitr. brick, 600 sq.yd. granite block (relaid), etc. $39,000. F. S. Krug, City Hall, engr.

O., Cleveland—Cuyahoga Co. plans grading and paving Royalton Rd. from State to Brecksville Rds., concrete, $226,192; 2 sections of S. O. M. Center Rd. in Solon, concrete, $186,693. F. Lander, Court House, engr.

O., Columbus — Having plans prepared grading, curbing, laying water services and paving 1,096 ft. 5th Ave. from Perry St. to alley west of Parker St., 60 ft., brick $120,440, asphalt $108,193; widening, grading and paving 4,860 ft. Oak St. from 18th St. to Miller Ave., 33 ft., asphalt or brick, $51,000. R. H. Simpson, City Hall, engr.

Ill., Belleville—Plans new 5,000 ft. street alongside Southern Ry. tracks between West Main and A Sts. Plan election to vote on $100,000-125,000 bonds. H. Heinzelman, city engr.

Ill., Columbia—City and Monroe Co. soon take bids paving and curbing 6,000 ft. Main St., 36 ft., 4,618 cu.yd. earth excav., 24,000 sq.yd. 7 in. concrete. $50,000. W. A. Fuller, 1917 Ry. Exch., St. Louis, Mo., engr.

Ill., Lewistown—Soon receives bids paving 3,600 ft. North and South Main St., 12-18 ft. (state and city will share cost); 2,600 ft. North and South Bway., 30 ft.; 1,376 ft. East Euclid Ave., 24 ft.; 1,635 ft. West Euclid Ave., 24 ft.; 356 ft. Milton Ave., 24 ft.; bituminous filled brick on 4 in. concrete. $100,000. A. W. Fuller, 1917 Ry. Exch. Bldg., St. Louis, Mo., engr.

Wis., Antigo—Langlade Co. appropriated $86,384 for county and state aid road and bridge construction. C. Olsen, comr.

Wis., Black River Falls—Jackson Co. appropriated $105,757 for state and county aid road and bridge construction during 1923. W. Tibbits, comr.

Wis., Darlington—Lafayette Co. appropriated $108,237 for county and state aid road and bridge construction in 1923. G. H. Priestley, comr.

Wis., Durand—Pepin Co. appropriated $40,569 for state and county aid road and bridge construction during 1923. G. A. Goss, comr.

Wis., Elkhorn—Walworth Co. appropriated $438,333 for county and state aid road and bridge construction during 1923. H. J. Peters, comr.

Wis., Friendship—Adams Co. appropriated $26,432 for county and state aid road and bridge construction in 1923. J. A. McGregor, comr.

Wis., Hayward—Sawyer Co. appropriated $38,635 for county and state aid road and bridge construction during 1923. E. J. Collett, comr.

Wis., Jefferson—Jefferson Co. appropriated $181,824 for county and state aid road and bridge construction in 1923. R. D. Royce, comr.

Wis., Juneau—Plans paving Oak, Oak Grove, South Main, North Main, Hustisford, Miller, Center, Fair and Mill Sts., 20-30 ft., concrete or asphalt. $30,000. Engineer not selected.

Wis., Lancaster—Grant Co. appropriated $212,174 for state and county aid road and bridge construction during 1923. H. Mink, comr.

Wis., Medford—Taylor Co. appropriated $94,052 for state and county aid road and bridge construction in 1923. C. Kelnhofer, comr.

Wis., Milwaukee—Milwaukee Co. appropriated $509,848 for state and county road and bridge construction in 1923. W. F. Cavanaugh, comr.

Wis., Oconto—Oconto Co. appropriated $61,000 for state and county aid road and bridge construction during 1923. E. W. McAllister, comr.

Wis., Richland Center—Richland Co. appropriated $139,511 for county and state aid road and bridge construction during 1923. W. V. Robinson, comr.

Ia., Colflax—Making plans plain concrete paving. $100,000. E. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., engrs.

Ia., Wapello—Takes bids in January for 30 blocks plain concrete paving. $200,000. E. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., engrs. Noted Nov. 16.

Kan., Wichita — M. Roseberry, engr. Sedgwick Co. soon takes bids paving and bridging 12½ mi. North Laurence Ave. from city limits to county line, 18 ft., brick or concrete.

S. D., Sioux Falls—Having plans prepared paving 23,415 sq.yd. various streets. $60,000. W. C. Leyse, city aud.

N. D., Bismarck—Burleigh Co. rejected bids opened Oct. 4, grading and gravel surfacing Federal Aid Project 174., west of McKenzie. Noted Oct. 19.

Missouri—State Hy. Dept., Jefferson City, plans grading and 16 ft. gravel pavement on 13.5 mi. road from Frederick to Dexter and Kenneth, 24 ft., Federal Aid Project 211, Stoddard Co., 10.46 mi. road from Stanberry to Albany, 24 ft., Federal Aid Project 57 B, Gentry Co., 8.78 mi. road on Old Wire Rd. through Lebanon, Special Rd. Dist., 24 ft., Federal Aid Project 89 A, Laclede Co., 8.1 mi. road from Clinton to Sedalia, 24 ft., Federal Aid Project 133 A, Henry Co.; grading and 12 ft. gravel pavement etc. on 18 mi. road from Jefferson City to Fulton through New Bloomfield Special Rd. Dist., 24 ft., Federal Aid Project 97, Callaway Co., 6 mi. road from New Florence to McKittrick through McKittrick Special Rd. Dist., 24 ft., Federal Aid Project 141, Montgomery Co., 17.4 mi. road from Oklahoma to St. Louis, through Granby Special Rd. Dist., 24 ft., Federal Aid Project 155, Newton Co., 25 mi. road from Iron Mountain

Streets and Roads (Continued)

to Salem Point on Poplar Bluff St. Louis Highway, 1 mi. north at Belleview, 24 ft., Federal Aid Project 193, Iron Co., 25.2 mi. road from Fredericktown to Marble Hill, 24 ft., Federal Aid Project 202, Bollinger Co., 16 mi. road from Fredericktown to Marble Hill Advance, 24 ft., Federal Aid Project 208, Bollinger Co., 16.76 mi. road from Willow Springs to Mountain View, 24 ft., Federal Aid Project 138, Howell Co., 23.03 mi. road from Ironton to Fredericktown and Patton, 24 ft., Federal Aid Project 203, Madison Co., 19 mi. road from Poplar Bluff to Jefferson City, 24 ft., Federal Aid Project 207, Butler Co., 3 mi. road from Doniphan to Grandin, 24 ft., Federal Aid Project 201, Ripley Co.; grading and 18 ft. gravel pavement on 8.17 mi. road from Stanbury to Albany, 24 ft., Federal Aid Project 37 B, Gentry Co.; grading and 9 ft. gravel pavement, etc. on 7.72 mi. road from Clinton to Springfield through Osceola Special Rd. Dist., 24 ft., Federal Aid Project 100 B, St. Clair Co., 28.5 mi. road from Ironton to Piedmont, 24 ft., Federal Aid Project 105 D, Iron Co.; grading, etc. 2.1 mi. road on Washington Park Blvd from Kansas City north to Van Horn Rd., 32 ft., Federal Aid Project 61, Jackson Co., 7.96 mi. road from Greenfield to Stockton, 24 ft., Federal Aid Project 213, Dade Co. 5.93 mi. road from Nevada to Springfield, 24 ft., Federal Aid Project 192, Cedar Co., 8.24 mi. road from Potosi to Steelville, 20 ft., Federal Aid Project 160 A, Washington Co., 11.9 mi. road from Doniphan to Grandin and Jefferson City through Jordan Special Rd. Dist., 24 ft., Federal Aid Project 200, Ripley Co., 4.4 mi. road from Popiar Bluff to Doniphan through Logans Creek special Rd. Dist., 24 ft., Federal Aid Project 206, Ripley Co., 4.09 mi. road from Forsyth to Branson through Branson-Kirbyville Special Rd. Dist., 24 ft., Federal Aid Project 191, Taney Co., 4.02 mi. road from Forsyth to Branson, Mt. James Special Rd. Dist., 24 ft., Federal Aid Project 189, Taney Co., 49 mi. road from Crane, Galena and Reed Springs to Blue Eye, 20 ft., Federal Aid Project 161, Stone Co., 15.7 mi. road from Rolla to Houston, 24 ft., Federal Aid Project 110, Phelps Co., 8.5 mi. road from Huntsville to Keytesville, 24 ft., Federal Aid Project 44 B, Randolph Co., 5.1 mi. road from Poplar Bluff to Doniphan and Alton through Fairdealing Special Rd. Dist., 24 ft., Federal Aid Project 216, Ripley Co.; grading, 9 ft. concrete and 7 ft. gravel surface on 7 mi. road from Kennett to Hayti and Caruthersville, 30 ft., Federal Aid Project 212, Dunklin Co.; grading, 12 ft. gravel and 16 ft. concrete surface on 9.9 mi. road from Cairo to Poplar Bluff, 24 ft., Federal Aid Project 204, Butler Co.; grading, 12 ft. gravel and macadam surfacing 15.7 mi. Natl. Old Trails Rd. from St. Louis to Kansas City through Calwood, Williamsburg Special Rd. Dist., 24 ft., Federal Aid Project 144, Callaway Co.; grading, 16 ft. chat or gravel pavement, etc. on 2.25 mi. road from Eldorado Springs to Osceola, Eldorado Springs Special Rd. Dist., 24 ft., Federal Aid Project 215, Cedar Co.; grading and 18 ft. concrete pavement on 9.02 mi. road from Pikes Peak Ocean to Ocean Highway, 30 ft., Federal Aid Project 205, Buchanan Co.; grading and 16 ft. waterbound macadam surface on 10.8 mi. road from Sedalia to Marshall through Longwood Special Rd Dist., 24 ft., Federal Aid Project 131, Pettis Co.; grading and 16 ft. asphaltic macadam surface on 8 mi. Natl. Old Trails Rd. from Malta Bend to Marshall, through Marshall Special Rd Dist., 24 ft., Federal Aid Project 16, Saline Co.; grading and 16 ft. chat surfacing 6.6 mi. road from Clinton to Warrensburg, 24 ft., Federal Aid Project 127, Henry Co.; grading and 18 ft. brick pavement on 8.22 mi. Jefferson Highway from north line of Parksville Special Rd. Dist. to east line of Platte Co., 24 ft., Federal Aid Project 48, Platte Co.; grading and 16 ft. Hereulaneum slag surface, etc. on 2.55 mi. Kings Highway, 24 ft., Federal Aid Project 185, Jefferson Co.; grading and constructing approach fills to bridge over Youngs Creek on 0.189 mi. road from Mexico to Moberly, 24 ft, Federal Aid Project 194, Audrain Co. B. H. Piepmeier, state highway engr.

Mo., St. Louis—Plans improving Blase St. from Bway. 500 ft. eastward, 1,530 sq.yd. 7 in. concrete, 6,900; 750 ft. Beacon Ave. from Lilian to Prange Sts., 24 ft., 2,645 sq.yd. Warrenite or asphalt, 1,500 ft. concrete gutter, $11,700; 900 ft. Geraldine Ave. from Lilian to Thekla Sts., 30 ft., 3,435 sq.yd. warrenite, 1,800 ft. concrete curbing, $17,400; 500 ft. Osceola St. from Ohio St. to Bway., 30 ft., 1,735 sq.yd. concrete, integral curbing, $7,500. W. W. Horner, City Hall, engr.

Tex., Brady—McCulloch Co. election Dec. 28, to vote on $450,000 bond issue for construction Puget Sound-Gulf Highway from Mason Co. line to Concho Co. line. Address E J. Adkins, co. judge.

Tex., Crockett — Houston Co. making plans grading and gravel surfacing 6.9 mi. State Highway 21, 16 ft., 51 acres clearing, 1,036 cu.yd. concrete, 46,432 cu.yd. roadway, 45,600 cu.yd. borrow, 2,067 cu.yd. dry and 184 cu.yd. wet structural excav., 16,214 cu.yd. gravel. $124,083. G. W. Courter, co. engr.

Tex., Greenville—Dec. 30, to vote on $150,000 bonds for street paving, water and sewer extensions. A. D. Duck, city engr.

Tex., Henderson—Rusk Co. making plans clay and gravel surfacing 14.92 mi. State Highway 26, from 8 mi. south of here to Nacogdohes Co., 16 ft., 26,261 cu.yd. gravel and 9,516 cu.yd. clay. $49,343. Hess & Skinner, Southwestern Life Bldg., Henderson, engrs.

Tex., Houston—Submitted $250,000 bond issue to Attorney Generals Dept., Austin, for approval, paving street, etc. J. C. McVey, city engr.

Tex., Kaufman—Terrell Rd Dist., Kaufman Co., voted $55,000 bond issue for additional highway improvements. L. M. Ferlet, co. engr.

Tex., Marshall—Takes bids latter part December paving 2,100 ft. West Houston Ave., 45 ft. and 50 ft., concrete, brick or bitulithic. $50,000. S. H. Cook, mayor.

Tex., Nacogdoches—Dec. 23, to vote on $225,000 bond issue paving city streets. V. E. Middlebrook, mayor.

Tex., Uvalde—Uvalde Co. making plans graveling 80 mi. various county roads also 30 mi. bituminous state aid roads. $500,000. M. B. Hodges, co. engr.

Tex., Wharton—Attorney General's Dept., Austin, approved $80,000 special road bond issue, Wharton Co. Nagle-Witt-Rollins Eng. Co., co. engrs.

Utah, Eureka—Plan concrete paving 3 mi. main streets, 18 ft. $100,000. F. N. Huddleson, Kearns Bldg., Salt Lake City, engr.

Calif., Bakersfield—Had plans prepared improving portions East 19th, Miller, Fremont and Eureka Sts., 39,266 sq.yd. cement concrete walks, 7,316 lin.ft. cement concrete curbs; portion Jefferson St. and Beale Ave., 34,160 sq.ft. 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete, 3,204 sq.ft. cement concrete gutters, 1,157 lin.ft. cement concrete curb, 4,608 sq.ft. cement concrete walks, etc. W. D. Clarke, city engr.

Calif., Merced—Merced Co. rejected bids improving Rd. Dist. 3. Will readvertise. Noted Nov. 9.

Calif., San Diego—Plans improving Chatsworth Blvd., Lytton and Curtis Sts., 91,418 sq.ft. 1½ warrenite bitulithic on 2½ in. asphaltic concrete, 9,240 sq.ft. 2 in. warrenite bitulithic, 535 lin.ft. concrete curb, etc.; Ibis Court, Hawk, Douglas and Ibis Sts., 63,077 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, 1,167 sq.ft. concrete sidewalk, 254 lin.ft. concrete curb, etc. F. A. Rhodes, city engr.

Calif., San Francisco — City and San Francisco Co. had plans prepared improving Broad St. between Capitol Ave. and Orizaba St., 3,849 cu.yd. excav., 60 cu.yd. fill, 1,987 lin.ft. concrete curb, 330 sq.ft. artificial stone walks, 50,547 sq.ft. asphaltic concrete pavement, etc., $21,400; 48th Ave. between Kirkham and Lawton Sts., 1,294 lin.ft. concrete curb, 660 sq.ft. artificial stone walks, 2,400 sq.ft. concrete gutter, 26,493 sq.ft. asphaltic concrete pavement, etc., $10,500. M. M. O'Shaughnessy, city engr.

Quebec—Dept. Rds., Quebec, takes bids in January, graveling 54.01 mi. Montreal-Mt. Laurier Highway, 2.5 mi. in St. Agathe, 4.43 mi. in Ivry, 8 mi. in Salaberry, 7.5 mi in Wolfe, 9.4 mi. in Clyde, 1.9 mi. in Labelle, 0.3 mi. in L'Annunciation, 6.56 mi. in Joly, 12.57 mi. in Marchand, 0.85 mi. in Nemeninque, 9.1 mi. Richmond-Yamaska Highway, 8.85 mi. in Wickham, 0.25 mi. in Grantham, 27.5 mi. Woburn-Victoriaville Highway, 1 mi. in Notre Dame de Lourdes, 5 mi. in North Ham, 4 mi. in Stratford, 2.5 mi. in South Winslow, 9 mi. in Spalding, 6 mi. in Woburn, 21.25 mi. of Levis-St. Lambert Highway, 5.05 mi. in St. Michael, 2.52 mi. in St. Francois, 1.24 mi. in St. Crancois, 3.26 mi. in St. Thomas, 7.34 mi. in St. Antoine, 2.14 mi. in St. Gerard, macadamizing 4.54 mi. Gifford-St. Simeon Highway, 3.6 mi. in St. Joachim, 0.94 mi. in St. Simeon. J. L. Boulanger, deputy minister.

Ontario — Provincial Government and Perth Co. Council, plans 20 mi. main highway from Mitchell to Palmerston via Listowel (portions to be paved with concrete). $250,000. G. Hogarth, Parliament Bldg., Toronto, ch. engr. F. W. Hay, Listowel, representative of Perth Co.

BIDS DESIRED

N. Y., Brooklyn—Dec. 21, by E. Riegelmann, boro pres., Boro Hall, grading, curbing and flagging East 15th St. from Ave. M to Ave. N and Skillman Ave. from Kingsland Ave. to Old Woodpoint Rd., paving roadway of East 15th St. from Ave. M to Ave. N and roadway of Skillman Ave. from Kingsland Ave. to Old Woodpoint Rd., permanent asphalt on 6 in. concrete.

N. Y., St. George—Dec. 19, by E. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Bay St. from Hannah St. to south side of Water St., granite block on present concrete.

N. J., Penns Grove—Dec. 26, by Mayor and Common Council, constructing certain streets, bituminous macadam. Kersey & Sparks, Salem, engrs.; adv. this issue.

Pennsylvania — Dec. 27, by State Hy. Dept., Harrisburg, reconstructing 17,197 ft. Route 243, Industry and Borough Twps., Beaver Co., 21,986 ft. Route 243, Industry Twp., Beaver Co., 13,704 ft. Route 82, Hempfield and Sugar Grove Twps., Greenville Boro., Mercer Co., all foregoing either bituminous surface course on concrete, or one course rein.-con.; 5,700 ft. Application 2255, Hempfield Twp., Mercer Co., one course rein.-con. G. H. Biles, asst. state comr.

N. C., Maiden—Dec. 19, by A. C. Black, mayor, 1,800 cu.yd. excav., 5,500 sq.yd. cement paving, 6,500 lin.ft. concrete curbs, etc. Mees & Mees, Kinney Bldg., Charlotte, engrs. Noted June 29.

Louisiana—Dec. 28, by State Highway Comn., Reymond Bldg., Baton Rouge, grading and gravel surfacing 9.91 mi. Sect. A and 8.17 mi. Sect. B, Federal Aid Project 117, Tallulah-Delhi Highway, Madison Parish. J. M. Fourmy, state engr.

Kentucky—Dec. 20, by State Hy. Dept., Frankfort, shaping and constructing drainage structures on 8.8385 mi. Louisville-Paducah Rd., Federal Aid Project 91, State Project 8, Sect. A, Crittenden Co., 3 acres clearing, 59,741 cu.yd. earth, 16,609 cu.yd. solid rock, 5,835 cu.yd. borrow, 608 cu.yd. excav. for structures, 31,053 yd. sta. overhaul, 1,784 lin.ft. standard vitr., rein.-con., or standard c.i. pipe, 1,103 cu.yd. concrete and 61,688 lb. reinforcing for concrete construction, alternate bid on 1,161 cu.yd. cement rubble masonry, 250 cu.yd. concrete and 39,270 lb. reinforcing, for cement rubble masonry construction; 17.045 mi. Louisville-Paducah Rd., from Livingston-Crittenden Co. line, Sta. 11018 plus 05 to Cumberland River, Sta. 11918 plus 00, Federal Aid Project 2, State Project 8, Sect. B, Livingston Co., 2 acres clearing, 70,109 cu.yd. earth, 20,424 cu.yd. solid rock, 79,886 cu.yd. borrow and 1,108 cu.yd. excav. for structures, 315 cu.yd. excav. for channel change, 37,115 yd. sta. overhaul, 2,396 lin.ft. standard vitr., rein.-con., or standard c.i. pipe, 1,173 cu.yd. concrete and 60,989 lb. reinforcing for concrete construction, alternate bid on 1,056 cu.yd. cement rubble masonry, 342 cu.yd. concrete and 39,166 lb. reinforcing for cement rubble masonry; 9.639 mi. Frenchburg-West Liberty Rd., from end of macadam 1½ mi. east of Frenchburg to Morgan Co. line, Federal Aid Project 83, State Project 32, Sect. A, Manifee Co., 13 acres clearing, 115,433 cu.yd. earth, 9,316 cu.yd. solid rock and 1,360 cu.yd. borrow excav., 295 cu.yd. excav. for channel change, 24,938 yd. sta. overhaul, 121 cu.yd. concrete, 2,728 lin.ft. standard vitr., rein.-con. or standard c.i. pipe, 1,033 cu.yd. concrete and 52,840 lb. reinforcing for concrete construction, alternate bid on 452 cu.yd. concrete, 1,015 cu.yd. cement rubble masonry and 36,880 lb. reinforcing, for cement rubble masonry construction; 5.018 mi. Stanton-Winchester Rd. from Stanton, Sta. 0 plus 00 to ½ mi. west of Clay City, Sta. 265 plus 00, Federal Aid Project 87, State Project 4, Sect. B, Powell Co., 16 acres clearing, 12,616 cu.yd. earth, 36,685 cu.yd. solid rock, 35,464 cu.yd. borrow, 5,000 cu.yd. excav., for channel change, 5,475 yd. sta. overhaul, 92 cu.yd. concrete, 1,216 lin.ft. standard vitr., rein.-con., or standard c.i. pipe, 653 cu.yd. concrete and 36,448 cu.yd. reinforcing for concrete construction, alternate bid on 674 cu.yd. cement rubble masonry, 52 cu.yd. concrete, 26,530 lb. reinforcing for cement rubble masonry construction; shaping and surfacing with creek gravel, waterbound macadam, or waterbound macadam surface treated, 9.55 mi. Vanceburg-Maysville Rd., from Tollesboro, Sta. 0 plus 00 to Valley Sta. 505 plus 22, State Project 20, Sect. A, Lewis Co., 2 acres clearing, 10,917 cu.yd. earth, 794 cu.yd. solid rock, 14,338 cu.yd. borrow, 623 cu.yd. dry earth and 208 cu.yd. wet earth excav., 1,733 cu.yd. excav. for structures, 290 yd. sta. overhaul, 401 cu.yd. concrete, 43,707 lb. reinforcing, 9,170 lb. structural steel, 14,007 cu.yd. creek gravel, 21,010 ton crushed limestone, 11,205 gal. prime coat, 18,676 gal. C.O. or M.T. special, 700 ton stone chips of pea gravel, 880 lin.ft. Class A or Class B corrugated metal pipe; shaping and surfacing, with rein.-con., rock asphalt on modified Telford or concrete base, or bituminous concrete on modified Telford or concrete base, 6.333 mi.

SEWER—TULSA, OKLA.

Following are lowest three bids opened Nov. 4, by Mayor and Bd. Comrs., for constructing Elm Park Relief Sewer; (A) Tibbets & Pleasant, Inc., Tulsa (awarded contract); (B) Comstock-Smedley Co., Tulsa; (C) H. L. Cannady Co., Tulsa. The unit bids were as follows:

	A	B	C
360 lin.ft. of open cut section, type "D", exclusive of excavation	$40.00	$50.00	$51.00
80 lin.ft. of open cut section, type "C", exclusive of excavation	53.00	62.00	63.00
210 lin.ft. of open cut section, type "F", exclusive of excavation	55.00	64.00	65.10
4,400 lin.ft. of tunnel section, type "A", inluding excavation	98.80	116.00	111.60
250 lin.ft. of tunnel section, type "B", including excavation	128.00	120.00	146.00
300 lin.ft. of tunnel section, type "E", including excavation	178.00	130.00	249.00
3,850 cu.yd. earth excavation in open cut	1.34	1.50	1.45
4,980 cu.yd. rock excavation in open cut	3.67	5.00	4.80
Shaft No. 1 at station 1400 complete (lump sum)	7,000.00	7,100.00	7,100.00
Shaft No. 2 at station 3600 complete (lump sum)	6,380.00	6,300.00	6,300.00
Sewer inlet north of Eleventh Street, exclusive of excavation (lump sum)	790.00	750.00	750.00
Sewer outlet south of Eighteenth Street, exclusive of excavation (lump sum)	850.00	800.00	800.00
Sewer connection at Eleventh Street complete (lump sum)	350.00	340.00	344.00
Sewer connection at Thirteenth Street complete (lump sum)	1,500.00	1,400.00	1,495.00
Sewer connection at Seventeenth St. complete (lump sum)	1,800.00	1,650.00	1,790.00
Sewer connection at Eighteenth Street, exclusive of excavation (lump sum)	2,400.00	2,370.00	2,400.00
600 lin.ft. 10-in. well hole including casing	3.33	4.00	4.00
600 cu.yd. earth excavation in drainage ditch	.47	1.00	1.00
1,200 cu.yd. rock excavation in drainage ditch	2.67	3.00	3.00
1,000 lin.ft. of extra drilling	.50	.50	.50
Extended totals	$600,799.60	$674,265.00	$696,876.50
Engineering fee	20,000.00	20,000.00	20,000.00
Advertising and Publishing	500.00	500.00	500.00
Easements and damages	10,000.00	10,000.00	10,000.00
Borings, consulting engineer	6,000.00	6,000.00	6,000.00
Extended grand totals	$637,300	$710,785	$733,377

Streets and Roads (Continued)

Jackson Highway Rd. from Bloomfield Rd. Sta. 1128 plus 00 to Cox Creek Sta. 1462 plus 39, Federal Aid Project 86, Sect. B. State Project 3, Sect. B. Nelson Co., 38,733 cu.yd. earth, 3,669 cu.yd. solid rock, 945 cu.yd. borrow, 1,009 cu.yd. cement rubble masonry, 75,371 lb. reinforcing, 480 sq.yd. bituminous surfacing, 516 cu.yd. concrete, 66,105 yd. sta. overhaul, 750 sq.yd. relaying Telford, 3,991 cu.yd. Telford excav., 66,878 sq.yd. rein.-con. paving, 1,124 lin.ft. standard vitr., rein.-con., or standard c.i. pipe, alternate bids on surfacing as follows: 63,163 sq.yd. rock asphalt, 63,163 sq.yd. bituminous concrete, 66,878 sq.yd. concrete base, or 66,878 sq.yd. rock asphalt, 66,878 sq.yd. bituminous concrete surface, 66,878 sq.yd. modified Telford base, 11,286 ton crushed limestone, 6,688 ton bonding stone; 8.501 mi. Jackson Highway from Jefferson Co. line, Sta. 675 plus 60, to Bloomfield Rd., Sta. 1128 plus 00, Federal Aid Project 86, Sect. A, State Project 3, Sect. A, Bullitt, Spencer and Nelson Counties, 2 acres clearing, 58,460 cu.yd. earth, 30,780 cu.yd. solid rock, 42,393 cu.yd. borrow, 244 cu.yd. wet earth and 733 cu.yd. dry earth excav., 1,249 cu.yd. excav. for channel change, 308,470 yd. sta. overhaul, 1,218 cu.yd. cement rubble masonry, 604 cu.yd. concrete, 97,469 lb. reinforcing, 1,000 sq.yd. relaying Telford, 8,281 cu.yd. removing Telford, 89,767 sq.yd. rein. con. paving, 1,358 lin.ft. standard vitr., rein.-con., or standard c.i. pipe, alternate bids on surfacing as follows: 84,780 sq.yd. rock asphalt, 84,780 sq.yd. bituminous concrete, 89,767 sq.yd. concrete base, or 89,767 sq.yd. rock asphalt, 89,767 sq.yd. bituminous concrete, 89,767 sq.yd. modified Telford base, 8,977 ton bonding stone, 15,148 ton crushed limestone. J. S. Boggs, state highway engr.

Ohio—Dec. 19, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 5.62 mi. Sect. "J" Cleveland-Sandusky Rd. Lorain Co., brick $234,849, bituminous concrete $215,094, bitulithic $223,142. L. C. Herrick, dir. highways.

Ohio—Dec. 22, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 1.42 mi. Sect. "K" Columbus-Millersburg Rd., Licking-Knox Co., rein.-con., $49,042, 0.83 mi. Sect. "Medina West" Ashland-Medina Rd., Medina Co., rein.-con. $34,540, brick $42,085; concrete beam bridge Sect. "B" Zanesville-McConnelsville Rd., Muskingum Co., $6,761. L. C. Herrick, dir. highways.

Ohio—Dec. 22, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving Sects. "N, O and P" of Oberlin-Norwalk Rd., Lorain Co., brick $270,297, bituminous concrete $241,270, bitulithic $254,945. L. C. Herrick, dir. highways.

O., Cincinnati—Dec. 18, by A. Hornberger, dir. Pub. Serv., laying sidewalks etc. on 2,700 lin.ft. McMillan St. extension west, 40 ft., 5,100 lin ft. granite curb, 21,000 sq.ft. sidewalk, 98,000 cu.yd. earth and rock excav., 12,300 sq.yd. granite block, 2,600 cu.yd. concrete base, 800 cu.yd. retaining wall. $239,700. F. S. Krug, City Hall, engr.

Illinois—Dec. 21, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving 5.66 mi. Route 1, Sect. 8, Edwards-Wabash Co., 4.6 mi. Route 1, Sect. 9, Wabash Co., 6.75 mi. Route 1, Sect. 10, Wabash Co., 21.49 mi. Routes 1 and 15, Combination A, Edwards-Wabash Co., 3.25 mi Route 1, Sect. 17, Lawrence Co., 5.55 mi. Route 1, Sect. 18, Lawrence-Crawford Co., 8.8 mi. Route 1, Combination B, Lawrence-Crawford Co., 6.2 mi. Route 3, Sect. 15, Whiteside Co., 5.07 mi. Route 3, Sect. 38, McDonough Co., 7.38 mi. Route 8, Sect. 7, Henderson Co., 7.12 mi. Route 8, Sect. 33, Woodford Co., 8.47 mi. Route 8, Combination C, Woodford Co., (incl. 1 section grading), 7.06 mi. Route 13, Sect. 6, Williamson Co., 5.56 mi. Route 14, Sect. 4, Franklin Co., 4.48 mi. Route 15, Sect. 21, Edwards Co., 6.18 mi. Route 16, Sect. 12, Shelby Co., 5.82 mi. Route 26, Sect. 1, Ogle-Stephenson Co., 5.82 mi. Route 26, Combination D, Ogle-Stephenson Co., (incl. 1 bridge), 5.17 mi. Route 28, Sect. 9, Henry Co., 4.15 mi. Route 44, Sect. 17-A, Will Co., 0.89 mi. Federal Aid Project 9, Sect. C-1, Madison Co., 0.84 mi. Federal Aid Project 9, Sect. 38, Madison Co., 1.73 mi. Federal Aid Project 9, Combination E, Madison Co., 3.22 mi. Federal Aid Project 9, Sect. W-1, Fayette Co., 0.68 mi. Federal Aid Project 26, Sect. 20, Logan Co., 6.76 mi. Federal Aid Project 26, Sect. 23, Logan Co., 6.5 mi. Federal Aid Project 26, Sect. 24, Logan Co., 13.26 mi. Federal Aid Project 26, Combination F, Logan Co., 5.28 mi. Federal Aid Project 27, Sect. 36, Tazewell Co., 5.7 mi. Federal Aid Project 40, Sect. 28, Hancock Co., 6.04 mi. Federal Aid Project 45, Sect. 23, Morgan Co., 9.62 mi. Federal Aid Project 46, Sect. 4, Cass Co., 6.06 mi. Federal Aid Project 47, Sect. 64, St. Clair Co., 2.99 mi. Federal Aid Project 47, Sect. 65, Monroe Co., 9.05 mi. Federal Aid Project 47, Combination G, St. Clair-Monroe Co., 1.76 mi. Federal Aid Project 48, Sect. 37, Tazewell Co., 3.08 mi. Federal Aid Project 48, Sect. 11, Peoria Co., 1.87 mi. Federal Aid Project 48, Sect. 17, Peoria Co., 6.82 mi. Federal Aid Project 48, Combination I, Peoria Co., 2.97 mi. Federal Aid Project 48, Sect. 16, Peoria Co., 3.85 mi. Federal Aid Project 48, Sect. 17, Peoria Co., 6.82 mi. Federal Aid Project 48, Combination J, Peoria Co., 18.81 mi. Federal Aid Projects 27 and 48, Combination K, Tazewell and Peoria Co., 3.24 mi. Federal Aid Project 49, Sect. 13, Livingston Co., 5.57 mi. Federal Aid Project 49, Sect. 14, Livingston Co., 7.8 mi. Federal Aid Project 49, Sect. 15, Livingston Co., 16.61 mi. Federal Aid Project 49, Combination L, Livingston Co., 0.59 mi. Federal Aid Project 50, Sect. 19, Coles Co., 7.42 mi. Federal Aid Project 50, Sect. 20, Coles-Douglas Co., 14.01 mi. Federal Aid Project 50, Combination M, Coles-Douglas Co., 4.68 mi. Federal Aid Project 51, Sect. 5, Woodford Co., 1.18 mi. Federal Aid Project 47, Sect. 66, Monroe Co. (to be let in combination with some city paving of Columbia, Ill.) All foregoing average 18 ft. wide. Alternate bids on the following types: Portland cement concrete, 4 in. monolithic and 4 in. bituminous filled brick, bituminous concrete with or without binder course. Grading 35,820 cu.yd. Route 1, Sect. 12-A, Wabash Co., 57,830 cu.yd. Route 1, Sect. 13-A, Wabash-Lawrence Co., 93,650 cu.yd. Route 1, Combination N, Wabash-Lawrence Co., 57,830 cu.yd. Route 1, Combination O, Wabash-Lawrence Co. (incl. 1 bridge), 93,650 cu.yd. Route 1, Combination P, Wabash-Lawrence Co. (incl. 1 bridge), 22,645 cu.yd. Route 1, Sect. 15-A, Lawrence Co., 115,160 cu.yd. Route 1, Sect. 16-A, Lawrence Co., 137,805 cu.yd. Route 1, Combination Q, Lawrence Co., 22,645 cu.yd. Route 1, Combination R, Lawrence Co. (incl. 1 bridge), 115,160 cu.yd. Route 1, Combination S, Lawrence Co. (incl. 1 bridge), 115,160 cu.yd. Route 1, Combination T, Lawrence Co. (incl. 1 bridge), 137,805 cu.yd. Route 1, Combination U, Lawrence Co. (incl. 2 bridges), 137,805 cu.yd. Route 1, Combination V, Lawrence Co. (incl. 1 concrete and 1 steel bridge), 231,455 cu.yd. Route 1, Combination W, Lawrence Co., 231,455 cu.yd. Route 1, Combination X, Lawrence Co. (incl. 3 concrete bridges), 231,455 cu.yd. Route 1, Combination Y, Lawrence Co. (incl. 2 concrete and 1 steel bridge), 32,000 cu.yd. Route 8, Sect. 34-A, Woodford Co. C. Older, ch. highway engr.

Minn., Chaska—Dec. 27, by Carver Co., grading, etc., 17 mi. road from Hennepin Co. line west, 24 ft., Carver Co. $63,028. L. A. Zeman, Chaska, engr.

Minn., Faribault—Jan. 24, by F. M. Kaisersatt, aud. Rice Co., grading, etc., 23 mi. road, 24 ft., between Lakeville and here. $150,000. J. C. McElherne, Faribault, engr.

Minn., Olivia—Dec. 28, by A. O. Schmidt, aud. Renville Co., Job 2201, State Rd. 6, 81,482 cu.yd. excav., 116,250 cu.yd. overhaul, clear 6.5 acres, grubbing 4.9 acres, Bridge 3927, 18 ft. span, 18 ft. roadway, rein.-con. abutments, 123 cu.yd. concrete, 5,923 lb. reinforcing, 4,390 lb. structural steel; Bridge 3928, 18 ft. clear beam span, 18 ft. roadway, rein.-con. abutments, 99 cu. yd. concrete, 5,116 lb. reinforcing, 4,370 lb. structural steel. $28,000. D. H. Gilchrist, Olivia, engr.

Tex., Clarksville—Dec. 21, by R. J. Williams, judge Red River Co., grading, gravel surfacing, etc., 9.63 mi. State Highway 5, Federal Aid Project 311, 12 ft., 41,207 cu. yd. roadway 23,347 cu.yd. borrow, 335 cu. yd. concrete, 33,130 lb. reinforcing, 15,112 cu.yd. shipped in gravel. $84,382. J. B. Rieman, co. engr.

Tex., San Angelo—Dec. 20, by J. T. Mathison, judge Tom Green Co., grading and bridging 16.44 mi State Highway 9-A, 24 ft., 1,049 cu.yd. concrete, 124,000 cu.yd. earth and 1,014 cu.yd. loose rock excav., 57,306 lb. reinforcing, $53,138; 25.18 mi. State Highway 7 and 7-A, Federal Aid Project 229, 24 ft., 1,370 cu.yd. concrete, 168,000 cu.yd. earth, 4,400 cu.yd. loose and 400 cu.yd. solid rock excav., 73,000 lb. reinforcing steel, $70,000. G. Gilchrest, San Angelo, engr. in charge.

Calif., Santa Rosa—Dec. 26, by Supervs. Sonoma Co., improving 38½ mi. highway from Jenner to Medocino Co. line, 240,000 cu.yd. unclassified excav., 50 cu.yd. concrete, 5,000 lin.ft. 12 in., 3,500 lin.ft. 15 in., 1,200 lin. ft. 18 in. and 900 lin. ft. 24 in. corrugated iron pipe, etc. $140,000. E. A. Peugh, co. surv.

Quebec—J. L. Boulanger, deputy minister of highways, Quebec, taking bids 17,831 ft. Laprairie-Rouses Point Highway, Sect. C-3, St. John Parish, St. John Co., incl. 6,924 cu.yd. excav., 50,092 sq.yd. gutter, 31,700 sq.yd. waterbound macadam treated with bituminous oil, 299.69 cu.yd. concrete; 30,365 ft. Laprairie-Rouses Point Highway, Sect. E, St. Blaise Parish, St. John Co., 11,715 cu.yd. excav., 33,413 sq.yd. gravel or waterbound macadam treated with bituminous oil, 677.23 cu.yd. concrete in bridges; graveling or macadamizing 23,945 ft. Lapraisie-Rouses Point Highway, Sect. G, in Notre Dame du Mont Carmel Parish, St. John Co., 42,569 sq.yd. gravel or macadam, 7,946 cu.yd. excav.; macadamazing and graveling 39,586 ft. Laprairie-Rouses Point Highway, Sect. F., St. Paul de L'Ils aux Noix Parish, St. John Co., 18,271 cu. yd. excav., 57,600 sq.yd. gravel, waterbound or bituminous macadam.

BIDS RECEIVED

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, opened bids Dec. 8, paving from end of Richmond Turnpike at linoleum factory gate to Carteret Ferry, concrete, from J. J. Kelly, 1150 Forest Ave. West New New Brighton, $25,716; J. Johnson Sons, 455 Bway., West New Brighton, $27,540; W. P. McDonald Constr. Co., 17 West 42nd St., New York, $27,540; J. E. Donovan, 2205 Richmond Terrace, Port Richmond, $30,383. Noted Nov. 30.

S. C., Newberry—Newberry Co. constructing 12.6 mi. Newberry-Broad River Rd., from Deaver & Robinson, Carlisle, $50,000. Noted Nov. 16.

Alabama—State Hy. Dept., Montgomery, grading and surfacing, (1) 11.408 mi. Birmingham-Montgomery Highway, Sect. A, Federal Aid Project 99, Shelby Co. (2) 11.175 mi. Birmingham-Montgomery Highway, Sect. B, Federal Aid Project 99, Shelby Co. (a) plain concrete (b) warrenite bitulithic on puzzolan cement concrete (c) bituminous concrete on puzzolan (d) sheet asphalt on puzzolan (e) vitr. brick on puzzolan (f) warrenite bitulithic on 8 in. macadam (g) bituminous concrete on 8 in. macadam, from Hancock Bros., Mobile, (1a) $365,901 (2a) $416,783; Lawr-

Streets and Roads (Continued)

ence, Nixon & Phillips, Jackson, Miss., (1a) $370,841 (1c) $371,499 (1d) $404,626 (1g) $358,283 (2a) $417,982 (2c) $417,144 (2d) $449,890 (2g) $404,383; Mills Eng. & Constr. Co., McComb, Miss., (1a) $375,092 (1c) $375,320 (1e) $474,703; W. T. Taylor Contg. Co., Wilsonville, (1b) $383,677 (1c) $363,686 (1d) $405,952 (1f) $362,760 (1g) $342,803 (2a) $435,922 (2b) $433,167 (2c) $414,536 (2d) $455,186 (2f) $412,857 (2g) $393,130; J. F. Morgan Paving Co., Woodward Bldg., Birmingham, (1b) $404,152 (1d) $426,998 (1e) $495,538 (1f) $394,064 (2b) $460,049 (2c) $437,466 (2d) $482,632 (2e) $460,049 (2f) $450,358; Southern Roads Co., American Trust Bldg., Birmingham, (1b) $426,477 (1f) $423,686 (2b) $482,976; Smith Bros., Birmingham, (street address not available) (1g) $368,892; Dunn Constr. Co., Chamber of Commerce Bldg., Birmingham (2f) $475,828; Nichols Contg. Co., Trust Co. of Georgia Bldg., Atlanta, Ga., (2g) $688,613. Noted Nov. 16.

Missouri—State Hy. Dept., Jefferson City, opened bids Dec. 2, (1) 4.972 mi. road from Clarksdale northwardly, 24 ft., State Project Route 31, Sect. 1, De Kalb Co. (2) 3.35 mi. road from St. Louis to Kansas City, 18 ft., State Project Route 2, Sect. 57, Montgomery Co. (3) 3.095 mi. road from North Co. line to Ellsinore, 24 ft., State Project Route 16, Sect. 73, Carter Co. (4) 5 mi. road from Gainesville northwestwardly, 26 ft., State Project Route 5, Sect. 95, Ozark Co. (5) 4.98 mi. road from St. Louis to Springfield, 30 ft., State Project Route 14, Sect. 66, Franklin Co. (6) 1.608 mi. road from Plattsburg to Kansas City, 30 ft., State Project Route 33, Sect. 9, Clinton Co. (7) 4.016 mi. road from Plattsburg to Kansas City, 30 ft., State Project Route 33, Sect. 10, Clinton Co. (8) 3.944 mi. road on Red Ball Highway, 24 ft., State Project Route 9, Sect. 7, Clark Co. (9) 4.845 mi. road from Monett to Eureka Springs Highway, 16 ft., State Project Route 37, Sect. 2, Barry Co. (10) 4.985 mi. road from Ozark Co. line to West Plains, 24 ft., State Project Route 80, Sect. 8, Howell Co. (11) 2.585 mi. road on Kings Highway, 26 ft., State Project Route 25, Sect. 19, Cape Girardeau Co. (12) 2.986 mi. road from Kansas City to St. Louis, 18 ft., State Project Route 2 Sect. 71, St. Charles Co. (13) 4.767 mi. road from Lebanon to Linn Creek, 12 ft., State Project Route 5, Sect 73, Laclede Co. (14) 4.482 mi. road from Jackson to Appleton, 16 ft., State Project Route 25, Sect. 5, St. Genevieve Co. (15) 4.012 mi. road from St. Louis to St. Genevieve, 16 ft., State Project Route 25, Sect. 3, Jefferson Co. (16) 0.559 mi. road from Lebanon to Pulaski Co. line, 34 ft., State Project Route 14, Sect. 38, Laclede Co. (17) 0.303 mi. road from St. Louis to Springfield, 34 ft., State Project Route 14, Pulaski Co. (18) 0.871 mi. road from Unionville to Milan, 16 ft., State Project Route 5, Sect. 2, Putnam Co. (19) 4.94 mi. road from Ozark Co. line to West Plains, 24 ft., State Project Route 80, Sect. 7, Howell Co. (20) 1.658 mi. road from Sullivan to St. Clair, 30 ft., State Project Route 14, Sect. 67, Franklin Co. (21) 4.991 mi. road from Excelsior Springs to Carroll Co., 26 ft., State Project Route 10, Sect. 14, Ray Co. (22) 0.085 mi. road from Kansas City to St. Louis, 34 ft., State Project Route 2, Sect. 34, Howard Co. (23) 0.284 mi. road from Salem to Licking, 24 ft., State Project Route 32, Sect. 4, Dent Co. (24) 5 mi. road from Milan to Green City, 24 ft., State Project Route 6, Sect. 34, Sullivan Co. (25) 2.575 mi. road from Greene Co. line to Seymour, 24 ft., State Project Route 16, Sect. 35, Webster Co. (26) 4.914 mi. road from Monett to Eureka Springs, 16 ft., State Project Route 37, Sect. 7 Barry Co. (27) 2.348 mi. road from Milan to Green City, 24 ft., State Project Route 6, Sect. 35, Sullivan Co. (28) 4.394 mi. road from Milan to Green City, 24 ft., State Project Route 6, Sect. 33, Sullivan Co. (29) 2.224 mi. road from Springfield to St. Louis, 24 ft., State Project Route 14, Sect. 77, St. Louis Co. (30) 1.279 mi. road from Hartville to Mansfield, 12 ft., State Project Route 5, Sect. 86, Wright Co. (31) 4.934 mi. road from St. Louis to Springfield, 24 ft., State Project Route 14, Sect. 76, St. Louis Co. (32) 5 mi. road from Kansas City to St. Louis, 24 ft., State Project Route 2, Sect. 7, Lafayette Co. (33) 4.899 mi. road from Warrensburg to Clinton, 30 ft., State Project Route 13, Sect. 27, Johnson Co. (34) 1.294 mi. road from Sedalia to Clinton, 24 ft., State Project 24, Sect. 4, Henry Co., (35) 4.061 mi. road from Vienna northwardly, 24 ft., State Project Route 7, Sect. 55, Maries Co. (36) 1.891 mi. road from Macon southward, 24 ft., State Project Route 7, Sect. 21, Macon Co. (37) 4.215 mi. road from Kansas City to Jefferson City, 26 ft., State Project Route 12, Sect. 5, Johnson Co. (38) 2.265 mi. road from Kansas City to St. Louis, 24 ft., State Project Route 2, Sect. 68, St. Charles Co. (39) 2.304 mi. road between Wentzville and St. Peters, 18 ft., State Project Route 2, Sect. 69, St. Charles Co. (40) 3.548 mi. road east and west through Beaufort, 16 ft., State Project Route 12, Sect. 52, Franklin Co. (41) 4.732 mi. road from Excelsior Springs to Carroll Co., 26 ft., State Project Route 10, Sect. 13, Ray Co. (42) 4.896 mi. road from Bolivar to Buffalo, 24 ft., State Project Route 15, Sect. 80, Dallas Co. (a) 18,876 cu.yd. earth excav. (b) 441 cu.yd. rock excav. (c) 5,879 cu.yd. borrow excav., etc., from W. A. Gierke, St. Joseph (street address not available) (1) $15,211; A. L. Cook, Ottawa, Kan., (1) $16,470; (22) $6,460 (37) $24,579; Moreno Burkham Constr. Co., 1213 Syndicate Trust Bldg., St. Louis (2) $119,374 (12) $130,466 (29) $108,771 (31) $243,694 (38) $80,012 (39) $92,250; Coopers Constr. Service Co., Federal Reserve Bank Bldg., St. Louis, (3) $11,890 (10) $21,905 (19) $18,283 (35) $26,832 (36) $24,924; W. A. Leach, Poplar Bluff (3) $14,480; T. S. Wheeler and W. Griffin, Elijah (4) $18,292; E. A. Luck, Black Rock, Ark. (4) $19,319; Sumerfield Jones, Springfield (street address not available) (4) $20,542; Felix Kersting Co., Jefferson City (5) $28,364 (20) $10,244 (22) $6,460; Frazier Davis Constr. Co., Arcade Bldg., St. Louis (5) $28,597 (20) $9,204; J. O. Patterson & Co., 310 Ridge Bldg., Kansas City (6) $12,612 (7) $24,762; F. E. Botts, Independence (6) $13,221; Cook-O'Brien Constr. Co., 305 Ry. Exch., Kansas City (6) $13,223 (7) $24,277 (21) $7,538 (24) $28,581 (27) $16,566 (28) $24,426 (32) $79,348 (41) $32,804; Land Constr. Co., Ballinger Bldg., St. Joseph, (7) $23,954; Cameron Joyce & Co., Keokuk, Ia. (8) $20,758 (32) $80,014; General Constr. Co., Syndicate Trust Bldg., St. Louis (8) $22,203 (16) $21,127; Riley & Bailey Constr. Co., International Life Bldg., St. Louis (8) $23,371 (16) $19,568 (17) $10,168; Allhands & Davis, 705 Frisco Bldg., Joplin (9) $20,881 (13) $18,655 (14) $28,855 (15) $35,756 (25) $17,616 (26) $39,261; M. E. Gillioz, Monett (9) $22,799 (13) $22,010 (14) $34,745 (26) $42,811; Short & Bramer, Monett (9) $24,644; Lane & Nicholas, West Plains (10) $20,597; Jones & Harlin, West Plains (10) $22,964; Corrall Bedwell & Hartie, Cape Girardeau (11) $17,378; S. M. Timberlake Co., 236 Amer. Central Life Bldg., Indianapolis, Ind. (12) $123,700 (29) $93,402 (31) $220,068 (38) $77,800 (39) $87,246; Alzina Constr. Co., Unity Bldg., Springfield, Ill. (12) $144,772 (38) $86,195 (39) $96,129; Pioneer Constr. Co., Springfield (street address not available) (13) $18,239 (17) $11,454; Reynolds-Bloker-Orens, Caruthersville (14) $32,967; W. J. Knapp and J. Richardson, De Soto (15) $28,834; J. P. Sparks, Kirkwood (15) $32,778; Wausau Iron Wks., Wausau, Wis. (16) $21,054; Parham Constr. Co., East St. Louis, Ill. (street address not available) (17) $12,441; J. Simmons, La Plata (18) $18,448 (24) $29,982 (27) $17,684 (28) $25,459; Lingo & Lowing, West Plains (19) $17,716; H. A. Worman, Pittsfield, Ill. (street address not available) (19) $17,197; A. Hood, Independence (21) $10,690 (41) $45,005; Haller & Davis, Boonville (22) $4,080; Illinois Steel Bridge Co., 608 Laclede Gas Bldg., St. Louis (23) $2,404; C. T. Fogle Constr. Co., Jefferson City (23) $2,544; St. Louis Constr. Co., 743 Frisco Bldg., St. Louis (23) $2,575; Abell & Co., Linneus (24) $28,221 (27) $16,152; W. F. Plummer, 434 East Elm St., Springfield (25) $19,687 (30) $8,072; Easley Bros., Aurora (25) $20,963 (26) $40,957; C. P. O'Reilley & Co., Wainright Bldg., St. Louis (28) $27,038; Louis Rich Constr. Co., East St. Louis (29) $99,067 (31) $234,518; A. M. Curtis, Hartsville and M. J. Craig, Mansfield (30) $7,609; H. E. Plyley, Walnut Ridge, Ark. (30) $7,933; Spitcaufsky Bros., 2452 Benton Blvd., Kansas City (32) $79,719; Maxwell Constr. Co., Columbus, Kan. (33) $49,314; C. F. Johnson, Warrensburg (33) $51,876; J. A. Woods Constr. Co., Smithville (33) $53,247; A. M. Highnote, Columbus, Kan. (34) $37,662; Carterville Constr. Co., Carterville (34) $39,167; Harrison Constr. Co., Des Moines, Ia., (street address not available) (34) $40,651; Birmingham & Terry, Vienna (35) $18,412; Mosswan Scott Constr. Co., Kansas City (street address not available) (35) $25,656; J. W. Wilson, Warrensburg (37) $22,432; J. E. Ridge, Warrensburg (37) $23,376; H. Kassman, Union (40) $26,678; Natl. Constr. Co., Inc., Kansas City (street address not available) (41) $42,333; C. F. Johnson & Son, Buffalo (42a) $0.40 per cu.yd. (42b) $1.95 (42c) $0.35; M. A. Holman Constr. Co., Carterville (42a) $0.40 (42b) $1.75 (42c) $0.38; J. E. Hartley, Mt. Vernon (42a) $0.40 (42b) $2 (42c) $0.40. Noted Nov. 23.

Missouri—State Hy. Dept., Jefferson City opened bids Dec. 2, (1) 3.049 mi. road from Malden to Risco, 16 ft., State Project Route 82, Sect. 3, Madrid Co. (2) 4.904 mi. road from Clinton Co. line to Hamilton, 18 ft., State Project Route 8, Sect. 13, Caldwell Co. (3) 5 mi. road from Tipton Ford to Neosho, 18 ft., State Project Route 1, Sect. 104, Newton Co. (4) 2.663 mi. road from East Prairie to New Madrid Co. line, 16 ft. State Project Route 55A, Sect. 2, Mississippi Co. (5) 4.096 mi. road south of Warrensburg, 26 ft., State Project Route 13, Sect. 28, Johnson Co. (6) 4.636 mi. road from St. Genevieve Co. line south toward Perryville, 16 ft., State Project Route 25, Sect. 12, Perry Co. (7) 4.871 mi. road from Neosho southwardly, 24 ft., State Project Route 1, Sect. 106, Newton Co. (8) 4.375 mi. road from Gainesville northwestwardly, 26 ft., State Project Route 5, Sect. 96, Ozark Co. (9) 2.322 mi. road from California eastwardly, 24 ft., State Project Route 12, Sect. 29, Moniteau Co. (10) 5 mi. road from McGirk east and west, 16 ft., State Project Route 12, Sect. 30, Moniteau Co. (11) 3.078 mi. road from Eldon northwardly, 24 ft., State Project Route 15, Sect. 57, Miller Co. (12) 4.991 mi. road from Eldon eastwardly, 24 ft., State Project Route 15, Sect. 56 Miller Co. (13) 0.123 mi. road north and south of Princeton, 24 ft., State Project Route 13, Sect. 6, Mercer Co. (14) 1.403 mi. road from Perryville northwardly, 12 ft., State Project Route 51, Sect. 3, Perry Co. (15) 1.942 mi. road from Linneus northwardly, 18 ft., State Project Route 5, Sect. 15, Linn Co. (16) 2.061 mi. road from Charleston westwardly, State Project Route 16, Sect. 94, Mississippi Co. (17) 3.232 mi. road from Tipton Ford to Neosho, 18 ft., State Project Route 1, Sect. 105, Newton Co., from:

Novaculite Constr. Co., Marion, Ill. (1) $35,298 (4) $59,425 (16) $50,696.

A. Creek, Gideon (1) $36,684.

Harrison Eng. & Constr. Corp., Wichita, Kan. (street address not available) (2) $171,227 (17) $123,397.

Cameron, Joyce & Co., Keokuk, Ia. (2) $191,594.

Zogler & Dalton Constr. Co., Junction City, Kan. (2) $202,298.

Independent Constr. Co., Pittsburg, Kan. (3) $170,000.

Western Constr. Co., 818 Mayo Bldg., Tulsa, Okla. (3) $173,791.

Koss Constr. Co., 2818 5th Ave., Des Moines, Ia. (3) $186,112 (17) $121,536.

R. L. Williams, Wyatt (4) $60,141.

Keeley Bros., Contg. Co., 2100 State St., East St. Louis, Ill. (4) $65,605.

A. L. Cook, Ottawa, Kan. (5) $15,676.

Maxwell Constr. Co., Columbus, Kan. (5) $16,029.

C. L. Johnson, Warrensburg (5) $17,041.

Kiefner Geile Endres, Perryville, (6) $49,806 (14) $13,232.

Allhands & Davis, 705-6 Frisco Bldg., Joplin, (6) $57,596 (7) $58,224.

J. P. Wolfenbarger, Neosho, (7) $52,525.

Wimstead & Gonter, Siloam Springs, Ark., (7) $55,019.

Wheeler & Griffin, Elijah, (8) $13,001.

E. O. Luck, Clack Bluff, Ark., (8) $13,847.

Summerfield Jones Co., Springfield (street address not available) (8) $14,646.

J. W. Newton, Eldon, (9) $6,969 (10) $30,224 (11) $10,797.

F. Kersting, Jefferson City, (9) $6,269 (10) $33,980 (12) $18,449.

Massman-Scott Constr. Co., 3663 Madison Ave., Kansas City, (9) $7,418.

Scott Constr. Co., 3663 Madison Ave., Kansas City, (10) $37,123.

Fogelman & Thompson, Eugene, (11) $10,399 (12) $17,190.

Woodsmall & Woodsmall, Marshall, (11) $10,405.

Doehla Koekmeyer, Jefferson City, (12) $17,936.

Pittsburgh Des Moines Steel Co., Tuttle and Southwest 10th Sts., Des Moines, Ia. (13) $2,211.

Energy Coal & Supply Co., Poplar Bluff, (14) $9,414 (16) $47,120.

J. F. Meek, Chillicothe, (15) $36,699.

E. C. Johnson, Carrollton, (15) $43,218.

Abell & Co., Linneus, (15) $46,138.

R. L. Williams, Wyatt, (16) $51,158.

Independent Constr. Co., Pittsburg, Kan. (17) $112,572. Noted Nov. 23.

Mo., Maplewood — G. Komar, city clk., City Hall and St. Louis Co. (Clayton), opened bids Dec. 6, reconstructing 3,100 ft. Greenwood Blvd. from Big Bend Rd. to Canterbury Ave., 6,192 lin.ft. concrete curb, 5,000 cu.yd. earth excav., 11,000 sq. yd. 8 in. concrete, from C. M. Berry, Empire Bldg., Webster Groves, $33,997; Carlon Constr. Co., 7319 Marietta Ave., $36,216; Frazier-Davis Constr. Co., Arcade Bldg., St. Louis, $36,500. Engrs. est. $40,000. Noted Nov. 30.

Colorado—State Hy. Dept., Denver, (1) gravel surfacing 3.489 mi. Sante Fe Trail, 18 ft., Federal Aid Project 218 B, Bent

Streets and Roads (Continued)

Co., engrs. est. $50,929 (2) grading 1.787 mi. Pikes Peak Ocean to Ocean Highway, Old Colorado Midland R.R., 18 ft., Park Co., State Project 694, engrs. est. $58,114, (3) timber bridges in Cheyenne Co., engrs. est. $21,385, from M. J. Kenney, 213 Interstate Bldg., Denver, (1) $36,373 (2) $41,940 (3) $17,339; F. H. Bullen, Pueblo, (1) $41,567; M. O. Morrison, 409 Cooper Bldg., Denver, (1) $41,789; Levy Constr. Co., 1930 Colorado Ave., Colorado Springs, (2) $39,495; H. C. Lallier Constr. Co., Hudson, (3) $42,648; A. R. Mackey, Sterling, (3) $16,992; C. O'Neil, Platteville, (3) $17,310. Noted Nov. 30.

Calif., San Diego—Common Council, improving Adams and Works Aves., Utah and 30th Sts., (a) 239,438 sq.ft. 1½ in. asphaltic concrete on 4 in. cement concrete (b) 113,090 sq.ft. 1½ in. asphaltic concrete on 2½ in. asphaltic concrete (c) 4.904 lin. ft. cement concrete curb (d) 23,428 sq.ft. cement concrete sidewalks, from G. R. Daley, 4430 Boundary St., (a) $0.315 (b) $0.229 (c) $0.75 (d) $0.265; Fairchild-Gilmore-Wilton Co., 25 14th St., (a) $0.25 (b) $0.20 (c) $0.65 (d) $0.25; California Constr. Co., 528 Granger Bldg., (a) $0.31 (b) $0.225 (c) $0.72 (d) $0.27. Noted Nov. 23.

CONTRACTS AWARDED

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., repaving East 31st St., granite block, to Casper-Helbock Co., 633 Wales Ave., $13,665; West 75th St., sheet asphalt, curbing, recurbing, flagging and paving 9th Ave., to Brusstar Constr. Co., Harlem River and 150th St., $2,799 and $3,854 respectively; restoring roadway foundation curb and sidewalk on West 141st St. and curbing, recurbing, flagging, reflagging and paving West 100th St., sheet asphalt, to Burnside Contg. Co., 270 Burnside Ave., $2,738 and $15,718; widening and repaving Canal St., granite block, to P. J. Kearns Contg. Co., 2306 Creston Ave., $12,320; curbing, recurbing, flagging, reflagging and paving Pleasant Ave., West 192nd and West 173rd Sts., sheet asphalt, toetaoicmfroat.o ,nnn2flBPg Madison Ave., $5,198, $4,049 and $12,769 respectively. Noted Nov. 30 and Dec. 7.

Pa., Ebensburg — Comrs. Cambria Twp., c/o H. T. Jones, controller Cambria Co., reconstructing 161,000 lin.ft. Wilmore Rd., vitr. brick on concrete, to McClure & Bingner, Johnstown, $175,062. Noted Nov. 23.

Pa., Uniontown — Fayette Co., 2.1 mi. Rush Run Rd., incl. 4,800 ft. 6 in. rein.-con. with integral curb, 6,228 ft. 4 in. macadam surface on 11 in. Tilford, to Cresson Constr. Co., Brownsville.

Kentucky—State Hy. Dept., Frankfort, resurfacing with macadam 8 mi. Cave City-Bowling Green Rd., Edmonson Co., 20,000 ton crushed limestone, to Gorrell & Sons, Russellville, $44,600.

Ia., Anamosa—Jones Co., grading 7.61 mi. road east of here, Federal Aid Project 163, Sect. A, to Foley Bros., Anamosa, 105,936 cu.yd. earth excav. $0.24 per cu.yd., 123 cu.yd. loose rock $1.50 and 123 cu.yd. solid rock $3; Cement Products Co., Waterloo, 39,666 ft. tile, 6 in. $0.139 per ft., 12 in. $0.35 and 15 in. $0.56. Noted Nov. 16.

Ia., Anita—For 41,526 sq.yd. brick paving and 22,075 lin.ft. curb and gutter, to Cook & Stucker, Ottawa, Kan., $161,441. Noted Nov. 2.

Mo., St. Louis—Federer-Arendes Realty Co., 2610 Gravois Ave., improving streets, laying sidewalks and sewers for Grand-Dover subdivision, 100,000 cu.yd. grading, 10 mi. streets 28-60 ft. wide, Kentucky rock asphalt on rock, 20 mi. granite curbs, 20 mi. 8-24 in. vitr. sewer pipe for storm and foul water sewers, 400,000 sq.ft. granitoid sidewalks, to McKelvey Constr. Co., 911 Title Guaranty Bldg. Engrs. est. $520,000.

Tex., La Grange—Fayette Co. grading and surfacing with gravel, 12.87 mi. Highway 3-B, Federal Aid Project 286, to W. T. Hutto, Gonzales, $69,825; concrete drainage structures, to L. Robertson, Schulenburg, $74,186. Engrs. est. $162,565. Noted Dec. 7.

Oklahoma—State Hy. Comn., Oklahoma City, constructing 3,172 mi. Federal Aid Project 77, Latimer Co., 18 ft., 8 in. shale with bituminous surface and concrete structures, to Green Constr. Co., 503 S W Natl. Bank Bldg., Oklahoma City, $27,615. Noted Nov. 9.

Colorado—State Hy. Dept., Denver, concrete paving 4.185 mi. Denver-Colorado Springs Rd., Federal Aid Project 116-A, El Paso Co., 18 ft., incl. bridge over Cottonwood Creek, to Standard Eng. & Constr. Co., 518-19 E & C Bldg., Denver, $195,605. Noted Nov. 23.

Industrial Works

PROPOSED WORK

Mass., Cambridge — Ford Motor Co., Highland Park, Detroit, Mich., having preliminary sketches made by A. Kahn, archt. and engr., 1000 Marquette Bldg., Detroit, Mich., 3 story assembly plant and power house, brick and steel, here. $300,000.

Mass., Great Barrington — Dairymen's League Cooperative Assn. plans 2 story dairy, brick and tile. $50,000. Architect not announced.

Conn., South Norwalk—Gabbe Mole Wks. Inc., 24 Raymond St., soon lets contract 3 story, 70 x 170 ft. factory addition, brick and steel, plain foundation, Water and Concord Sts. $75,000. A. S. Meloy, 2965 Main St., Stratford, archt.

Conn., South Norwalk—H. Jacobs & Sons, Day St., having revised plans prepared by A. S. Meloy, archt., 2967 Main St., Stratford, 2 story, 60 x 120 ft., addition to plant, Day St., brick and steel. $40,000. Noted Feb. 9.

N. Y., Blasdell—Seneca Iron & Steel Co., Erie Co. Bank Bldg., Buffalo, plans large addition to steel plant on 15 acre site, here. To exceed $50,000. Architect not announced.

N. Y., Buffalo—A. L. Dixon, 1034 Main St., plans 2 story, 98 x 200 ft. brick, steel and tile auto sales building and garage, Main St. To exceed $40,000. Architect not announced.

N. Y., Buffalo—Quality Damp Wash Co., Inc., Northland Ave. and Chelsea St., plans 1 story, 80 x 100 ft., modern hollow tile and brick laundry, Northland Ave. To exceed $40,000. Architect not announced.

N. Y., Leroy—Union Explosives Co. plans to rebuild power house recently destroyed by fire.

N. Y., Tonawanda—Amer. Kardex Co., Main St., having plans prepared by L. Eggert, archt., 35 Elmwood Ave., 2 story, 50 x 160 ft., brick addition to plant. $70,000.

N. J., Trenton — Trenton Potteries Co. having plans prepared by W. A. Klemann, archt., 1st Natl. Bank Bldg., 4 story, 72 x 115 ft., brick and steel factory addition, Lalor St. $100,000.

Pennsylvania — Penn Pub. Service Co., Johnstown, plans to expend $1,600,000 for improving plants and lines in Armagh, Confluence, Boswell and Lumber City.

Pa., Allentown—Independent Oil Co., Inc., 12th and Liberty Sts., plans to rebuild plant recently destroyed by fire. Cost between $60,000 and $75,000. Architect not announced.

Pa., Armagh—See "Pennsylvania."

Pa., Boswell—See "Pennsylvania."

Pa., Confluence—See "Pennsylvania."

Pa., Galeton—Galeton Electric Co., plans to expend $60,000 for improving works and lines.

Pa., Juniata—Pennsylvania R.R., Broad St. Sta., Phila., having plans prepared by W. H. Cookman, archt., and A. C. Shand, ch. engr., c/o owners, 1 story, 80 x 402 ft. blacksmith shop No. 2; two 1 story, 42 x 142 ft. welfare buildings, with 35,000 gal. steel tank; 1 story, 80 x 515 ft. blacksmith shop, No. 1; 1 story, 65 x 620 ft. laboratory shop, with 15 ton crane and 620 ft. runway; 1 story, 23 x 163 ft. fuel shed; 1 story, 90 x 574 ft. fuel shop; 2 story, 70 x 578 ft. tank shop, with 15 ton crane, 650 ft. runway; 1 story, 80 x 722 ft. boiler shop, all steel and brick, here.

Pa., Lumber City—See "Pennsylvania."

Pa., Mt. Jewett—Safety Sled Co., plans to rebuild factory recently destroyed by fire. $50,000. Architect not announced.

Pa., Phila.—S. F. Whitman & Sons, 4th and Race Sts., plans 5 story and basement, brick, steel and stone factory, plain foundation, 4th and Race Sts. $250,000. W. Steele & Sons, 16th and Arch Sts., archts.

Pa., Phila.—Crescent Textile & Supply Co., Trenton and Susquehanna Aves., soon takes bids 4 story and basement, rein.-con. and brick factory, plain foundation, Trenton Ave. $100,000. W. H. Wooters, 816 West Allegheny Ave., archt.

Pa., Phila.—S. B. and B. W. Fletcher, 25th and Reed Sts., soon takes bids 1 story and basement, 60 x 160 ft. brick and steel garage, plain foundation, 26th and Wharton Sts. $70,000. Stuckert & Co., Crozier Bldg., archts.

Pa., Pittsburgh—Superior Auto Accessories Co., 1342 Forbes St., having plans prepared by Hunting & Davis Co., archts., Century Bldg., 1 story and basement, 100 x 145 ft. and 78 x 120 ft. show room and warehouse, brick and steel, Baum Blvd. and Woodworth Ave. $50,000.

Pa., Wilkes-Barre — A. Hildebrand, 91 Wood St., plans to rebuild mill recently destroyed by fire. $45,000. Architect not announced.

D. C., Wash.—Corby Baking Co., Georgia and Trumbull Aves., had revised plans prepared for gas plant. $75,000. Private plans.

N. C., Gastonia — Ragan Spinning Co. plans 10,000 spindle mill. G. W. Ragan, pres.

N. C., Gold Hill—Rodrain Electro-Metallurgical Co. plans gold mining plant. $500,000. Architect not announced.

N. C., New Bern—Rowland Lumber Co. plans to rebuild large lumber mill, recently destroyed by fire. $200,000. A. R. Turnbull, pres.

N. C., Whitnel—Nelson Cotton Mill Co. plans 6,000 spindle cotton mill, here.

Tenn., Chattanooga—Continental Mchy. Co., G St. and Msmy. Ave., plans to rebuild plant recently destroyed by fire. $200,000. Architect not announced.

Ky., Louisville—Louisville Garage Co., plan brick and steel, garage and service station, 5th St. $100,000. Architect not announced.

O., Cleveland—See "Buildings."

O., Cleveland—Donley Bros. Co., East 74th St. and Aetna Rd., plans 1 story, brick, steel and concrete factory, East 138th St. and Miles Ave. $50,000. Architect not selected.

O., Norwood (Cincinnati P. O.)—Kemper Thomas Co., Park Ave., having plans prepared by E. Hannaford & Sons, archts. and engrs., 1024 Dixie Terminal Bldg. Cincinnati 2 story, 60 x 200 ft., rein.-con. and brick factory, rein.-con. foundation, Park Ave. $150,000.

Mich., Detroit—Detroit Pub. Lighting Comn., East Atwater St., having plans prepared by Smith, Hinchman & Grylls, archts., 800 Marquette Bldg., 1 story, 20 ft. high, 56 x 83 ft. rein.-con., steel and stone substation, Woodward Ave.

Mich., Detroit—Michigan Stamping Co., 11631 Mack Ave., had plans prepared by A. Kahn, archt., 1000 Marquette Bldg., 1 story, 15 ft. high; 140 x 347 ft. rein.-con., brick and steel addition to plant, Mack Ave. $175,000.

Mich., Ecorse—Michigan Steel Corp., 1708 First Natl. Bldg., Detroit, had plans prepared 1 story, rein.-con., brick and steel plant, plain foundation, along Rouge River. $1,000,000. Private plans.

Mich., Kalamazoo—City will have revised plans prepared and vote on $2,000,000 bonds in summer for large gas plant incl. 6 buildings. Burns & McDonnell, 400 Interstate Bldg., Kansas City, Mo., engrs.

Mich., St. Joseph — Cahill & Douglas, engrs., 217 West Water St., Milwaukee, Wis., take bids in March, 2 story concrete and brick power plant and store house on 100 x 132 ft. plot, incl. 3 boilers and electric generating unit, 125 ft. radial brick stack, for Whitcomb Hotel. $50,000. Noted Nov. 30.

Ill., Chicago—See "Buildings."

Ill., Dixon—O. Beyer, Hennepin and 1st Sts., had plans prepared by R. Griesser, archt., 64 West Randolph St., Chicago, 1 and 2 story, 79 x 140 ft. bakery, rein.-con., brick and steel, here. $90,000.

Ill., Oak Park—Madison Motor Co., 810 West Madison St., having plans prepared by Weller & Rippel, archts., 140 South Dearborn St., Chicago, 1 story, rein.-con., brick and steel service station, here. $60,000.

Wis., Cambridge—A. Kravick plans 1 and 2 story, 50 x 90 ft. garage and repair shop, brick and rein.-con., Main St. $45,000. Architect not selected.

Wis., Cedar Grove—Cedar Grove Shoe Mfg. Co. plans 2 story, 50 x 95 ft., brick and rein.-con. factory, plain foundation. M. J. De Master, pres. Architect not selected.

Wis., Crandon—F. H. Himes plans 50 x 65 ft. planing mill, rein.-con. and brick. Architect not selected.

Wis., Milwaukee—See "Buildings."

Wis., Stratford — G. Chrouser plans 2 story, 60 x 100 ft. garage and repair shop, brick and rein.-con., plain foundation. $40,000. Architect not selected.

Wis., Sturgeon Bay — Door Co. Fruit Growers' Union plans 2 story, cold storage plant and dehydrating plant, rein.-con. and brick. $50,000. E. L. Johnson, mgr. Architect not selected.

Wis., Waupun—Landall Bros. Co. plans 1 or 2 story, 60 x 132 ft. garage and repair shop, brick and rein.-con., plain foundation, Drummond St. $50,000. Architect not selected.

Ia., Cedar Rapids—Disbrow Sash and Door Co., 7th Ave. and South 1st St., having plans prepared 2 story and basement, warehouse, brick, tile and steel, Oakland Ave. $50,000. Private plans.

Mo., Kansas City—International Aircraft Co., 71st St. and Davenport Rd., having plans prepared by C. B. Sloan, archt, 321 East 11th St., 103 x 200 ft. factory, 18 ft. high, rein.-con. and steel, also aircraft hanger. $75,000.

Mo., St. Louis—United Shoe Mchy. Corp., Albany Bldg., Boston, Mass., plans 125 x 190 ft. rein.-con. and brick factory addition, plain foundation, probably 3 story, Forest Park Blvd., here.

Industrial Works (Continued)

Tex., Pioneer—Amer. Oil Co. making plans oil refinery, 2,500 bbl. initial capacity. T. Ryan, pres. Architect not announced.

Calif., Berkeley—J. Havens, c/o J. W. Blachek, archt., 2014 Shattuck Ave., having plans prepared 1 story, rein.-con. garage, Shattuck Ave. To exceed $50,000.

Calif., Emeryville—Paraffine Co. Inc., 34 1st St., San Francisco, purchased 40 acres here and plans to construct plant.

Calif., San Francisco—Roth, Winter & Walsh, 1271 Mission St., had plans prepared by Ward & Blohme, archts., 454 California St., 2 story, 92 x 120 ft., rein.-con. packing plant, Townsend St. near 5th St.

Calif., San Francisco—Stevenson Garage, Inc., c/o A. S. Bugbee, archt., 26 Montgomery St., having plans prepared 2 story and basement, 130 x 150 ft., rein.-con. garage, Stevenson St.

N. B., St. Johns—Stephen Brick Co. plans to rebuild plant recently destroyed by fire. $100,000.

Que., St. Hyacinthe — Penmans Ltd., Paris, having plans prepared by J. M. Moore, archt., 489 Richmond St., London, Ont., brick plant, Girouard St., here. $100,000.

Ont., Petrolea—B. P. Corey plans plant. $100,000. Prices wanted on materials. Private plans.

Ont., Stratford — Stratford Frames & Novelties, plans to vote on $50,000 by-law in January for factory.

B. C., Vancouver—Adkison & Dill, 325 Howe St., local capitalists, granted franchise to build central heating plant and distributing system, to burn lumber mill waste. Project subject to confirmation of ratepayers Dec. 13. Noted Sept 28.

BIDS DESIRED

R. I., East Providence—United Electric Rys. Co., Providence, taking bids 1 and 2 story, 170 x 535 ft. car house and repair shop, brick and steel, North Bway., here. $400,000. Private plans. Noted Nov. 16.

Pa., Abington—Tilden & Register, archts., 1525 Locust St., Phila., taking bids 2 story and basement, 29 x 66 ft., laundry and heating plant, brick steel and stone, plain foundation, for Abington Memorial Hospital, c/o J. B. Winder. $75,000.

Pa., Phila.—C. E. Wunder, archt., 1225 Locust St., taking bids 4 story and basement, 60 x 80 ft, brick and steel factory, plain foundation, Water and Mifflin Sts., for Schlorer Delicatessen Co., Water and Mifflin Sts. $60,000.

Pa., Phila.—Abbotts Dairy Co., c/o E. R. Limbach, archt., 31st and Chestnut St., taking bids 3 story and basement, 102 x 104 ft. brick and steel garage, plain foundation, 223-227 Lombard St. $150,000. W. Smedley, Stephens Girard Bldg., archt.

O., Delaware—Jan. 4, by W. H. Duffy, dir. Pub. Serv., Oak and 9th Sts., Columbus, 1 story and basement, 60 x 80 ft. power house, 25 ft. high, laundry with two 30 x 90 ft. wings, brick and concrete, 15,000 gal. coagulating and 26,000 gal. reserve reservoir, small pumping station and sulpher well, at Girls Industrial School, here. Noted Nov. 2.

Ill., Chicago—See "Buildings."

Ill., Chicago—Muehlhausen Spring Co., 5841 Loomis St., receiving bids 1 story, 100 x 142 ft. factory, rein.-con., brick and steel, 5811-19 South Western Ave. $40,000. Newhouse & Bernham, 4630 Prairie Ave., archts.

Ill., Shelbyville—Dec. 18, for municipal electric light plant and distribution system. $100,000 bonds voted. W. A. Fuller, 1971 Ry. Exch. Bldg., St. Louis, Mo., engrs. Noted Oct. 19.

Wis., Sheboygan — City taking bids 2 story, 76 x 108 ft., tool, carpenter and woodworking shop, brick, rein.-con. and steel, plain foundation, South Water St. $40,000. A. A. Nack, City Hall, archt.

Wis., Sheboygan Falls—Falls Motor Corp. taking bids 1 story, 50 x 60 ft., unit to factory, brick and timber, plain foundation. Private plans.

CONTRACTS AWARDED

Me., Windham — Mallison Falls Power Co., Westbrook, 1 story, 1,000 k.w. power plant, brick and concrete, plain foundation, here, to H. P. Cummings Constr. Co., Fidelity Bldg., Portland. Archts. est. $100,000.

Conn., Westport — Lees Mfg. Co., 320 Bway., New York City, 3 story, 50 x 150 ft. addition to factory, brick and heavy timber, to T. J. Pardy Constr. Co., 1387 Seaview Ave., Bridgeport. Archts. est. $75,000. Noted Nov. 30.

Mass., Holyoke—P. F. Donaghue, Walnut St., 2 story garage, brick and concrete, plain foundation, Walnut St., to M. J. Walsn & Sons, 1412 Dwight St. Archts. est. $75,000.

Mass., Marlboro—Marlboro Dairy Co., 2 story, 50 x 60 ft. dairy, brick and hollow tile, plain foundation, East Main St., to T. L. LePage, 71 Sarrin St. Archts. est. $50,000.

Mass., South Boston (Boston P. O.)—New York, New Haven & Hartford R.R., South Station, Boston, 1 story roundhouse, brick and steel, plain foundation, Dorchester Ave., here, to H. R. Kent Co., 10 High St., Boston. Archts. est. $75,000.

Mass., Stoneham—J. J. Grover Sons Co., Main St., will build 4 story and basement, 40 x 80 ft. factory addition, brick and wood, plain foundation, Main St., by day labor. $40,000. C. L. Betton, 31 Exchange St., Lynn, archt.

N. Y., Cohocton—Wetmiller Dairy & Farm Products Co., 2 story, 44 x 44 ft., concrete and hollow tile plant, to Elmira Building Co., Elmira. To exceed $40.000.

N. Y., Niagara Falls—A. S. Gilman Printing Co., 623 St. Clair Ave., 1 story, 100 x 200 ft., brick plant, to Wright & Kremers, Gluck Bldg.

N. Y., Rochester—Rochester Packing & Cold Storage Co., 78 Front St., remodeling and addition to plant, ordinary fireproof construction, to A. Friederich & Sons Co., 710 Lake Ave. Archts. est. $200,000.

Pa., Phila.—Penna. Brick & Tile Co., c/o L. F. Ducker, Land Title Bldg., 1 and 2 story, steel buildings, Westmoreland and Delaware Aves., to Cemprod Eng. & Constr. Co., 171 Madison Ave., New York City. Engrs. est. $100,000.

Pa., Pittsburgh—Chatham Land Co., c/o H. D. Shawkey Motor Co., 5526 Penn Ave., 1 story, 100 x 200 ft., service and repair shop, brick and steel, Penn and Pacific Aves., to Inland Constr. Co., 5612 Penn Ave. Archts. est. $60,000.

Pa., Pittsburgh—Metal & Thermite Corp., 1201 Bway, New York City, 2 story, 40 x 100 ft. storage shop, brick, Fayette St., to W. B. Mason, 551 3rd Ave. Archts. est. $60,000. Noted Nov. 16.

Pa., Washington—Topliffe & Ely Co., 3 story, 20 x 80 ft. rein.-con. and brick factory, West End Ave., to F. M. Gardner, Washington. Archts. est. $100,000.

Ala., Montgomery—Atlantic Ice & Coal Co., Perry St., 101 x 220 ft., ice and cold storage plant, brick and rein.-con., to C. A. D. Bayley, 16 East 15th St., Atlanta, Ga., $300,000.

O., Cleveland—Fischer & Jirouch, 4821 Superior Ave., 3 story and basement, 60 x 73 ft., brick and steel factory addition, to J. G. Woide, 1659 East 86th St. Architect's est. $40,000.

O., Columbus—C. W. Bellows, archt., 69 Ruggery Bldg., 2 story, 125 x 125 ft., brick and concrete warehouse, North Front St., to E. H. Latham Co., 60 East Broad St., for Teachout Sash, Door & Glass Co., 100 West Spring St. $40,000. Noted Nov. 9.

O., Lakewood (Cleveland P. O.)—Cleveland Waterproof Paper Co., c/o A. Kennedy, mgr., 2033 West 106th St., Cleveland, 1 story, 40 x 160 ft., brick and tile factory, Berea and Fischer Rds., here, to General Building & Investment Co., Williamson Bldg., Cleveland. Archts. est. $40,000.

Ind., Ft. Wayne—Ft. Wayne Dairy Co., 449 Baker St., general contract 2 story and basement, dairy, to M. Irmscher, 118 West Berry St. Archts. est. $50,000.

Wis., Eau Claire — Lang Canning Co., Mill St., will build 2 and 3 story addition to cannery, brick and timber, plain foundation, by day labor. $120,000. Private plans.

Wis., Menasha—J. Strange Paper Pail Co. will build 4 story, 60 x 100 ft., brick and rein.-con. factory, plain foundation, by day labor. $50,000. J. Strange, pres.

Wis., Milwaukee—Random Lake Ice Co., 064 Locust St., will build 1 story, 100 x 125 ft., ice plant, brick and timber, plain foundation, Walnut St., by day labor. $50,000. G. B. Bright Co., Marquette Bldg., Detroit, Mich., mechanical engr.

Mo., St. Louis—Grace Sign Mfg. Co., 425 South Main St., 1 story, 162 x 260 ft. concrete factory, plain foundation, President and 2nd Sts., to Unit Constr. Co., Title Guaranty Bldg. Archts. est. $100,000. Noted Dec. 7.

Mo., St. Louis—G. O. Langenberg, archt., 4045 Forest Park Blvd., concrete work for 3 story, 150 x 200 ft., rein.-con. and brick factory, plain foundation, Bircher St. near Euclid Ave., to Gamble Constr. Co., 620 Chestnut St., for Haynes-Langenberg Mfg. Co., 4045 Forest Park Blvd. $60,000. Noted Nov. 30.

Tex., Dallas—Dallas Power & Light Co., Interurban Bldg., 15,000 kw. plant, Flynn St., also power lines, to Texas [illegible] Co., Interurban Bldg. Engrs. est. $[illegible]. Noted Nov. 2.

Buildings

PROPOSED WORK

Mass., Boston—Church—Allen & Collens, archts., 75 Newbury St., soon take bids 3 story, Boylston and Ipswich Sts., for Second Society of Universalists. c/o S. H. Robbin, pastor, 13 Regent Circle, Brookline. $250,000.

Mass., Boston—School—Public Building Dept. having plans prepared by C. G. Greco, archt., 8 Beacon St., 4 story, 20 room, concrete or brick, wood pile foundation, Maverick and Orleans Sts. $[illegible]. F. J. Uneeland, supt.

R. I., East Providence — Hign School — School Com. plans 3 story, brick and concrete addition, Bway. $150,000. W. R. Walker & Son, 47 Weybosset St., Providence, archts.

Conn., Bridgeport — Clubhouse — Loyalty Lodge of Odd Fellows c/o S. Sherman, 42 State St., plans 3 story, 90 x 110 ft., brick and steel, State and Lafayette Sts. $150,000. Architect not selected.

Conn., Bridgeport—Hospital—Columbus Hospital, 582 Washington Ave., plans 3 story, brick and concrete addition, also remodeling present structure. $150,000. J. L. Vannucci, 1024 Main St., archt.

Conn., Bridgeport — School — Bd. Educ. 886 Main St., having plans prepared by L. Asheim, archt., 211 State St., 3 story, 16 room, brick and steel, South Ave. and Warren Sts. $235,000.

Conn., Bristol — Bank — Bristol Savings Bank, 244 Main St., plans bank, Main St. Architect not selected.

Conn., Hartford—Parish House and commercial—South Baptist Church, Main St. plans 3 story, brick and steel parish house and commercial building, Main and Elm Sts. $150,000. W. D. Johnson, 174 Bond St., archt.

N. Y., Alexandria Bay—Hotel—R. Hood, archt., 7 East 42nd St., New York, preparing plans 300 room, brick and stone, here. $800,000. Owners name withheld.

N. Y., Buffa'o—Clubhouse—Busy Corner Club, c/o Markeen Hotel, Main and Utica Sts., plans 3 story clubhouse. $300,000. F. W. Rosenberger, 162 Pearl St., member of building com. Architect not selected

N. Y., Buffalo—Store—Walbridge & Co., 392 Main St., plans 87 x 131 ft., brick, Main St. To exceed $300,000. Architect not announced.

N. Y., Buffalo—Store and Office—Walbridge & Co., 392 Main St., purchased 87 x 131 ft. site, Court St., and plans new store and office building. To exceed $250,000.

N. Y., Elmira—Store—S. F. Iszard Co., Baldwin and Water Sts., plans brick and steel, Main and Market Sts. $350,000. Pierce & Bickford, 118 Lake St., archts.

N. Y., Lima—Dormitory—Genesee Wesleyan Seminary plans new dormitory buildings. $300,000. Architect not announced.

N. Y., New York — Apartment — Fifth Ave. and Tenth St. Corp., c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., soon takes bids 14 story, 95 x 150 ft., brick, steel and stone, plain foundation, 5th Ave. and 10th St. $1,500,000.

N. Y., New York—Theatre—W. H. Rahman & Son, archts. and engrs., 126 Cedar St., preparing plans 3 story, 150 x 150 ft., brick, steel and stone, plain foundation, East Fordham Rd. $500,000. Owners name withheld.

N. Y., Niagara Falls—Bank and Office—Niagara Falls Trust Co., 45 Falls St., had plans prepared 10 story and basement, 45 x 90 ft., rein.-con., brick, steel, artificial stone and marble, Falls and 1st Sts. $400,000. Architect's name withheld.

N. Y., Watertown—Office—Agricultural Insurance Co., having plans prepared by York & Sawyer, archts., 50 East 41st St., New York, brick, steel and stone, Lower Washington St. $300,000. Noted March 16.

N. J., Atlantic City—Hotel—L. R. Pollock, Pennsylvania Ave., having plans prepared by F. A. Berry, archt., Real Estate Trust Bldg., Phila., 4 story and basement, 90 x 155 ft., rein.-con. and brick addition, caisson foundation. $500,000.

Pa., Ardmore—Theatre and Store—C. F. Kline, 110 North 60th St., Phila., soon takes bids 2 story and basement, 85 x 200 ft. brick and steel, plain foundation. $250,000. J. C. Norton, Ardmore, archt.

Pa., Bethlehem — Bank — Lehigh Valley Trust Co., soon takes bids 1 story and

Buildings (Continued)

basement, 60 x 100 ft. brick, steel and stone, plain foundation. $200,000. Ritter & Shay, North American Bldg., Phila., archts.

Pa., Erie — Schools — Bd. Educ. having plans prepared by M. W. Meyers, archt., c/o owner, for Ferncliff and Meyers Schools, each 2 story, 16 room, concrete, brick, and steel. $200,000 each.

Pa., Johnstown—Temple—Masonic Temple Assn., Alma Hall, purchased 255 x 358 ft. tract on Valley Pike and Linton Ave., and plans 4 story and basement, rein.-con., steel and stone. $300,000.

Pa., Kittanning — Hospital — Armstrong Co. Community Hospital, having preliminary plans prepared by Crow, Lewis & Wick, archts., 200 5th Ave., New York City, hospital and power house, brick and steel. $250,000.

Pa., New Castle—School—Bd. Educ. having plans prepared by H. M. Wirsing, archt., New Castle, 2 story and basement, brick and steel, East Side near Rose and Ryan Sts. $160,000.

Pa., Norristown—High School—Bd. Educ. having plans prepared by O. H. Parry, archt., Builders Exch. Bldg., Phila. 3 story, junior high school. $250,000.

Pa., Phila. — Apartment — B. Levy, 604 South 2nd St., soon takes bids 4 story and basement, 92 x 137 ft. brick, steel and stone, plain foundation, 15th and Allegheny Aves. $200,000. A. Levy, Real Estate Trust Bldg., archt.

Pa., Phila.—Bank—Frankford Trust Co., c/o E. O'Neill, 4344 Frankford Ave., plans 2 story and basement, 60 x 86 ft. brick, steel and granite, plain foundation, Frankford and Unity Sts. $150,000. Stearns & Woodmont, Stephen Girard Bldg., archts.

Pa., Phila. — Clubhouse — See "Miscellaneous."

D. C., Wash.—Hotel—G. W. McCord, 101 D. St., N.E., having plans prepared by Milburn & Heister, archts., 710 14th St., for hotel. $150,000.

W. Va., Wheeling — Temple — Osiris Temple, A.A.O.N.M.S., plans 5 story and basement, 125 x 200 ft., 1301 Eoff St. $600,000. Architect not selected.

W. Va., Williamson — Hotel — C. F. Vaughan, had plans prepared by R. M. Bates, archt., Mortimor Pl., Huntington, 5 story, brick and steel. $250,000.

N. C., Asheville—Office—L. B. Jackson plans 10 story, Market St. $175,000. Architect not announced.

Tenn., Memphis — Office — Columbia Mutual Life Insurance, Odd Fellows Bldg., had plans prepared by Boyer & Baum, archts. and engrs., 428 Arcade Bldg., St. Louis, Mo., soon takes bids 22 story, 75 x 77 ft., steel, tile, terra cotta, concrete and steel, concrete pile foundation North Court and Main Sts. $1,000,000.

Ky., Louisville—Hotel—J. G. Brown, having plans prepared by P. J. Bradshaw, archt. International Life Bldg., St. Louis, Mo., 600 room hotel. $2,000,000.

Ky., Louisville—School—Bd. Educ., having plans prepared by E. A. Rassinier, archt., 2217 Blvd. Napoleon, 1 story and basement, 200 x 225 ft., rein.-con. and brick veneer, Virginia Ave.

O., Avondale (Cincinnati P. O.)—School—Bd. Educ., 511 West Court St., having plans prepared by S. Hannaford & Sons, archts., 1024 Dixie Terminal Bldg., Cincinnati, 2 story, 10 room, rein.-con., brick and stone, rein-con. foundation, Reading Rd. and Rockdale Ave., here. $150,000. W. E. Bodenstein, 405 2nd Natl. Bank Bldg., Cincinnati, engr.

O., Cincinnati—School—Bd. Educ., 511 West Court St., having plans prepared by Tietig & Lee, archts. and engrs., 901 4th Natl. Bank Bldg., 5 story, 76 x 121 ft., brick, rein.-con. foundation, McMillan and Clifton Ave. $400,000.

O., Cleveland—Commercial and Office—Chester-Twelfth Co., c/o C. H. Quinlan, Swetland Bldg., having plans prepared by W. S. Ferguson Co., archts., 1900 Euclid Ave., 12 story, 130 x 130 ft., brick, steel and concrete, East 12th St. and Chester Ave. $1,000,000.

O., Cleveland — Convent, School, etc.—Sisters of Good Shepherd, East 30th St. and Carnegie Ave., having plans prepared by W. Koehl, archt., Park Bldg., 4 and 1 story and basement, 600 ft. long, convent, school and power house, brick, steel and concrete, Stop 10½ Euclid Line. $350,000.

O., Cleveland—Sales and Office—Studebaker Corp. of America, c/o E. J. Murane, local mgr., 2020 Euclid Ave., having plans prepared by W. S. Ferguson Co., archts., 1900 Euclid Ave., 3 story and basement, 54 x 190 ft., brick and rein.-con., 2000 Euclid Ave. $300,000.

O., Columbus—School—Bd. Educ., Town and High Sts., having plans prepared by H. D. Smith, archt., 50 East Town St., 2 story and basement, 72 x 176 ft., brick and concrete, concrete pile foundation, Lincoln Park. $175,000.

O., Columbus—Schools—Bd. Educ. plans improvements to East High School. $75,000, Sullivant School $32,200, 4th St. School $49,000, Feiser School $44,000, 2nd Ave. School $50,000, also an addition to Bellows Ave. School $65,000.

Mich., Benton Harbor—Y. M. C. A. having plans prepared and takes bids in spring, 4 story and basement, 90 x 135 ft rein.-con. and brick, incl. cafeteria, swimming pool, gymnasium, etc., Colfax St. $175,000. Private plans.

Mich., Detroit—Apartment—G. T. Bader, 221 Moffat Bldg., having plans prepared by J. Kasurin, archt., 512 Empire Bldg., 4 story and basement, 70 x 91 ft., brick and steel. $150,000.

Mich., Detroit—Apartment—G. M. Copeland, 758 Glynn Court, having plans prepared by Williams Bros., archts., 1111 Kresge Bldg., 3 story and basement, 60 x 120 ft. brick and steel, plain foundation, Collingwood Ave. $150,000.

Mich., Detroit—Apartment—Kohner & Seeler, archts., 1402 Kresge Bldg., preparing plans 3 story and basement, 92 x 140 ft. concrete, brick and steel, plain foundation, Philadelphia Ave. $225,000. Owner's name withheld.

Mich., Flint—Schools—Bd. Educ. having plans prepared by Malcomson, Higginbotham & Palmer, archts., 405 Moffat Bldg., Detroit, two 3 story, rein.-con., brick and steel, plain foundations. $750,000 each.

Mich., Grand Ledge—High School—Bd. Educ. having sketches made by E. Batterson, archt., Kalamazoo, 3 story, rein.-con. and brick, plain foundation. Election soon to vote on $175,000 bonds.

Mich., Grand Rapids—Office—Furniture Temple Bldg. Co., 321 Grand Rapids Natl. Bank, having sketches made by G. L. Stone, archt., Widdicomb Bldg., 9 story, 100 x 170 ft. rein.-con., brick and steel, addition, Lyon St. $300,000.

Mich., Hamtramck (Detroit P. O.)—School—Bd. Educ. having plans prepared by J. G. Kastler & Co., archts., Detroit Savings Bank Bldg., Detroit, 2 story and basement, 20 room, rein.-con., brick and steel, plain foundation. $250,000.

Mich., Ironwood — High School — Bd. Educ., having plans prepared by Croft & Boerner, archts., 1006 Marquette Ave., Minneapolis, Minn., 3 or 4 story and basement, rein.-con., brick, stone and tile. $700,000. Noted Oct. 19.

Mich., Kalamazoo—City Hall—City plans election to vote on $1,500,000 bonds for 7 story, 66 x 198 ft. rein.-con., brick and stone, Burdick St. Architect not selected.

Mich., Paw Paw—High School—Bd. Educ. having sketches made by E. Batterson, archt., Hanselman Bldg., Kalamazoo, 3 story, concrete, brick, steel and stone plain foundation. Plans to vote on $175,000 bonds. E. Hawley, secy.

Mich., St. Joseph—Y. W. C. A. having plans prepared and takes bids in spring, 3 story and basement, 70 x 132 ft. rein.-con. and brick building incl. gymnasium, swimming pool, dormitories, auditorium, etc., Lake Dr. $150,000. Private plans.

Ill., Chicago—Office, etc.—Mansure Co., 16th St. and Indiana Ave., plans 8 story office and factory. $2,000,000. Architect not announced.

Ill., Chicago—Temple and Community House—Kehilath Anshe Mayriv Congregation c/o Newhouse & Bernham, archts., 4630 Prairie Ave., having revised plans prepared 3 story, 125 x 200 ft., rein.-con., brick and steel, Drexel Blvd. and 50th St. $800,000. Noted March 30.

Wis., Madison—Dormitories—University of Wisconsin plans 4-6 story, brick, rein.-con. and steel dormitories, plain foundations. $600,000. M. E. McCaffery, secy. Architect not selected.

Wis., Madison—Hotel—Hotel Madison Co., c/o E. Clarenboch, proprietor Hotel Martin, 21 Wisconsin St., Milwaukee, having preliminary plans prepared by C. Barkhausen, archt., 79 Wisconsin St., Milwaukee, and G. Post & Sons, consult. engrs., 101 Park Ave., New York City, 8 story and basement, 90 ft. high, rein.-con. or structural steel, plain foundation. $1,000,000.

Wis., Madison—Hotel—Hotel Wisconsin Co., c/o W. Schroeder, 86 Michigan St., Milwaukee, having plans prepared by M. Tullgren & Sons Co., archts., 425 East Water St., Milwaukee, 9 story and basement, 80 x 160 ft., brick and concrete, plain foundation, here. $1,000,000.

Wis., Milwaukee—Administration, etc.—Creamery Package Mfg., 61 West Kinzie Ave., Chicago, had plans prepared by M. Tullgren & Sons., archts., 425 East Water St., 3 story and basement, 165 x 266 ft., administration building and warehouse, rein.-con. and brick, plain foundation, West Division St., here. $500,000.

Wis., Pulaski—Church and Auditorium—Church of Blessed Virgin Mary having plans prepared by Smith & Reynolds, archts., Dempsey Blk., Manitowoc, 2 story, 76 x 181 ft., brick, rein.-con. and stone, plain foundation. $150,000.

Ia., Atlantic—Hotel—C. R. Jones, having plans prepared by C. W. Farnham, archt., 1037 Lumber Exch., Minneapolis, Minn., 3 story and basement, 100 x 140 ft., rein.-con., brick and stone, here. $165,00.

Ia., Cedar Rapids—Court House and Jail—Linn Co. having plans prepared by J. W. Royer, archt., Flat Iron Bldg., Urbana, Ill., for court house and jail, 2nd Ave. and Court St., here. $750,000. H. R. Churchill Marion, aud. Noted Nov. 16.

Ia., Des Moines—Store and Office—Silverberg & Lince, S and L Bldg., soon receive bids 10 story and basement, 67 x 130 ft., rein.-con., brick, tile and stone, 5th and Walnut Sts., Boyd & Moore, 1020 Grand Ave., archts. Contract for footings let to J. A. Benson Constr. Co., 422 Valley Natl. Bank Bldg., $13,500.

Ia., Fairfield—School—Bd. Educ. having plans prepared by W. Gordon, archt., 319 Hubbell Bldg., Des Moines, 2 story and basement, brick, tile and stone. $150,000 bonds voted. C. Emery, secy.

Ia., Ida Grove—School—Dec. 19 to vote on $175,000 bonds for school. J. T. Peterson, secy. Bd. Educ.

Ia., Palla—School—Central College plans 4 story and basement, 50 x 60 ft., with one 3 story, 60 x 112 ft. and one 3 story 60 x 88 ft. wing, rein.-con., brick, tile and stone, on campus, here. $250,000. M. J. Hoffman, pres. Noted Nov. 9.

Ia., Sioux City—Fire Station—City having plans prepared by E. R. Swanson, archt., 302 Smith Apt., for fire station, 6th and Water Sts. $250,000.

Ia., Sioux City — Hospital — Methodist Episcopal Hospital, 14th and Jones St., having plans prepared by Beuttler & Arnold, archts., 406 Grain Exch. Bldg., for 4 story and basement, brick and steel. $300,000. G. T. Notson, supt. Noted Oct. 12.

Ia., West Union—Court House—Fayette Co. having plans prepared by J. G. Ralston, archt., L & J Bank Bldg., Waterloo, and will open bids after Jan. 1, 3 story, rein.-con., brick, tile and stone. $300,000. Noted Feb. 23.

Minn., Minneapolis—High Schools—Bd. Educ., City Hall, rejected bids opened Nov. 23, 3 story and unfinished basement, 45 x 250 x 300 ft. with 1 story, 40 x 300 ft. wing, 5th St. S.E. and 13th Ave.; also 3 story and unfinished basement, 45 x 250 x 300 ft. with 1 story, 60 x 80 ft. wing, 26th St. and Emerson Ave. S., both rein.-con., brick and tile. Will revise plans and readvertise. Division of Design, Bd. Educ., City Hall, archts. Noted Dec. 7.

Neb., Fairbury—High School—Bd. Educ. having plans prepared by Fiske & McGinnis, archts., Bankers Life Bldg., Lincoln, 2 story, rein.-con. and brick, plain foundation. $150,000.

Mo., Columbia—Hotel—Bd. Control of Council Residence Hall, Methodist Women, having plans prepared by Jamieson & Spearl, archts., Arcade Bldg., St. Louis, 3 story, 40 x 65 x 125 ft., stone, plain foundation, 9th and University Sts. $125,000-$150,000.

Mo., Nevada—Dec. 22 to vote on $315,000 bonds for school. C. A. Smith, 602 Finance Bldg., Kansas City, archt.

Mo., St. Louis—Hotel—Hotel Jefferson Co., 12th and Locust Sts., soon takes bids 13 story, 220 x 275 ft., rein.-con., brick and steel addition, caisson foundation, Locust and 13th Sts. $2,500,000. T. P. Barnett, Arcade Bldg., archt.

Mo., Sedalia — Schools — Voted $500,000 bonds for new high school and Summit School. Noted Dec. 7.

Tex., Austin—Hotel—Baker Hotel Co., San Antonio, having plans prepared by Sanquinet, Staats & Hedrick, archts., 1st Natl. Bank Bldg., Ft. Worth, and takes bids before March 1. 11 story, 65 x 90 ft., rein.-con., brick and concrete, here. $400,000.

Tex., Dallas—Club, etc.—Dallas Athletic Club had plans prepared by Lang & Witchell, archts. and engrs., Amer Exch. Natl. Bank Bldg., and opens bids in January, 12 story and basement, club incl. dormitories, rein.-con., brick and steel, plain foundation, Elm and Live Oak Sts. $1,000,000.

Okla., Oklahoma City—Clubhouse—B. P. O. E., had plans prepared by J. Hicks, archt., 19½ West Main St., and soon takes bids 5 story and basement, 40 x 100 ft. rein.-con., brick and stone, 3rd and Harvey Sts. $300,000.

Okla., Tulsa—Church—First Methodist Episcopal Congregation, 1101 South Boulder Sts., having revised plans prepared by Wright & Wright, archts., 1st Natl. Bank Bldg., Kansas City, Mo., 1 story, basement and balcony, rein.-con., stone and steel, 11th and Boulder Sts. $400,000.

Okla., Tulsa—Office—Sinclair Oil Co., Sinclair Bldg., having plans prepared by

Buildings (Continued)

Price & Hoit, archts., Reliance Bldg., Kansas City, Mo., 8 story and basement, rein.-con. and brick. $250,000.

Ore., Eugene—Hotel—Tortellette & Hummel, archts., Title & Trust Bldg., Portland, preparing plans and takes bids about Feb. 1, 6 and 9 story, concrete, on 100 x 100 ft. site, 10th St., here. $300,000. F. Berger, Eugene, represents owners.

Ore., Portland — Apartment — Miller & Tobey, archts., Henry Bldg., preparing plans and take bids about Feb. 1 for 4 story and basement, rein.-con., on 100 x 100 ft. site, 25th and Hawthorne Sts., for J. C. Moore, Portland. $150,000.

Calif., Lodi — Store and Theatre — A. Salomon, Lodi, (street address not available), plans store and theatre. $150,000. Architect not selected.

Calif., Los Angeles — Apartment — A. C. Blumenthal, et al., 105 Montgomery St., San Francisco, having plans prepared by Macdonald & Couchot, archts., 234 Pine St., San Francisco, 12 story, 130 x 159 ft., Wilshire Blvd. $1,000,000.

Calif., Marysville — Club — American Legion, having plans prepared by J. Morgan, archt., Merchants Exch. Bldg., San Francisco, club, 9th and E Sts. $150,000. W. L. Huber, 1st Natl. Bank Bldg., San Francisco, civil engr.

Calif., Napa — Sanitarium — Atlas Peak Sanitarium, c/o C. H. Bulson, Napa, having plans prepared by J. Morgan, archt., Merchants Exch. Bldg., San Francisco, group of building, on 170 acre site, Harris Ranch. $300,000.

Calif., Reedley—Hotel—Chamber of Commerce will organize building association to finance construction of fireproof hotel, G St. $200,000. Ellery, Frost & Patten, 1913 Fresno St., Fresno, engrs.

Calif., Sacramento — Hotel — W. H. McMorry, et al., 10th and K Sts., having preliminary plans prepared by J. Kossic, archt., c/o owner, 10 story, fireproof, 11th and K Sts. $150,000.

Calif., San Diego—Theatre—R. E. Hicks, 4250 Arguello St., having plans prepared by W. H. Wheeler, archt., Spreckels Bldg., concrete and steel, 2,000 seating capacity. $600,000.

Calif., San Francisco — Club — Pacific Coast Jockey Club, c/o H. Spreckels, secy., 1st Natl. Bank Bldg., had plans prepared by G. A. Applegarth, archt., Claus Spreckels Bldg., 2 story, frame and plaster, Tanforan Race Track. $150,000.

Calif., San Francisco—Loft—L. A. Myer, 68 Post St., having plans prepared by S. L. Hyman, archt., Foxcroft Bldg., 2 story, 47 x 160 ft., rein.-con., Howard and Mary Sts.

Calif., Santa Barbara—College—State plans additions to college incl. administration, training school and auditorium. $585,000. B. G. McDougall, Forum Bldg., Sacramento, state archt.

Que., Montreal—Office and Store—Dominion Sq. Realty Co., (street address not available), having plans prepared by Ross & McDonald, archts., Belmont St., 10 story, 113 x 170 ft., St. Catherine and Peel Sts. $3,250,000. D. B. Munger, pres.

Que., Sherbrooke — Schools — Catholic School Comrs., take bids about Jan. 8, for 2 brick and steel schools. $310,000. Architect not selected.

Ont., Bridgeburg—Hospital—Welland Co. Memorial Hospital plans brick addition to hospital. $200,000.

Ont., London — Dormitories — Western University Governors, having plans prepared by J. M. Moore, archt., 489 Richmond St., 3 story, and basement, stone. $500,000.

Que., Sherbrooke—High School—Protestant School Com. takes bids about Jan. 8, new brick and steel high school. $150,000. Architect not selected.

Ont., Welland — Hospital — Welland Co. Hospital Bd. plans wing addition, Main St. $225,000. J. Moore, Port Colborne, chn. Architect not selected.

BIDS DESIRED

Conn., New Haven—Church—J. A. Heller, pastor St. Boniface Roman Catholic Church, 229 George St., taking bids and opens same about Jan. 1, 1 story and basement, 55 x 120 ft., brick and stone, plain foundation, State St. $150,000. G. A. Zunner, 182 High St., Hartford, archt. Noted Feb. 2.

Conn., New Haven—Home—Norton & Townsend, archts., 839 Chapel St., taking bids 3 story and basement, 50 x 130 ft., brick and steel, plain foundation, Dixwell Ave., for Jewish Home for Children. $150,000. Noted Nov. 30.

N. Y., Bath—Municipal—Jan. 5, at office of J. W. Taggert, village clk., for municipal building; adv. this issue.

N. Y., Brooklyn — Bank — Holmes & Winslow, archts. and engrs., 134 East 44th St., New York, taking bids and opens same about Jan. 2, 2 story, brick, steel and stone, plain foundation, Atlantic and Pennsylvania Ave., here, for East New York Savings Bank, Atlantic Ave. $500,000. Noted Dec. 7.

N. Y., New York—Apartment—One Thousand One Hundred and One Park Ave. Corp., c/o R. Candella, archt. and engr., 200 West 72nd St., 14 story, 100 x 125 ft., brick, steel and stone, plain foundation, Park Ave. $150,000. Work will be done by separate contracts under supervision of architect.

N. Y., New York — Apartment — One Hundred and Seventy First St and Audubon Ave. Corp., c/o V. C. Farrar, archt. and engr., 4 East 39th St., 5 story, 100 x 120 ft., brick, steel and stone, plain foundation, Audubon Ave. and 171st St. $150,000. Work will be done by separate contracts under supervision of architect.

N. J., Elizabeth—School—Jan. 11, by Bd. Educ., South Broad St., additions and alterations to P. S. 12, Magie Ave. and Springfield Rd. C. Godfrey Poggi, 275 Morris Ave., archt.; adv. this issue.

Pa., Ardmore—Apartment—J. F. Haberson, archt., Otis Bldg., Phila., taking bids 3 story and basement, 100 x 100 ft. brick, steel and stone, plain foundation, Akens Ave. and Simpson Rd. $300,000. Owner's name withheld.

Pa., Holmesburg (Phila. P. O.)—Kitchen—Dec. 20, by Director Dept. Pub. Welfare, City Hall, 1 story, 75 x 115 ft. concrete, brick and steel, plain foundation. $150,000. J. P. B. Sinkler, 1211 Chestnut St., Phila., archt.

N. C., Raleigh—School—Dec. 20, by Twp. School Com., 3 story and basement, brick. $150,000. S. B. Underwood, supt. of schools. C. G. Sayre, Allen Bldg., archt.

La., Baker—Dormitories—Jan. 4, by Favrot & Livaudais, archts., Hibernia Bank Bldg., New Orleans, 3 brick dormitory buildings, here, for Leyland College. $150,000. Contract does not include mechanical equipment.

O., Arlington—School—Jan. 4, by Bd. Educ., 2 story, 62 x 135 ft., brick, steel and concrete. $150,000. T. D. McLaughlin, Savings Bldg., Lima, archt.

O., Cleveland—Apartment—J. Narosny, 13407 3rd Ave., East Cleveland, taking bids 3 story and basement, 80 x 110 ft., brick and steel, plain foundation, 861 Thornhill Dr., here. $150,000. M. Weis, 617 Union Bldg., archt.

O., Cleveland — Display and Sales — Walker & Weeks, archts., 1900 Euclid Ave., taking bids 4 story, 60 x 123 ft., brick, steel and concrete, 7023 Euclid Ave., for Schwegler & Co., 6501 Euclid Ave. $200,000. Noted Sept. 7.

O., Cleveland—Hospital—Jan. 3, by R. S. Harsh, archt., Ohio Hartman Bldg., Columbus, 1 story and basement, 180 x 180 ft., concrete and brick, at Cleveland State Hospital, here, for Dept. Pub. Welfare, 9th and Oak Sts., Columbus. $275,000. Noted Sept. 14.

O., Lakewood (Cleveland P. O.)—Apartment—S. Koslen, 1077 East 97th St., Cleveland, taking bids 3 story, 97 x 124 ft., brick and steel, 11833 Lake Ave., here. $150,000. M. Weis, 617 Union Bldg., Cleveland, archt. Noted Nov. 16.

Mich., Detroit—Apartment—C. D. Lundblad, archt., 206 New Telegraph Bldg., taking bids and opens same about Dec. 20, 4 story and basement, 95 x 135 ft. brick, steel and stone, plain foundation, Willis Ave. and Brush St. $250,000. Owner's name withheld.

Mich., Port Huron—School—Dec. 18, by Secy. Bd. Educ., 3 story, 50 ft. high, 150 x 283 ft. rein.-con., brick and steel, plain foundation, 10th St., $250,000. Van Leyen, Schilling, Keough & Reynolds, 3440 Cass Ave., Detroit, archts.

Ill., Chicago — Administration, etc. — Creamery Package Mfg. Co., 61 West Kinzie St., and M. Tullgren & Sons Co., archts., 425 East Water St., Milwaukee, Wis., receiving bids 3 story and basement, 165 x 266 ft. administration building and warehouse, rein.-con. and brick, plain foundation, West Division St., here. $500,000.

Ill., Chicago—Apartment and Store—D. G. Wallace, archt., 22 West Monroe St., receiving bids 3 story and basement, 75 x 125 ft., rein.-con., brick and steel, Wilson and Eastwood Sts. $150,000. Owner's name withheld.

Ill., Chicago—Apartment—A. White, 133 West Washington St., (representing owner) receiving bids 3 story and basement, 103 x 129 ft., rein.-con., brick and steel, 78th St. near Ada St. $150,000. A. Bishop & Co., 35 South Dearborn St., archts. Owners name withheld.

Ill., Chicago—Store and Apartment—D. Blumrosen c/o Newhouse & Bernham, arcts., 4630 Prairie Ave., receiving bids 4 story, 58 x 125 ft., rein.-con., brick and steel, Lawrence Ave. and Central Park. $150,000

Wis., Milwaukee — Apartment — J. Humholz, 2310 Vliet St., taking bids and opens same about Dec. 18, 6 story and basement, 53 x 104 ft., rein.-con. and brick plain foundation, Biddle St. $150,000. Private plans. Noted Nov. 23.

Wis., Milwaukee—Store—H. J. Esser, archt., 82 Wisconsin St., taking bids 8 story and basement, 78 x 120 ft. and 60 x 177 ft. addition, rein.-con. and terra cotta, plain and wood pile foundation, Grand Ave., for Gimbel Bros., 3 Grand Ave. Noted May 18.

Wis., Racine—Lodge and Commercial—Columbus Bldg. Assn., c/o A. J. Weber, pres., 1600 Racine St., taking bids 3 and 4 story and basement, 60 x 114 ft., brick and concrete, plain foundation. $150,000. Private plans.

Ia., West Union—Court House—Fayette Co. receiving bids 3 story, rein.-con. and stone. $300,000. J. G. Ralston, L & J Bldg., Waterloo, archt.

Kan., Lawrence—Library—Jan. 2, by Kansas University, 4 story and sub basement, 84 x 151 ft., rein.-con., brick, steel and stone. $250,000. R. L. Gamble, Topeka, state archt.

Mo., Kansas City — Club — Dec. 24, by Marquette Council 1698, Knights of Columbus, 4 story and basement, 129 x 137 ft., rein.-con., brick and stone, Forest Ave. and Armour Blvd. $400,000. A. F. Adams, 500 Walix Bldg., archt. H. A. Noble, 411 Reliance Bldg., engr. Noted Aug. 10.

Wash., Kelso—Hotel—Long Bell Lumber Co., 14th and Kenwood Sts., Kansas City, Mo., taking bids, 6 story and basement, 82 x 134 ft., brick, stone and terra cotta, near here. $350,000-$400,000. F. E. McIlvain, 1001 Orear Leslie Bldg., Kansas City, Mo., archt. Noted Sept. 21.

Calif., Bakersfield—Lodge—C. Werner, archt., Santa Fe Bldg., San Francisco, receiving bids 4 story and basement, rein.-con. and hollow tile, 18th St., here, for Masonic Temple Assn. $200,000. A. S. Crites, secy. Noted Feb. 2.

BIDS RECEIVED

N. Y., Flushing—Dormitories, etc.—C. B. J. Snyder, supt. School Buildings of Bd. Educ., Flatbush Ave. extension and Concord St., Brooklyn, opened bids Dec. 11, dormitories, masters house, etc., for Parental School on westerly side of road between here and Jamaica, about 1,700 ft. south of North Hempstead Turnpike, here, from T. A. Clarke, Inc., 122 Livingston St., Brooklyn, $447,000; C. Meads Co., 217 West 14th St., New York, $471,000; L. M. Neckerman, Inc., 103 Park Ave., New York, $474,895. Noted Dec. 7.

O., Cleveland—High School—Bd. Educ., East 6th St. and Rockwell Ave., opened bids Dec. 4, general contract 3 story, brick, steel and concrete, West 46th St. and Hyde Ave., from J. F. Hohlock, Davis & Farley Bldg., $619,983, P. Kirschner & Co., 1104 Prospect Ave., $650,750; heating and ventilating, from Becker-Seidel Co., 324 Prospect St., $89,990. Noted Nov. 23.

CONTRACTS AWARDED

Calif., Santa Clara—Science—University of Santa Clara, 3 story, rein.-con., from J. S. Sampson, Monadnock Bldg., San Francisco, $161,000; Brown & Stafford, Madera, $167,271; Lange & Bergstrom, Inc., Sharon Bldg., San Francisco, $167,500. Noted Dec. 7.

Mass., Boston—Apartment—Charles St. Apartment Trust, 134-142 Charles St., will build three 4 story, brick, stone and steel plain foundations, Charles St. $275,000. Private plans.

Mass., Boston—Apartment—Grishaver & Cartoof, 1082 Commonwealth, Ave., will build five 4 story apartment buildings, 17,500 sq.ft. floor space, concrete and brick, wood pile foundation, Commonwealth and Sutherland Aves., by day labor. $400,000. Silverman, Brown & Heenan, 51 Cornhill, archts.

Mass., Brookline (Boston P. O.)—Apartment—Berch & Cadigan, 130 Shawmut Ave., Boston, will build 4 buildings, each 3 story, 40 x 60 ft., concrete and brick, Babcock St., here, by day labor. $300,000. F. A. Norcross, 46 Cornhill, Boston, archt.

Mass., Lowell—Bank—Lowell Five Cents Savings Bank, John St., 2 story, 70 x 100 ft., brick, stone and concrete, plain foundation, John St., to W. Coulson, 1 Hayward St., Cambridge. Archts. est. $150,000.

Conn., Rockville — School — Rockville School Dist., 1 story and basement, brick and steel, Maple and Union Sts., to H. Wales Lines Co., 134 State St., Meriden. Archts. est. $150,000. Noted Nov. 30.

N. Y., Brooklyn — Apartment — Kraslow Building Co., Inc., c/o Shampan & Shampan, archts. and engrs., 50 Court St., 5 story, 75 x 133 ft., brick, steel and stone.

Buildings (Continued)

plain foundation, Church Ave. and East 21st St., by day labor. $180,000.

N. Y., New York—Apartment—Benenson Realty Co., c/o C. Schaefer, archt. and engr., 394 East 150th St., will build 4 story, 100 x 120 ft., brick, steel and stone, plain foundation, Grand Concourse and 173rd St., by day labor. $300,000.

N. Y., New York—Apartment—L. Klosh, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., 5 story, 100 x 150 ft., brick, steel and stone, plain foundation, Wadsworth Ave., by day labor. $350,000.

N. Y., New York—Apartment—Lasberg Realty Corp., c/o M. Courland, archt. and engr., 47 West 34th St., 6 story, 100 x 150 ft., brick, steel and stone, plain foundation, Andrews Ave. and West 176th St., by day labor. $250,000.

N. Y., New York—Apartment—J. H. Miles Building Corp., c/o Margon & Glaser, archts. and engrs., 2806 3rd Ave., will build 6 story, 100 x 100 ft., brick, steel and stone, plain foundation, Clinton Pl., by day labor. $200,000.

Pa., Phila.—Hospital—Jefferson Hospital, 12th and Sansom Sts., 14 story, 90 x 115 ft. brick, stone and marble, 12th and Sansom Sts., to Wark & Co., 231 South Broad St., $1,400,000.

Ga., Atlanta—Schools—For 2 story and basement, 68 x 385 ft., to McDevitt Fleming Co., McC and Lindsey Sts., Chattanooga, $400,000; 3 story and basement, 260 x 360 ft., to Southern Ferro Concrete Co., Trust Co. Georgia Bldg., $200,000. Noted Nov. 2.

Ky., Louisville—Lodge—Preston Lodge 281, 2 story and basement, marble, 515-517 East Bway., to Platoff & Bush, 120 West Liberty St., $160,000.

O., Bowling Green—Dormitory—Bd. Trustees State Normal College, 3 story and basement, 40 x 150 ft., brick, stone and concrete on campus, to Watts-Suhrbier Co., 1235 Miami St., Toledo, $138,138. Noted Dec. 7.

O., Cleveland—Commercial and Market—Bway. Properties Co., c/o G. R. McKay of Associated Investment Co., Guardian Bldg., 1 and 2 story, 193 x 213 ft., brick, steel and concrete, Cable Ave. and Bway., to C. F. Minnick Constr. Co., 701 Guardian Bldg. Archts. est. $500,000. Noted Nov. 17.

O., Cleveland—Temple and School—Tifereth Israel Congregation, c/o L. M. Wolf, chn. Building Comn., Hickox Bldg., 2 and 4 story, brick, steel and concrete, concrete pile foundation, East 105th St. and Anse Rd., to J. Gill & Sons, Citizens Bldg. Archts. est. $1,000,000. Noted Oct. 19.

O., Columbus—Hotel—Neil House Co., 12 story, 187½ ft. square, brick, steel and terra cotta, South High St., to Boyle-Robertson, Constr. Co., Evans Bldg., Wash., D. C., $3,500,000.

Mich., Detroit—Hotel and Store—J. Barlum, 5737 Second Blvd., 10 story, 40 x 100 ft. rein.-con., brick and steel, plain foundation, Farmer and John Sts., to O. Misch, 159 East Columbia Ave.

Mich., Detroit—Mercantile—G. F. Webber, 1414 Gratiot Ave., 5 story and basement, 60 x 90 ft. concrete, brick and steel, plain foundation, Gratiot Ave., to Bryant & Detwiler Co., 2336 Dime Bank Bldg. Archts. est. $150,000. Noted April 13.

Ill., Chicago—Apartment—A. Smith, 1339 South Lawndale Ave., 3 story and basement, 200 x 200 ft., rein.-con., brick and steel, 3537-53 West Madison St., to Douglas Constr. Co., 3939 West Adams St. Archts. est. $350,000.

Ill., Chicago — Store, Office and Apartment—H. Schlackett, 5400 West Madison St., 3 story, 77 x 130 ft., rein.-con., brick and steel; 5303-9 West Madison St. to Thogerson & Erickson, 4104 North Kedzie Ave. Archts. est. $200,000.

Wis., Sheboygan—Theatre—Rex Theatre Co., 710 North 8th St., 2 story, 50 x 110 ft., brick, rein.-con. and stone, plain foundation, 8th St., to F. Geib, 1439 South 9th St. Archts. est. $150,000. Noted Sept. 7.

Ia., Cedar Rapids — Hospital — Mercy Hospital Assn. c/o Sister Cepheas, 4 story and basement, rein.-con., brick, tile and stone, 6th Ave. between 8th and Division Sts., to Lightner Bros., Granby Bldg. Archts. est. $250,000. Noted Aug. 31.

Ia., Ottumwa—High School—Bd. Educ. 4 story and basement, to Natl. Contg. Co., 311 Metropolitan Bank Bldg., Minneapolis, Minn., $700,000.

Kan., Leavenworth—High School—Bd. Educ. general contract 2 story and basement, 101 x 155 ft., rein.-con., brick and stone, to G. Walker, Salina, $182,520. Archts. est. $250,000. All heating and plumbing bids rejected. Noted Nov. 2.

Tex., San Antonio—School—General contract for 1 story with partial 2nd floor for cafeteria, rein.-con. and brick, concrete footings, to L. E. Shelton, 1902 River Ave. $145,947. Noted Nov. 30.

GATE VALVES, ETC.—BROOKLYN, N. Y. ..

Bids were opened by Bd. Water Supply, Dec. 5, for furnishing and delivering gate valves and hydrants for Mt. Prospect, Park Slope, Fort Hamilton and Clove Conduits and Narrows Siphon No. 2 of Catskill Aqueduct, Contr. No. 213, (A) Michigan Valve & Fdry. Co., 3631 Parkinson Ave., Detroit; (B) Kennedy Valve Mfg. Co., East Water St., Elmira; (C) Coffin Valve Co., Neponset, Mass. The unit bids were as follows:

		A	B	C	Average Bid
4	48-in. turbine-driven gate-valves	$3,030.75	$4,663.37	$5,385.00	$4,359.707
29	48-in. hand-operated gate-valves	2,521.55	3,597.37	4,100.00	3,406.307
15	36-in. gate-valves	1,680.00	2,477.24	3,000.00	2,385.747
14	24-in. gate-valves	816.77	1,652.96	2,000.00	1,489.91
33	20-in. gate-valves	526.00	1,192.25	1,300.00	1,006.083
2	16-in. gate-valves	409.09	1,799,77	1,185.00	1,131.287
40	12-in. gate-valves	164.96	552.26	535.00	417.407
2	8-in. gate-valves	33.24	39.05	50.00	40.763
50	6-in. gate-valves	21.03	26.40	35.00	27.477
9	5-in. gate-valves	15.34	26.40	40.00	27.247
45	6-in. hydrants	46.37	55.45	75.00	58.94
	Extended totals	$150,000	$252,442	$285,695	

Tex., Waco—Library—Baylor University, 5th and Speight Sts., 2 story and basement, rein.-con. and brick, plain foundation, to Johnson Constr. Co., Waco. $150,000. Noted Oct. 5.

Calif., Redwood City—High School—Sequoia Union High School Dist., constructing high school, general contract to R. Trost, 26th and Howard Sts., San Francisco, $210,704; plastering to L. Bosch, 180 Jessie St., San Francisco, $42,320; heating and ventilating to J. F. McGowan, 180 Jessie St., San Francisco, $33,997; plumbing to Christensen & Anderson, Palo Alto, $36,111. Noted Dec. 7.

Calif., San Francisco—Apartment—A. J. Falvey, 2099 Lake St., will build 5 story and basement, Sutter St. near Leavenworth St., by day labor. $150,000. Private plans.

Calif., San Francisco—Store and Club—O'Brien Bro., Inc., archts., 240 Montgomery St., 2 story, brick, Market St. near 12th St., to F. L. Hansen, 251 Kearney St., for Loyal Order of Moose, Lodge 26, 105 Jones St. $100,000. Noted Oct. 12.

Federal Government Work

PROPOSED WORK

Del., Wilmington—Dredging—U. S. Engineer, rejected bids for dredging Tuckerton Creek, N. J. Noted Sept. 7.

O., Cincinnati—Horses and Props—U. S. Engineer, 1st Dist., plans to purchase horses and props for Dams 34, 36 and 38, Ohio River.

O., Cincinnati—Metal Work—U. S. Engineer, 405 Custom House, plans metal work for Dams 36 and 38 in Ohio River.

BIDS DESIRED

N. Y., Tupper Lake—Drainage System—Spec. 4723—Dec. 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., drainage system at U. S. Veterans Hospital, here. L. E. Gregory, ch. of Bureau.

N. Y., Tupper Lake—Roads, etc.—Spec. 4727—Dec. 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., for roads, sidewalks, etc., at U. S. Veterans Hospital, here. L. E. Gregory, ch. of Bureau; adv. this issue.

Pa., Phila.—Fuel Oil—Dec. 26, at office U. S. Engineer, 815 Witherspoon Bldg., furnishing 37,000 bbl. fuel oil for floating plant.

Pa., Phila.—Remodeling—Dec. 28, by Treas. Dept., Wash., D. C., remodeling on 1st and 2nd floors, lookout gallery, etc., in U. S. Post Office and Court House, here. J. A. Wetmore, acting superv. archt.

Md., Edgewood Arsenal—Quarters—Dec. 27, by Constructing Quartermaster, U. S. Army, Edgewood Arsenal, for 20 sets officers quarters; adv. this issue.

O., Cincinnati—Pipe Line Dredge—Jan. 15 at office U. S. Engineer, 405 Custom House, for one 24 in. pipe line dredge.

Ala., Birmingham—Changes—Dec. 29, by Treas. Dept., Wash., D. C., changes in U. S. Post Office and Court House, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Tex., Del Rio—Drainage System—Jan. 3 by Treas. Dept., Wash., D. C., for complete sanitary drainage piping in U. S. Post Office Courthouse, etc., here. J. A. Wetmore, acting superv. archt.

Wash., Tacoma—Hospital—Jan. 16, by Director, U. S. Veterans Bureau, in offices Quartermaster-General, 2306 Munitions Bldg., Wash., D. C., for Neuro-Psychiatric Hospital, at American Lake, here; adv. this issue.

Ore., Portland—Scows—Dec. 26, at office U. S. Engineer, 1st Dist., for two 70 x 22 x 6 ft. steel dump scows.

H. T., Pearl Harbor—Refrigerating and Ice-Making Plant—Spec. 4735—Jan. 24, by Bureau Yards & Docks, Navy Dept., Wash., D. C., for refrigerating and ice-making plant, here. L. E. Gregory, ch. of Bureau. Noted Oct. 19.

BIDS RECEIVED

California—Road—C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., 881 Mills Bldg., San Francisco, opened bids Nov. 28, grading and building structures on 10.9 mi. Adin-Adin Summit Natl. Forest Highway, about 28 mi. southwest of Alturas, Modoc Co., (engrs. est. $84,890), from D. H. Ryan, 1615 Fern St., San Diego, $94,060 less equipment rental $1,204; C. R. Hall, Reno, Nev. (street address not available) $101,638 less equipment rental $2,666; A. A. Tieslau, 2819 Grove St., Berkeley, $108,833; J. Welsh, San Francisco, (street address not available), $111,246 less equipment rental $3,000. Noted Nov. 16.

California—Road—C. H. Sweetser, dist. Engr., U. S. Bureau Pub. Rds., 881 Mills Bldg., San Francisco, opened bids Nov. 24, grading and building structures on 15.1 mi. Cuyama Rd. in Santa Barbara Natl. Forest, Santa Barbara and San Luis Obispo Counties, from S. Hunter, Santa Barbara, Sect. A, $188,222 less equipment rental $2,200, Sect. B, $514,796 less equipment rental $9,300; Boyd Bros., San Diego (street address not available), Sect. A, $178,204 less equipment rental $9,806, Sect. B, $403,148 less equipment rental $28,628, Sect. C, $583,879 less equipment rental $44,043; Warren Constr. Co., Bacon Bldg., Oakland, Sect. A, $178,967; W. A. Bechtel, San Francisco, (address not available) Sect. B, $659,255; C. H. Hudson, Marsh-Strong Bldg., Los Angeles, Sect. C, $491,602; Palmer & McBryde, 503 Market St., San Francisco, Sect. C, $578,288. Noted Nov. 16.

CONTRACTS AWARDED

Pa., Pittsburgh—Barges—U. S. Engineer, Pittsburgh, 3 steel deck barges to McWilliams Co., Inc., Exch. Bldg., Memphis, Tenn., $85,082. Noted Nov. 2.

Del., Wilmington—Dredging—U. S. Engineer, Wilmington, dredging in Tuckerton Creek, N. J., to Independent Bridge Co., May Bldg., Pittsburgh, Pa., $40,020.

S. C., Charleston—Dredging—U. S. Engineer dredging western channel and Sampit River, Winyah Bay, to Seaboard Dredging Co., Durkee Bldg., Jacksonville, Fla., $99,594. Noted Oct. 26.

Ga., Savannah—Catamarans—U. S. Engineer furnishing 25 pontoon catamarans for U. S. Dredge Morgan, to C. Ward Eng. Co., Charleston, W. Va. (street address not available), $22,375. Noted Oct. 5.

Fla., Jacksonville—Dredging—U. S. Engineer, Jacksonville, dredging in Key West Harbor, here, to Clark Dredging Co., Miami (street address not available), 63,000 cu.yd. $1.43 per cu.yd. Noted Nov. 2.

Mo., St. Louis—Earthwork—Secretary Mississippi River Comn., 1311 International Life Bldg., 380,000 cu.yd. earthwork, near Apex, Kings Lake D.D. to McWilliams Co., Inc., Exch. Bldg., Memphis, Tenn., $0.2239 per cu.yd., total $85,082. Noted Nov. 30.

Mo., St. Louis—Earthwork—Secretary Mississippi River Comn., 1311 International Life Bldg., 170,000 cu.yd. hydraulic fill above Cairo, Ill., in sub-district 1 of drainage Union Dist. 1, Ill., to La Crosse Dredging Co., 405 Plymouth Bldg., Minneapolis, Minn., $43,690. Noted Nov. 30.

Okla., Chandler — Post Office — Treas. Dept., Wash., D. C., for U. S. Post Office, here, to C. Weitz Sons, 713 Mulberry St., Des Moines, Ia., $43,900 (12 months). Noted Dec. 7.

Miscellaneous

PROPOSED WORK

Wharf and Bulkhead—Weymouth (Boston P. O.), Mass.—Edison Electric Illuminating Co. of Boston, 70 State St., Boston, having preliminary plans prepared, wharf and bulkhead adjoining proposed power plant, here. $50,000. Stone & Webster, Inc., 147 Milk St., Boston, archts. and engrs.

Park—Binghamton, N. Y.—Plans to convert property of Weed Tannery Co.

Miscellaneous (Continued)

into modern park. $50,000. **W. E. Weller**, city engr.

Road Oil—Mayville, N. Y.—Bd. Supervs. Chautauqua Co. plan to purchase about 285,000 gal. road oil. S. Fitch, Westfield, co. engr.

Road Oil Machine—Mayville, N. Y.—Bd. Supervs. Chautauqua Co. soon take bids for road oiling machine (complete), $3,000. S. E. Fitch, Westfield, co. engr.

Transmission Lines—Pennsylvania—See "Industrial Works."

Crane—Blawnox, Pa.—Blaw-Knox Co., Freeport Rd., Pittsburgh, and Blawnox, does not plan to purchase 10 ton crane as stated in our issue of Nov. 23.

Transmission Line—Galeton, Pa.—See "Industrial Works."

Elevated Railways—Phila., Pa.—Soon takes bids 3 mi. 3 track elevated railway from Christian and Broad Sts., to 49th St. and Paschall Ave., $22,000,000, also 4 mi. 2 track elevated railway from Hunting Park Ave. and Broad St. to Olney Ave., $14,000,000. H. H. Quimby, 1211 Chestnut St., engr.

Playgrounds — Phila., Pa. — Takes bids early in 1923 playground at Kensington and Frankford Aves., incl. clubhouse, wading pool, lockers, etc., $100,000; playground at Ann and Cedar Sts., clubhouse, paving, grading, etc., $120,000; playground at 11th and Lombard Sts., clubhouse, lockers, grading paving, etc., $100,000. **J. P. B. Sinkler**, 1211 Chestnut St., archt.

Subway—Phila., Pa.—Dept. Transit, 1211 Chestnut St., takes bids within 90 days, 4 track subway under Broad St. from League Island Navy Yard to Olney Ave. $55,000,000. W. Twining, dir.

Electric Light System—Plaquemine, La.—See "Waterworks."

Stone Washer and Crushing Machine—Chattanooga, Tenn.—Gager Lime & Mfg. Co., James Bldg., taking bids stone washer and crushing machine, 200 ton capacity. M. P. Kennedy, secy.

Stadium—Youngstown, O.—Bd. Educ., 20 West Wood St., plans stadium, 20,000 seating capacity. $150,000. G. Rudge, Jr., 742 Elm St., chn. building com.

Road Machinery — Antigo, Wis. — Langlade Co. appropriated $10,000 for road machinery incl. gravel screening plant. C. Olsen, comr.

Road Machinery—Black River Falls, Wis.—Jackson Co. appropriated $3,000 for road machinery, incl. 1 tractor, 12 ft. grader and 2 patrol graders. W. Tibbits, comr.

Road Machinery — Darlington, Wis. — Lafayette Co. appropriated $5,000 for road machinery, incl. tractor, drags and graders. C. H. Priestley, comr.

Road Machinery—Durand, Wis.—Pepin Co. appropriated $3,500 for road machinery, incl. Holt 10 ton tractor and large grader. G. A. Goss, comr.

Road Machinery—Elkhorn, Wis.—Walworth Co. appropriated $5,000 for road machinery. H. J. Peters, comr.

Road Machinery—Fond du Lac, Wis.—Fond du Lac Co. appropriated $10,000 for road machinery. G. Treleven, comr.

Road Machinery, etc.—Friendship, Wis.—Adams Co. appropriated $2,000 for road machinery, incl. patrolmen's outfits. J. A. McGregor, comr.

Road Machinery — Green Lake, Wis.—Green Lake Co. Bd. appropriated $8,000 for road machinery, incl. crusher plant. D. C. Williams, comr.

Road Machinery — Hayward, Wis. — Sawyer Co. appropriated $4,000 for road machinery, incl. large grader, patrol graders, etc. E. J. Collett, comr.

Truck, etc.—Jefferson, Wis.—Jefferson Co. appropriated $19,000 for truck and patrolmen's equipment. R. D. Royce, comr.

Road Machinery—Lancaster, Wis.—Grant Co. appropriated $12,000 for road machinery incl. 1 tractor, 2 trucks, one 12 ft. blade grader, 10 patrol graders and 10 road drags. H. Mink, comr.

Tunnels—Madison, Wis.—University of Wisconsin plans underground tunnels for heating and water systems, etc. $107,500. J. D. Phillips, Purch. Agt.

Road Machinery—Medford, Wis.—Taylor Co. appropriated $9,000 for road machinery. C. Kelnhofer, comr.

Road Machinery—Milwaukee, Wis.—Milwaukee Co. appropriated $10,000 for road machinery. W. F. Cavanaugh, comr.

Road Machinery—Oconto, Wis.—Oconto Co. appropriated $5,000 for road machinery for 1923. E. W. McAllister, comr.

Road Machinery—Richland Center, Wis.—Richland Co. appropriated $14,000 for road machinery, incl. 1 truck, 1 rock crusher, 1 large grader, 1 tractor, 1 small cement mixer, 4 patrol graders, 12 road drags. W. V. Robinson, comr.

Golf Links, etc.—Omaha, Neb.—Happy Hollow Country Club, 54th St. and Underwood Ave., having surveys made golf links and country club. $75,000 each. Langford & Moreau, 104 South Dearborn St., Chicago, golf archts. Bruce & Grupe, 408 Finance Bldg., engrs.

Stadium—Omaha, Neb.—Creighton University, 25th and California Sts., having plans prepared for stadium. $150,000. J. Latenser & Sons, 732 Peters Bldg., archts.

Stadium, etc.—University Place, (Lincoln P. O.), Neb.—Nebraska Wesleyan University, had plans prepared by Fiske & McGinnis, archts., Bankers Life Bldg., Lincoln, 1 story, 42 x 187 ft. stadium, 25 x 75 ft. enclosed swimming pool, etc. $75,000.

Memorial Tower—Columbia, Mo.—University of Missouri Memorial Fund had plans prepared by Jamieson & Spearl, archts., Arcade Bldg., St. Louis, and soon takes bids, 50 x 60 ft. memorial tower, 145 ft. high, steel and stone, concrete foundation, on campus. $150,000. Two 2 story and basement wings will be added later.

Aircraft Hanger—Kansas City, Mo.—See "Industrial Works."

Grand Stand—Kansas City, Mo.—Kansas City Baseball Club, 20th and Olive Sts., having plans prepared by Osborn Eng. Co., archts., 2848 Prospect Ave., Cleveland, O., single deck, brick and steel grand stand, 20,000 seating capacity. $250,000.

Headers and Dykes—Alamosa, Colo.—Alamosa Co. rejected bids for headers and dykes in Rio Grande Del Norte River, near here. $25,000. Will readvertise. L. D. Blauvelt, State Office Bldg., Denver, engr.

Golf Course, etc.—Halifax, N. S.—Brighwood Golf & Country Club plans improving golf course and clubhouse. $130,000.

Grain Elevator — Montreal, Que. — Montreal Harbor Comrs., plans 10,000,000 bu. grain elevator. $10,000,000. W. L. McDougald, pres.

Skating Rink — Montreal, Que. — Loyola College, Sherbrooke St. W., plans large skating rink, 125 x 250 ft., Sherbrooke St. W. T. McLaren, 264 Beaver Hall, archt.

Drilling Wells—Port Royal, Ont.—Dominion Gas Co., Port Rowan, plans drilling gas wells here. $40,000. Prices wanted on piping and equipment.

Hydro Electric Development—Quebec, Que.—Quebec Development Co., c/o W. L. Lee, engr., 511 5th Ave., New York City, plans hydro electric development along Saguenay River. $10,000,000.

Cement, Crushed Stone, etc.—London, Ont.—Takes bids end of January on cement, crushed stone, asphalt and all iron castings for sewer work. $100,000. H. A. Brazier, city engr.

Grain Elevator — Owen Sound, Ont. — Owen Sound Elevator Co., having plans prepared grain elevator, steel and cement, on waterfront. $150,000. R. Patterson, mgr. Prices wanted on materials. Private plans.

BIDS DESIRED

Portland Cement—Brooklyn, N. Y.—Dec. 21, by E. Riegelmann, boro pres., Boro Hall, furnishing and delivering 3,500 bbl. Portland cement.

Subway — Brooklyn, N. Y. — Dec. 22, by Transit Comn., 49 Lafayette St., New York, two-track subsurface railroad extending under Bushwick Ave. from Meserole to Boerum Sts., also subsurface railroad extending along and under 4th Ave. from 87th to 95th Sts., here. G. McAneny, chn.

Bulkhead, etc.—Mineola, N. Y.—Dec. 26, by Bd. Supervs. Nassau Co., Court House, constructing bulkhead and filling for improvement of Long Beach Rd. between Barnum Island Creek and the Upland. J. Merritt, clk.; adv. this issue.

Wood Paving Blocks—New York, N. Y.—Dec. 19, by Bd. Purch., Municipal Bldg., furnishing and delivering creosoted wood paving blocks to Dept. Plant & Structures. G. A. Whalen, chn.

Sewer Scraper Machine—Lewistown, Pa.—J. H. Godd, chn. Sewer Com. taking bids sewer scraper. $600. Boro. also plans to enlarge sewerage system.

Crane—Norwood, Pa.—Penn. Equipment Co., taking bids 25 ton, 45 ft. boom, 8 wheel locomotive crane equipped with clamshell bucket.

Crushed Stone and Bituminous Material—Phila., Pa.—Dec. 16, by T. F. Armstrong, purch agt., 316 City Hall, 25,000 ton ½ to 2½ in. crushed stone. $35,000; 85,000 gal. cold patch bituminous material, $50,000.

Pile Driving—Milwaukee, Wis.—Dec. 22, by Sewerage Comn., 508 Market St., driving piles in connection with sewage disposal system. J. H. Fowles, secy.; adv. this issue.

Crushed Stone—Lincoln, Neb.—See "Sewers."

Portland Cement, etc.—St. Louis, Mo.—Dec. 17, by G. H. Oetting, supply comr., 1,258 bbl. Portland cement in sacks, 140 squares ¾ in. macadam, 430 ton Mississippi River and 60 ton Meramec River sand, to be delivered in wagon lots to new Fairground locker building, 60 ton 6 in. and 30 ton 8 in. c.i. pipe to be delivered to Water Dept. yards, Kingshighway.

Pier—San Diego, Calif.—Dec. 22, by W. P. Bates, city purch. agt., first unit of mole type pier No. 2, 305,000 cu.yd. excav., 12,000 ton rock fill, 4,500 lin.ft. curtain retaining wall of precast rein.-con. with 500 wooden piles with concrete jackets and 200 wooden anchor piles. $200,000. F. G. White, Ferry Bldg., San Francisco, engr.

Dry Dock Machinery—Esquimalt, B. C.—Jan. 15, by R. C. Desrochers, secy. Dept. Pub. Wks., Ottawa, Ont., pumping and other machinery for dry dock, here. $50,000.

Crane—Kilgard, B. C.—Dec. 28, by Comrs. Sumas Dyking Dist., 8 ton traveling crane. $4,000. G. P. Moe, engr.

BIDS RECEIVED

Gate Valves, etc.—New York, N. Y.—Bd. Water Supply, Municipal Bldg., opened bids Dec. 5, furnishing and delivering gate valves and hydrants for Mt. Prospect, Park Slope, Fort Hamilton and Clove Conduits and Narrows Siphon 2 of Catskill Aqueduct, Contr. 213, from Michigan Valve & Fdry. Co., 3631 Parkinson Ave., Detroit, Mich., $150,000; Kennedy Valve Mfg. Co., East Water St., Elmira, $252,442; Coffin Valve Co., Neponset, Mass., $285,695. Noted Nov. 16.

Electroliers—Berkeley, Calif.—Installing 151 electroliers in University Ave., from Osborne Electric Co., Turlock, $36,503; Butte Electric & Mfg. Co., 534 Folsom St., San Francisco, $39,292; H. C. Reid & Co., 115 Mission St., San Francisco, $39,380. Noted Oct. 26.

CONTRACTS AWARDED

Enlarging Subway Station — Cambridge (Boston P. O.), Mass. — Boston Elevated Ry. Co., 108 Massachusetts Ave., Boston, enlarging and altering Harvard Sq. subway station, here, to Coleman Bros., Charlestown and Cambridge, $83,633. Noted Nov. 23, under Boston.

Oil Tanks—Fall River, Mass.—New England Oil Refining Co., New St., erecting three 30 x 77 ft. steel oil tanks, and one 30 x 95 ft. tank, to Phoenix Iron Wks., Mercer and Railroad Sts., Meadville, Pa., $15,000, and Reeves Bros. Co., Rush St., Alliance, O., $25,000.

Coaling Plant—Worcester, Mass.—New York, New Haven & Hartford R.R., South Station, Boston, will build coaling plant, rein.-con., at freight yards, here, by day labor. $40,000. Private plans.

Gas Holder—Bristol Conn.—Bristol and Plainville Tramway Co., foundation and superstructure of 1,000,000 cu.ft. capacity gas storage holder, at plant, Riverside Ave., to F. T. Ley & Co., Inc., 499 Main St., Springfield, Mass.

Tunnel and Turbine—Stamford, Conn.—Stamford Gas and Electric Co., 11 Bank St., rein.-con. tunnel and foundation for large turbine, at plant, to T. J. Pardy Constr. Co., 1387 Seaview Ave., Bridgeport. Engrs. est. $30,000.

Dock—Newark, N. J.—Dept. Streets & Pub. Impvts., City Hall, 1,000 ft. relieving platform, type of marginal dock, at Port Newark Terminal, to Allen N. Spooner & Sons, Inc., Pier 11, N.R., New York City. $187,347. Noted Nov. 16.

Foundation—Milwaukee, Wis.—Milwaukee Elks Lodge, 448 Jefferson St., foundation for 9 story and basement, 110 x 145 ft., brick and concrete club, plain foundation, to Dahlman Constr. Co., 456 Bway., $84,412. Total cost $1,000,000. Noted Nov. 16.

Footings—Des Moines, Ia.—See "Buildings" under Bids Desired.

Power Lines—Dallas, Tex.—See "Industrial Works."

Wharf—Isleton, Calif.—J. F. Butts Co., 2 Pine St., San Francisco, constructing 100 x 260 ft., loading wharf, pile foundation, to Davidson & Nicolsen, 180 Jessie St., San Francisco.

Tram Wall—Steveston, B. C.—Dominion Government, Ottawa, Ont., 4,100 ft. tram wall built of brush mattress wired together with No. 6 galvanized telephone wire anchored with one man rocks, at King Edward Cut, Woodwards Channel on Fraser River, incl. 15,000 cu.yd. brush, 35,000 lb. wire, 62,000 ton rock, etc., to Pacific Constr. Co., 510 Hastings St. W., Vancouver. $100,000.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: **Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.**

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Dec. 19.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Tuesday, December 19, 1922, for the improvement of highways in the following counties:

Albany ....(one highway: 0.23)
Cattaraugus ....(one highway: 0.15)
Monroe ....(one highway: 0.12)
Ontario ....(one highway: 0.41)
Otsego ....(one highway: 0.48)
Steuben ....(one highway: 4.24)
Suffold ....(two highways: Gravity Concrete Retaining Wall)

Also for the reconstruction of the following:

Montgomery...(two contracts: 1.50 & 2.50)
Niagara ....(one contract: 5.13)
Steuben ....(one contract: 3.00)
Suffolk ....(one contract: 4.50)
Tioga ....(one contract: 3.18)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved or reconstructed. The addresses of the Division Engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.
State Commission of Highways.
J. C. FINCH,
Secretary.

Bids: Jan. 5 (Date of closing extended).

Reservoir Dam

Bluefield, W. Va.

Sealed proposals or bids for the construction of a clay or earthen dam, containing about 40,000 cubic yards of material, to be sluiced into place, will be received at the office of the BLUEFIELD WATER WORKS & IMPROVEMENT COMPANY, at Bluefield, West Virginia, until three o'clock P.M., on the 5th day of January, 1923, when they will be publicly opened and read. All proposals shall be enclosed in an envelope furnished by the above styled company and shall be accompanied by a certified check on some national bank, in the sum of five (5%) per cent of the amount of the proposed bid. The contractor to whom the award is made will be required to furnish surety company bond in the sum of thirty five (35%) per cent of the amount of the contract, within thirty days after official notice of the award of contract and in accordance with the terms of the specifications. The right is reserved to reject any or all bids. Drawings, specifications and blank forms of proposals may be consulted at the office of company, 601 Princeton Avenue, Bluefield, West Virginia, or they will be forwarded by mail upon request if $4.00 accompanies the order. This amount will be refunded upon return of the plans and specifications in reasonably good order.

BLUEFIELD WATER WORKS & IMPROVEMENT COMPANY.
WM. McCARTHY,
Superintendent.
November 23rd, 1922.

OFFICIAL PROPOSALS

Bids: Jan. 1.

Road Bed, Bridges and Culverts

Kelso, Wash.

Sealed proposals for the construction of roadbed, bridges and culverts for approximately eight and one-half (8½) miles of railroad in Cowlitz County, Washington, will be received by the Longview, Portland & Northern Ry. Company at its offices at Kelso, Washington, up to 2 o'clock P.M., January 1st, 1923, when they will be opened and read, such eight and one-half (8½) miles being regarded by the company as the first unit of contemplated construction expected to total twenty-six (26) miles, contract expected to be let early in 1923.

Drawings, specifications and form of proposal, contract and bond are on file in the office of the Chief Engineer, Kelso, Washington, and may be inspected by prospective bidders; or same will be furnished to interested parties on deposit of Ten Dollars ($10.00), which will be refunded upon return of papers in good condition.

Bids must be made on proposal forms to be furnished by the company and in the manner designated therein, same to be inclosed in sealed envelope bearing the name and address of the bidder and to be marked "Bid for Railroad Construction."

The principal quantities involved are approximately as follows:

153,580	cubic yards common excavation.
39,300	cubic yards loose rock excavation.
59,300	cubic yards solid rock excavation.
222,660	cubic yards embankment borrow.
649,710	station yards overhaul.
924	lin. feet 18 in. concrete culvert pipe.
672	lin. feet 24 in. concrete culvert pipe.
60	lin. feet 30 in. concrete culvert pipe.
380	lin. feet 36 in. concrete culvert pipe.
70	lin. feet 42 in. concrete culvert pipe.
43,860	lin. feet piling.
514,500	ft. B.M. lumber for trestles.

Each proposal must be accompanied by a certified check payable to the Longview, Portland & Northern Ry. Company for not less than five (5) per cent of the total amount of the bid as a guarantee that contract will be entered into if awarded.

The person or persons, if any to whom the contract is awarded will be required to file a bond in a sum not less than 50 per cent of the total amount bid, with good and sufficient sureties, to guarantee the faithful performance of the contract.

Special attention of the bidder is called to "Information for Bidders" included in the proposal forms.

The right is reserved to reject any and all bids.

LONGVIEW-PORTLAND & NORTHERN RY. COMPANY.
By WESLEY VANDERCOOK,
Chief Engineer.

Bids: Dec. 28.

Resurfacing Streets

Mobile, Ala.

Bids will be received by the Board of City Commissioners of the City of Mobile for resurfacing with either Asphalt, Warrenite Bitulithic Asphaltic Concrete, Type No. 1, and Asphaltic Concrete, Type No. 2, until noon, December 28th, 1922, 45,868 square yards of one and half inch surface, 45,868 square yards of one inch binder.

Plans and specifications can be had at the office of the City Engineer. The right is reserved to reject any or all bids.

R. V. TAYLOR, Mayor.
WRIGHT SMITH, City Engineer.

OFFICIAL PROPOSALS

Bids: Jan. 11.

Public School Additions

Elizabeth, N. J.

Sealed proposals will be received by "The Board of Education of the City of Elizabeth, in the County of Union," State of New Jersey, at a meeting to be held at the office of the Board of Education on South Broad Street, Elizabeth, New Jersey, on the eleventh day of January, 1923, at eight-thirty o'clock in the evening of that day, for the erection and completion of certain new additions and alterations to Public School No. 12, corner of Magie Ave. and Springfield Road in the City of Elizabeth, New Jersey.

Proposals to be considered must be made out on forms supplied by the architect, and must be in strict accordance with the requirements of the plans and specifications.

Bids to be submitted separately on each division of the work as expressly provided for by the plans and specifications on each of the following divisions of the work, namely, "General Construction," "Plumbing," "Electrical," "Heating and Ventilating," and all kindred thereto in each case.

Alternate Bids.—Each and every bidder shall also estimate on the alternate requirements mentioned in the plans and specifications and shall so designate the amounts to be added or deducted from the base bid, as the case may be, in the space allotted to same on the bid blank.

Plans and specifications may be obtained on application at the office of the architect, C. Godfrey Poggi, 275 Morris Ave., Elizabeth, N. J., or examined in the office of the secretary of the Board of Education, and each applicant shall state definitely the branch of work he intends to bid upon.

A deposit of $25 (twenty-five dollars), will be required of each bidder receiving plans and specifications, which shall be returnable conditionally upon the return to the architect of the plans and specifications within the specified time limits. No bidder shall receive more than one set of plans for this building, and no such deposit nor payment shall be construed to give any bidder ownership of the plans and specifications.

Retention of Plans.—Bidders shall not retain plans and specifications longer than the time limits mentioned in the specifications under penalty of forfeiture of the deposit money.

Sub-contractors shall obtain plans and specifications from general contractors.

Bidders may be required to qualify to the satisfaction of the Board of Education, both as to financial responsibility and capability of efficient execution of the work.

Contractors to whom contracts may be awarded shall furnish a surety company bond satisfactory to the Board of Education equal to 100% (one hundred per cent), of the contract price, as provided for and in accordance with the specifications.

All bidders shall tender with their bids a certified check or surety bond in amount equivalent to 10% (ten per cent), of the base bid for the purpose mentioned in and by the specifications.

The Board of Education reserves the right to reject any and all informalities, and award contracts either in part or as a whole, as may be deemed best for the interest of the Board of Education.

WM. J. KENEALY,
WILLIAM SEFTON,
HORACE K. CORBIN,
HERMAN HERSH,

Committee on Sites and New Buildings of "The Board of Education of the City of Elizabeth, in the County of Union," N. J.

OFFICIAL PROPOSALS

Bids: Dec. 27.

Dock Wall

TERMINAL CONTRACT NO. 53-B.

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Wednesday, December 27th, 1922, at which place and hour they will be publicly opened and read, for the construction of barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and amendatory laws, and Chapter 402 of the Laws of 1920, as follows:

TERMINAL CONTRACT NO. 53-B.

For constructing certain portions of the dock-wall at Ohio Basin, Buffalo.

Contract plans, sheets 1 to 3, inclusive.

Plans may be seen and detailed specifications, engineers' estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works, at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE,
Superintendent of Public Works.
November 23rd, 1922.

Bids: Dec. 28.

Sewage Disposal Plant

DIVISION III—SECTION 4

Indianapolis, Ind.

Sealed proposals will be received by the Board of Sanitary Commissioners, Sanitary District of Indianapolis, at its office in the City Hall, Indianapolis, Indiana, until 10 A.M., December 28th, 1922, at which time bids will be publicly opened and scheduled and awards made as soon thereafter as practicable, for furnishing and erecting mechanical equipment of Section 4, Division III, for the Sewage Disposal Plant of the Sanitary District of Indianapolis, in accordance with plans and specifications on file at the office of the board. This construction and equipment consists of the following items:

4-a. Cast Iron Pipe and Specials.
4-b. Low Pressure Gate Valves.
4-c. Power Plant Piping.
4-d. Standard and High Pressure Valves.
4-e. Air Washing Equipment.
4-f. Electric-Centrifugal Pumping Units.
4-g. Electric Wiring and Fixtures.
4-h. Rotary Dryers, Stokers and Conveying machinery.
4-i. Sludge Filters.

Each bidder shall be required to deposit with his bid a certified check in the amount as provided in said specifications and information to bidders, to secure the execution of the contract for which bid is made.

Copies of plans and specifications and general information may be obtained at the office of Charles H. Hurd, Consulting Engineer, 1405 Merchants Bank Building, Indianapolis, Indiana.

The board reserves the right to reject any and all bids.

BOARD OF SANITARY
COMMISSIONERS.
JAY A. CRAVEN, President.
JOHN L. ELLIOTT, Vice-Pres.
LUCIUS B. SWIFT.

Bids: Dec. 26.

Road Work

Penns Grove, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Common Council of the Borough of Penns Grove for the construction of certain streets in the Borough of Penns Grove, in the County of Salem, with a bituminous macadam surface; estimated amount of pavement required is 20,793 square yards; and opened and read in public at the Borough Hall, Penns Grove, N. J., December 26th, 1922, at 8 P.M., standard time.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Keasbey & Sparks, Engineers, have been filed in the office of the said engineers at Salem, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blueprints of the drawings by the engineers on proper notice.

By order of the Mayor and Common Council of the Borough of Penns Grove.

CLYDE W. STRUBLE. Clerk.

Bids: Jan. 2.

Sewer

Wilkes-Barre, Pa.

Sealed proposals will be received by Fred H. Gates, City Clerk, Wilkes-Barre, Pennsylvania, for constructing a four and six-foot circular brick or segmental block sewer, about seventeen hundred feet in length. Bids close Tuesday, January 2nd. 1923, at 12 o'clock noon, and will be opened by City Council on the same day at three o'clock P.M. Plans and specifications may be had from B. K. Finch, City Engineer, upon making a deposit of $10.00, said deposit to be refunded upon receipt of bid or upon return of specifications to City Engineer on or before January 15th, 1923. Each bid must be accompanied by a certified bank check of bidder in the sum of $1,000.00 made payable to the City of Wilkes-Barre. Successful bidder must furnish to said city a surety company bond in the full amount of contract. Proposals to be endorsed "Proposals for Sewer" and addressed to Fred H. Gates, City Clerk, City Hall, Wilkes-Barre; Pennsylvania. The City Council reserves the right to reject any or all bids received.

¶Procrastination bears the reputation of being a thief of time. ¶You'll find it the thief of your money if you continue to put off the building up of your credit in the Bank of Bond Underwriting.

SWART

Contract Bonds Compensation Insurance

92 William St., New York.

Bids: Dec. 19.

Mt. Prospect Conduit

CONTRACT 196

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 A.M., Eastern Standard time, on Tuesday, December 19, 1922, for Contract 196, for the construction of the Mt. Prospect conduit, a portion of the City conduits of the Catskill aqueduct, extending from Shaft 24 of the City tunnel in Fort Greene park, along Cumberland Street, Lafayette, Washington and Flatbush Avenues to Clarkson Avenue, in the Borough of Brooklyn, New York City.

The conduit will consist of about 10,530 linear feet of 72-inch and 6,270 linear feet of 66-inch steel pipe, about 360 tons of cast-iron pipe and special castings of various sizes, a Venturi meter, valves and other appurtenances, all of which will have to be maintained for one year.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, etc., can be obtained at the office of the Secretary at the above address, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer at the above address.

GEORGE J. GILLESPIE,
President,
JAMES P. SINNOTT,
PHILIP F. DONOHUE,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: Jan. 24.

Garbage Incinerator Plant

Fargo, N. D.

Sealed proposals will be received at the office of the City Auditor until 10 A.M. on the 24th day of January, 1923, for the erection and construction of a complete plant for the incineration of all garbage collected by the City of Fargo, having a capacity of thirty-five (35) tons per twenty-four hours. The plant shall be completed, tested and ready for acceptance by the City of Fargo on or before July 1st, 1923. Bidders will submit detailed plans and specifications of their plan of construction including the cost for such a plant, completed and tested ready for operation and showing the method of incineration and the cost of operation per ton. Bidders shall also guarantee that no obnoxious gases or odors will be created in the operation of the plant.

Proposals must be accompanied by a certified check payable to the order of the City of Fargo in amount equal to five (5) per cent of the total cost of the plant, conditioned that the successful bidder will enter into a contract and give bond for the construction of the plant, according to the proposal.

The City of Fargo reserves the right to reject any and all bids.

A. R. WATKINS.
City Auditor.

Dated at Fargo, N. D.,
November 29, 1922.

Bids: Dec. 30.

Ditch Construction

Greenfield, Ind.

Sealed bids will be received at the Surveyor's Office, Room L, Court House, Greenfield, up until 2 P.M. on Saturday, December 30, 1922, for the construction of the George W. Putterbaugh, et al., Ditch.

The following are the approximate quantities of materials:

4,000 lineal feet 30 inch tile.
1,100 lineal feet 14 inch tile.
8 catch basins.
3,000 cubic yards of excavation.

The 30 inch tile may be of either clay, shale, or concrete as specified.

Plans and specifications will be mailed to any address upon receipt of check for $10.00 made payable to the engineer.

CHARLES BOONE.
Engineer.

Greenfield, Indiana.

Crushing Sand Stone

Johnstown, Pa.

Proposals requested on the crushing of 8,000 cu.yd. sandstone, Cambria County, Pa.

McCLURE & BINGNER CO., INC.,
Johnstown, Pa.

Dec. 5, 1922.

OFFICIAL PROPOSALS

Bids: Dec. 21.

Sewer System Improvements

Corinth, Miss.

Sealed proposals will be received at the office of the City Clerk of Corinth, Mississippi, up until 7:00 o'clock p.m., of Thursday, the 21st day of December, 1922, for furnishing materials, labor and constructing complete according to the Plans and Specifications, Improvements to the Sewer System.

Each bidder must state in his proposal his full name and business address, and the proposal must be properly executed by an officer of the firm authorized to execute same.

A certified check for five (5%) per cent of the amount of each bid made payable to the Treasurer of the City of Corinth, Mississippi, must accompany each bid. This check will be held as an assurance that the successful bidder will enter into a contract within ten (10) days after Notice of award and will fulfill the conditions of Article 24 of the General Specifications, to guarantee the execution of same. Plans and Specifications are on file with the City Clerk of Corinth, Mississippi, and at the office of the Consulting Engineers, Fuller & Beard, Room 616 Title Guaranty Bldg., St. Louis, Missouri.

Parties desiring extra copies of Plans and Specifications for their personal use may obtain same from the Engineers. A deposit of $10.00 shall be made for a complete set of Plans and Specifications, $6.00 of which will be returned upon the receipt of the Plans and Specifications in good condition.

Bids must be sealed and addressed to M. T. Sharp, City Clerk, Corinth, Mississippi, and on the outside of the envelope must be plainly written "Proposals for Improvements to Sewer System."

Bids must be made out on the blank form of Proposal attached hereto.

Bidders are advised and expected to carefully study the Plans and Specifications, also to make a personal inspection of the local condition affecting in any way, the execution of this work, so that after the submission of his Proposal, the contractor shall not make a claim that he did not understand the nature or the approximate amount of work to be done.

The Mayor and City council especially reserve the right to reject any or all bids and waive informalities.

J. A. LOWE,
Mayor.

Bids: Dec. 22.

Sewage Disposal System

OFFICIAL NOTICE NO. 95

Milwaukee, Wis.

Sealed proposals for the construction of work in connection with the Sewage Disposal System for the City of Milwaukee will be received by the Sewerage Commission of said City at its offices, 508 Market St., until 1:30 p.m. the 22nd day of Dec., 1922, at which time and place during the session of the said Commission, the proposals will be publicly opened and read.

The work to be done consists of the driving of approximately 2,000 piles, varying in length from 35 ft. to 50 ft.

The whole of the work shall be completed on or before the first day of March, 1923.

The liquidated damages for not completing the work within the time above stated shall, for each day in excess thereof, be Ten ($10.00) Dollars.

Each proposal must be accompanied by a cash deposit or a certified check drawn to the order of the Sewerage Commission of the City of Milwaukee in the sum of Two Thousand ($2,000.00) Dollars.

Specifications and blank forms of proposal can be obtained and detailed plans examined at the office of the Sewerage Commission.

The Sewerage Commission reserves the right to reject any and all bids submitted.

JOHN H. FOWLES,
Secretary.

Countersigned:
LOUIS M. KOTECKI,
City Comptroller.

OFFICIAL PROPOSALS

Bids: Dec. 21.

Improvements to Waterworks System

Corinth, Miss.

Sealed Proposals will be received at the office of the City Clerk of Corinth, Mississippi, up until 7:00 o'clock p.m., of Thursday, the 21st day of December, 1922, for furnishing materials, labor and constructing complete according to the Plans and Specifications, Improvements to the Waterworks System.

A certified check for five (5%) per cent of the amount of each bid made payable to the Treasurer of the City of Corinth, Mississippi, must accompany each bid. Plans and Specifications are on file with the City Clerk of Corinth, Mississippi, and at the office of the Consulting Engineers, Fuller & Beard, Room 616 Title Guaranty Building, St. Louis, Missouri.

Parties desiring extra copies of Plans and Specifications for their personal use may obtain same from the Engineers. A deposit of $10.00 shall be made for a complete set of Plans and Specifications, $6.00 of which will be returned upon the receipt of the Plans and Specifications in good condition.

Bids must be sealed and addressed to M. T. Sharp, City Clerk, Corinth, Mississippi, and on the outside of the envelope must be plainly written, "Proposals for Improvements to the Waterworks System."

Bids must be made out on the blank form of Proposal attached hereto.

Bidders are advised and expected to carefully study the Plans and Specifications, also to make a personal inspection of the local condition affecting in any way, the execution of this work, so that after the submission of his Proposal, the Contractor shall not make a claim that he did not understand the nature or the approximate amount of work to be done.

The Mayor and City Council especially reserve the right to reject any or all Bids and waive informalities.

J. A. LOWE,
Mayor.

Bids: Dec. 26.

Road Improvement

Mineola, N. Y.

Sealed proposals will be received by the Board of Supervisors of Nassau County in its Chambers, in the Court House at Mineola, Long Island, on Tuesday, December 26, 1922, at 11 a.m. for the Improvement of the Long Beach Road between Barnum Island Creek and the Upland by the construction of bulk head and filling.

Plans and specifications may be seen at the office of the County Engineer at Mineola, Long Island.

Each bid must be accompanied by a certified check on a solvent bank in the sum of three per cent of the amount of the total contract, made payable to the County of Nassau.

The Board of Supervisors reserves the right to reject any or all bids, waive any informality in the bids, and to accept the bid which it deems most favorable to the interest of the County.

By order of the Board of Supervisors.
By JESSE MERRITT,
Clerk.

Dated at Mineola, L. I., December 11, 1922.

Bids: Dec. 21 (Date Extended).

Pumpage and Power Machinery

Wheeling, W. Va.

Notice is hereby given to all bidders on pumpage and power machinery for the new water works plant at Wheeling, West Virginia, that the time for opening bids has been extended from 12 o'clock noon, Tuesday December 12th, to 12 o'clock noon, Thursday, December 21, 1922.

C. H. DOWLER,
City Manager.

OFFICIAL PROPOSALS

Bids: Jan. 5.

Municipal Building

Bath, N. Y.

Sealed proposals will be received at the office of the Village Clerk on or before noon, Jan. 5, 1923, for the construction of a Municipal Building.

Plans, specifications, and blank proposal form may be obtained from John W. Taggart , Village Clerk, Bath, N. Y., upon application and deposit of certified check for twenty-five ($25.00) dollars.

The right is reserved to reject any or all bids.

JOHN W. TAGGART,
Village Clerk.

U. S. GOVERNMENT

SEALED PROPOSALS, indorsed "Proposals for Hospital Construction, Tupper Lake, N. Y., Specification No. 4718," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock A.M., December 28, 1922, and then and there publicly opened, for the following work at the U. S. Veterans' Hospital, Tupper Lake, N. Y.:

Part I. Twelve new buildings and remodeling existing residence, including plain and reinforced concrete; cast concrete; brick and hollow tile work; structural steel interior tile work; wood framing, sash, doors and finish; plaster and metal lath; slate, promenade tile, and tin roofing; sheet metal work; steel sash; steel covered doors; miscellaneous steel and iron work; hardware; painting and glazing, and electric dumbwaiters.

Part II. Plumbing work inside the buildings, including soil, vent and drain piping; hot and cold water lines; interior stand pipe system; all valves, fittings, plumbing fixtures, catch basins and floor drains.

Part III. Complete heating and steam distributing systems for each building and an outside steam distributing system, including high pressure and vacuum return lines; hot water heaters; underground concrete trenches; manholes; and cast iron manhole frames and covers.

Part IV. Lighting systems for each building; nurses' call system; power systems and telephone conduits in certain buildings; and outside electric distributing systems including transformers, panel boards, fixtures, conduits, fibre ducts, and wiring.

Part V. Boiler plant equipment and piping, including brick settings for return tubular boilers, smoke flue, feed water heater, steel storage tank, feed water and vacuum pumps, combined twin pump and receiver, drip traps, incinerator with hot water heating and sterilizing equipment, complete piping systems for all apparatus, and the installation of horizontal return tubular boilers furnished by the Government.

Drawings and specification No. 4718 may be obtained on application to the Bureau of Yards and Docks, Navy Department, Washington, D. C. Deposits of checks or postal money orders, payable to the Chief of the Bureau of Yards and Docks, are required as security for the safe return of the drawings and specification. Deposits shall be in the following amounts: Part I—$75, Part II—$75, Part III—$20, Part IV—$10, Part V—$10; and complete (all parts) $100.

L. E. GREGORY, Chief of Bureau.
November 11, 1922.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., Dec. 7, 1922.—Sealed proposals will be opened in this office at 3 p.m., Dec. 29, 1922, for furnishing the materials and labor required for changes on first and second floors, in the U. S. Post Office and Court House at Birmingham, Ala. Drawings and specifications may be obtained from the Custodian at the building or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

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Treat your bonding company as you do your banker; both help you with the CREDIT you require.
ÆTNA CASUALTY AND SURETY COMPANY
HARTFORD, CONN.
AGENTS EVERYWHERE

U. S. GOVERNMENT

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., Nov. 29, 1922.—Sealed proposals will be opened in this office at 3 P.M., December 27, 1922, for the construction including mechanical equipment, of the United States Post Office, at Leesburg, Va. Drawings and specifications may be obtained from the Custodian of the site at Leesburg, Va., or at this office in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, PITTSBURGH, PA. Sealed proposals will be received here until 12 noon (Eastern Time), December 20, 1922, and then opened for furnishing and delivering steel lock gates for Lock No. 1, Allegheny River. Further information on application.

U. S. ENGINEER OFFICE, WILMINGTON, N. C., Nov. 25, 1922. Sealed proposals will be received here until 12 M., December 26, 1922, and then opened for constructing one 60-foot by 22-foot by 4-foot steel barge. Further information on application.

U. S. ENGINEER OFFICE, WILMINGTON, DEL. Sealed proposals will be received here until 11 a.m., December 20, 1922, and then opened for excavating cut-offs in St. Jones and Mispillion Rivers, Del. Further information on application.

PROPOSALS FOR OFFICERS' QUARTERS.—Sealed proposals will be received by Constructing Quartermaster, U. S. Army, Edgewood Arsenal, Md., until 11:00 a.m., December 27, 1922, and then opened for the construction of twenty sets of frame officers quarters at Edgewood Arsenal, Md. Plans and specifications obtainable upon deposit of $10.00, which will be refunded upon return of same in good condition. Right is reserved to accept any or to reject all bids.

SEALED PROPOSALS, indorsed "Proposals for Roads, Tupper Lake, N. Y., Specification No. 4727," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., December 28, 1922, and then and there publicly opened, for concrete roads and sidewalks, concrete culverts, macadam roads, cobble stone gutters, inlets, catch basins, and terra cotta piping, all at the U. S. Veterans' Hospital, Tupper Lake, N. Y. Drawings and Specification No. 4727 may be obtained on application to the Bureau of Yards and Docks, Navy Department, Washington, D. C., or to the Officer in charge of construction U. S. Veterans' Bureau, Tupper Lake, N. Y. Deposit of a check or postal money order for $10, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the drawings and specification. L. E. GREGORY, Chief of Bureau, December 5, 1922.

SEALED PROPOSALS will be received and publicly opened by the Director, U. S. Veterans' Bureau, in the Office of the Quartermaster General, 2306 Munitions Building, Washington, D. C., at 11 A.M., January 16, 1923, for construction of a Neuro-Psychiatric Hospital at American Lake, Tacoma, Washington, for the Veterans' Bureau. Work will include construction of twenty-eight buildings of reinforced concrete, tile and brick, complete with water, lighting, heating and sewer systems, roads and walks. Plans and specifications may be obtained after December 9, 1922, from the Quartermaster General, Room 2306, Munitions Building, Washington, D. C., upon deposit of $100. One set of plans and specifications will be on exhibition at each of the following stations: Constructing Quartermasters at 39 Whitehall St., New York City, and Fort Mason, California, and Quartermaster Supply Officers at 1819 West Pershing Road, Chicago, Ill., Second and Arsenal Sts., St. Louis, Mo., Stacy Street Terminal, Seattle, Washington, and New Post Office Building, Portland, Oregon.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, Florence, Alabama. Sealed proposals will be received here until 11 a.m., December 30, 1922, and then opened, for the construction and delivery of one 15-inch dredging pump for dredge Pettus. Further information on application.

U. S. ENGINEER OFFICE, MILWAUKEE, WIS. Sealed proposals will be received here until 2 p.m., Dec. 20, 1922, and then opened for constructing and delivering steel barges. Further information on application.

U. S. ENGINEER OFFICE, CINCINNATI, O. Sealed proposals will be received here until Jan. 5, 1923, and then opened for the construction of one 24-inch pipe line dredge. Further information on application.

U. S. ENGINEER OFFICE, HUNTINGTON, W. VA., Nov. 29, 1922. Sealed proposals will be received here until 11 a.m. (Eastern time) December 30, 1922, and then opened, for constructing a Fireproof Powerhouse at Dam No. 30, Ohio River. Further information on application.

OFFICE OF CONSTRUCTING QUARTERMASTER, WILLIAM BEAUMONT GENERAL HOSPITAL, EL PASO, TEXAS. Sealed proposals in triplicate will be received at this office until 10:00 A.M., December 20th, 1922, then publicly opened for constructing complete, including utilities, two (2) Field Officers' Quarters; one (1) Bachelor Officers' Quarters, and one (1) Guard House at William Beaumont General Hospital, El Paso, Texas. Plans and specifications furnished upon receipt of certified check for $20.00 to guarantee return.

U. S. ENGINEER OFFICE, NORFOLK, VA. Sealed proposals will be received here until 12 m., January 15, 1923, and then opened, for dredging in Appomattox River, Va. Further information on application.

POSITIONS VACANT **EMPLOYMENT** **POSITIONS WANTED**

POSITIONS VACANT

A DISTRICT engineer wanted for a large company doing work all over the United States, for permanent position on variety of engineering service in Mississippi and Louisiana wth headquarters at Meridian, at salary of $300 a month. Southern man with long experience in one or both of above states preferred. Address P-345, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

CHIEF draftsman wanted for structural steel plant in Southern City. Send references, experience and name salary. Address P-344, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

POSITIONS VACANT

DRAFTSMAN, experienced, wanted for structural steel buildings; apply by mail only, giving age, nationality, education, experience and salary expected. Post & McCord, 101 Park Ave., New York.

DRAFTSMAN, experienced on structural steel mill and factory buildings, is wanted by a large industrial corporation. Location, New York City. Permanent position. No shop details. Give age, nationality, and full details as to salary and experience in first letter. P-375, Eng. News-Record, 10th Ave. at 36th St., New York City.

POSITIONS VACANT

CONSTRUCTION engineer, competent and experienced; bridges, reinforced concrete work, cofferdams, buildings. Work in South. Must be able to handle own job. Give references, salary requirements and education. Box 722, Richmond, Va.

DRAFTSMEN, structural or mechanical, wanted, capable of acting as squad leader and checker. Give full technical experience with accurate information about work you have done. State age and salary desired. P-376, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

ESTIMATORS

Men who are familiar with steel and concrete design and who have had considerable experience in both price and quantity work; technical graduate preferred. These are responsible positions and advance will be rapid to men of ability. State fully qualifications, salary desired and date available in first letter, marked attention Mr. H. F. Miter.

THE AUSTIN COMPANY
16112 Euclid Avenue,
Cleveland, Ohio

PUMPS

Wanted:—Six ambitious young men for salesman's training course. Must have vision enough to take full advantage of an intensive shop and office training and capable of development into high grade representatives. Engineering degrees required. Also one man of similar qualifications who wishes to specialize in foundry work. Write—

The Goulds Manufacturing Company
Seneca Falls, N. Y.
Attention S. S. Gould, Jr., Vice-Pres.

GOULDS

Help Wanted

Master Mechanic

by Public Works Contractor. Must have wide experience and good references. Give details of experience and references. Address

P-333, Engineering News-Record
10th Ave. at 36th St., New York City

ENGINEER—EXECUTIVE—SALESMAN
Member Am. Soc. Civ. Eng.

Over twenty years' experience in General Engineering, Industrial Plants, Railroads, Canals, Sewers, Levees, etc. With present connection 12 yrs., nine of which Selling Construction in addition to Designing, Purchasing and Traffic. Familiar with Accounting. American, single, age 46. Salary, $6,000.

P-368, Engineering News-Record,
1570 Old Colony Bldg., Chicago, Ill.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Dec. 27	Buffalo, N. Y.	Dec. 21
Dec. 29	Nashville, Tenn.	Dec. 21
Dec. 29	Phila., Pa.	Dec. 21
Jan. 3	Rapid City, S. D.	Dec. 21
Jan. 11	Albemarle, N. C.	Dec. 21
Jan. 12	Cleveland, O.	Dec. 21
	Adv. Dec. 21.	
Jan. 15	Cyril, Okla.	Dec. 14
Jan. 22	Hinsdale, Ill.	Dec. 21
Feb. 1	Spokane, Wash.	Nov. 16

SEWERS

Bids Close		See Eng. News-Record
Dec. 28	Indianapolis, Ind.	Dec. 7
Dec. 29	North Milwaukee, Wis.	Dec. 21
Dec. 30	Lakewood (Cleveland P. O.), O.	Dec. 21
Jan. 2	Wilkes Barre, Pa	Dec 14
	Adv. Dec. 14 and 21.	
Jan. 9	Newark, N. J.	Dec. 21
Jan. 16	Richmond, Va.	Dec. 21
	Adv. Dec. 21.	

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Dec. 29	Portland, Ore.	Nov. 30
Jan. 24	Fargo, N. D.	Dec. 7
	Adv. Dec. 7 and 14.	

BRIDGES

Bids Close		See Eng. News-Record
Dec. 26	California	Dec. 7
Dec. 27	Missouri	Dec. 21
Dec. 28	Sterling, Ill.	Dec. 7
Dec. 28	Minnesota	Dec. 7
Dec. 28	Windom, Minn.	Dec. 14
Dec. 28	Missouri	Dec. 21
Jan. 23	Spokane, Wash	Sept. 21
Apr. 1	Wilkes-Barre, Pa.	Dec. 14
Sept. 1, 1923,	Sydney, New South Wales, Australia	Aug. 3

DAMS

Bids Close		See Eng. News-Record
Jan. 5	Bluefield, W. Va.	Nov. 30
	Adv. Nov. 30 to Dec. 21.	

RAILWAYS

Bids Close		See Eng. News-Record
Jan. 1	Washington	Dec. 7
	Adv. Nov. 30 to Dec. 21.	

EXCAVATION, DRAINAGE, IRRIGATION

Bids Close		See Eng. News-Record
Dec. 29	Logansport, Ind.	Dec. 21
Dec. 30	Greenfield, Ind.	Dec. 14
	Adv. Dec. 14 and 21.	
Jan. 9	Glencoe, Minn.	Dec. 14

STREETS AND ROADS

Bids Close		See Eng. News-Record
Dec. 26	California	Dec. 7
Dec. 26	Santa Rosa, Calif.	Dec. 14
Dec. 26	Penns Grove, N. J.	Dec. 14
	Adv. Dec. 14 and 21.	
Dec. 26	New York, N. Y.	Dec. 21
Dec. 26	Atlanta, Ga.	Dec. 21
Dec. 26	Missouri	Dec. 21
Dec. 27	Chaska, Minn.	Dec. 14
Dec. 27	Pennsylvania	Dec. 14
Dec. 27	Missouri	Dec. 21
Dec. 27	Onawa, Ia.	Dec. 21
Dec. 27	Iowa City, Ia.	Dec. 21
Dec. 28	Austin, Tex.	Dec. 21
Dec. 28	Mobile, Ala.	Nov. 30
Dec. 28	Michigan	Dec. 21
Dec. 28	Minnesota	Dec. 7
Dec. 28	Louisiana	Dec. 14
Dec. 28	Olivia, Minn.	Dec. 14
Dec. 28	Missouri	Dec. 21
Dec. 28	Richmond Hill, N. Y.	Dec. 21
Dec. 28	Brooklyn, N. Y.	Dec. 21
Dec. 29	Long Island City, N. Y.	Dec. 21
Dec. 29	Kansas City, Kan.	Dec. 7
Dec. 29	Winamac, Ind.	Dec. 21
Dec. 30	Logansport, Ind.	Dec. 21
Dec. 30	Quebec	Nov. 23
Dec. 30	Quebec	Nov. 2
Dec. 30	Quebec	Nov. 9
Dec. 30	Quebec	Nov. 16
Dec. 30	Quebec	Nov. 30
Jan. 2	St. Louis, Mo.	Dec. 7
Jan. 2	Tacoma, Wash.	Dec. 21
Jan. 3	Independence, Kan.	Dec. 21
Jan. 4	Rio Vista, Calif.	Dec. 21
Jan. 5	Larned, Kan.	Dec. 7
Jan. 7	Duluth, Minn.	Sept. 28
Jan. 10	Albemarle, N. C.	Dec. 21
Jan. 11	Wichita, Kan.	Dec. 21
Jan. 23	Spokane, Wash.	Dec. 21
Jan. 24	Faribault, Minn.	Dec. 14

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Jan. 2	St. Louis, Mo.	Dec. 7
Jan. 4	Delaware, O.	Dec. 14

BUILDINGS

Bids Close		See Eng. News-Record
Dec. 26	Camden, N. J.	Dec. 21
Dec. 26	Detroit, Mich.	Dec. 21
Dec. 28	Lockhart, Tex.	Dec. 21
Dec. 28	Kenosha, Wis.	Nov. 30
Dec. 28	Butte, Mont.	Dec. 21
Dec. 28	Hancock, Mich.	Dec. 21
Dec. 28	St. Charles, Mo.	Dec. 7
Dec. 30	Aitkin, Minn.	Dec. 21
Jan. 2	Olean, N. Y.	Nov. 9
Jan. 2	Duluth, Minn.	Nov. 23
Jan. 2	Lawrence, Kan.	Dec. 14
Jan. 2	Providence, R. I.	Dec. 21
Jan. 2	Rome, Ga.	Dec. 21
Jan. 2	Dover, Del.	Dec. 21
Jan. 3	Cleveland, O.	Dec. 14
Jan. 3	Farmersville, O.	Dec. 21
Jan. 4	Arlington, O.	Dec. 14
Jan. 4	Baker, La.	Dec. 14
Jan. 5	Bath, N. Y.	Dec. 14
	Adv. Dec. 14 and 21.	
Jan. 5	Detroit, Mich.	Dec. 21
Jan. 6	Newark, N. J.	Dec. 21
Jan. 10	Nashville, Tenn.	Dec. 7
Jan. 10	Grand Rapids, Mich.	Dec. 21
Jan. 11	Elizabeth, N. J.	Dec. 14
Jan. 15	Dallas, Tex.	Dec. 21
Jan. 19	Monticello, Ia.	Dec. 21
Feb. 1	Chicago, Ill.	Dec. 21
Mar. 23	Shreveport, La.	Nov. 9

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Dec. 26	Barge—Wilmington, N. C.	Nov. 30
	Adv. Nov. 30 to Dec. 21.	
Dec. 26	Remodeling—Rockford, Ill.	Dec. 7
Dec. 26	Scows—Portland, Ore.	Dec. 14
Dec. 26	Fuel Oil—Phila., Pa.	Dec. 14
Dec. 27	Post Office—Leesburg, Va.	Dec. 7
Dec. 27	Quarters—Edgewood Arsenal, Md.	Dec. 14
	Adv. Dec. 14 and 21.	
Dec. 27	Covering Railroad Track—San Diego, Calif.	Dec. 7
Dec. 28	Hospital — Tupper Lake, N. Y.	Dec. 7
Dec. 28	Equipment, etc.—Tupper Lake, N. Y.	Dec. 7
Dec. 28	Radial Brick Stack—Tupper Lake, N. Y.	Dec. 7
Dec. 28	Water Tank—Tupper Lake, N. Y.	Dec. 7
Dec. 28	Remodeling—Phila., Pa.	Dec. 14
Dec. 28	Drainage System—Tupper Lake, N. Y.	Dec. 14
Dec. 28	Roads, etc.—Tupper Lake, N. Y.	Dec. 14
	Adv. Dec. 14 and 21.	
Dec. 29	Changes — Birmingham, Ala.	Dec. 14
Dec. 30	Power House — Huntington, W. Va.	Dec. 7
	Adv. Dec. 7 to 21.	
Dec. 30	Dredging Pump—Florence, Ala.	Dec. 7
	Adv. Dec. 7 to 21.	
Jan. 3	Piers—Pearl Harbor, H. T.	Nov. 16
Jan. 3	Drainage System—Del Rio, Tex.	Dec. 14
Jan. 3	Alterations—El Paso, Tex.	Dec. 21
Jan. 5	Dredge—Cincinnati, O.	Dec. 7
	Adv. Dec. 7 to 21.	
Jan. 9	Fuel Oil—Wash., D. C.	Dec. 21
Jan. 9	Extension — St. Cloud, Minn.	Dec. 21
Jan. 10	Extension—Elmira, N. Y.	Dec. 21
Jan. 12	Remodeling—Boston, Mass.	Dec. 21
	Adv. Dec. 21.	
Jan. 15	Metal Work — Key West, Fla.	Dec. 21
	Adv. Dec. 21.	
Jan. 15	Pipe Line Dredge—Cincinnati, O.	Dec. 14
Jan. 16	Hospital—Tacoma, Wash.	Dec. 14
	Adv. Dec. 14 and 21.	
Jan. 16	Hull—Nashville, Tenn.	Dec. 21
	Adv. Dec. 21.	
Jan. 18	Furnishing and Placing Rock —New Orleans, La.	Dec. 21
	Adv. Dec. 21.	
Jan. 24	Refrigerating and Ice-Making Plant—Pearl Harbor, H. T.	Dec. 14

MISCELLANEOUS

Bids Close		See Eng. News-Record
Dec. 26	Bulkhead, etc. — Mineola, N. Y.	Dec. 14
	Adv. Dec. 14 and 21.	
Dec. 26	Rails and Poles—Cape May, N. J.	Dec. 21
	Adv. Dec. 21.	
Dec. 27	Dock Wall—Buffalo, N. Y.	Nov. 30
	Adv. Nov. 30 to Dec. 21.	
Dec. 27	Tractor—Luverne, Minn.	Dec. 21
Dec. 28	Crane—Kilgard, B. C.	Dec. 14
Dec. 29	Crane—Phila., Pa.	Dec. 21
Dec. 29	Coal Handling Equipment — Phila., Pa.	Dec. 21
Dec. 29	Long Island City, N. Y.	Dec. 21
Dec. 30	Grain Elevator—Port Arthur, Ont.	Dec. 21
Dec. 31	Crushed Stone — Toronto, Ont.	Dec. 21
Jan. 1	Transmission Line—Spokane, Wash.	Nov. 9
Jan. 2	Steel Water Pipe, etc.—Terra Bella, Calif.	Dec. 21
Jan. 11	Structural Steel—New Orleans, La.	Dec. 21
	Adv. Dec. 21.	
Jan. 15	Bulkhead — Jersey City, N. J.	Dec. 21
	Adv. Dec. 21.	
Jan. 31	Dry Dock Machinery—Esquimalt, B. C	Dec. 21

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

W. Va., Bluefield—Take bids about Jan. 1, for 2,000,000 gal. filtration plant. $75,000. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, engrs.

O., Columbus—See "Streets and Roads."

Mich., Detroit—Furnishing and erecting 80 filter operating tables for filtration plant at Waterworks Park, to New York Continental Jewel Filtration Co., 45 East 17th St., New York City, $27,000.

Ill., Litchfield — Plans artificial water basin, 300,000,000 gal. capacity. $165,000. L. Starr, city engr.

Wis., Fond du Lac—City plans to purchase pump for Water Dept., about 5-10,000 gal. per day, steam driven and boiler, also large amounts of c.i. mains and service connections. $50,000. G. H. Staunchfield, City Hall, engr.

Wis., Fond du Lac—See "Sewers."

Kan., Lakin—Dec. 22, to vote on $33,000 bond issue for new waterworks system. E. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., engrs.

S. D., White River—Voted $30,000 bonds for waterworks plant, reservoir and sewerage system. T. H. Green, city clk.

Mo., St. Charles—Defeated $65,000 bonds for mains, machinery, meters, etc. Noted Nov. 23.

Tex., Perryton—Voted $75,000 bonds for waterworks. H. E. Elrod Eng. Co., Dallas, (street address not available), engrs.

Tex., Rotan—Voted $50,000 bonds for complete waterworks plant. Engineer not selected. Noted Nov. 2.

Okla., Wyneewood—Dec. 28, to vote on $50,300 bonds for tank, tower, mains, pumping equipment and reservoir. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Ore., Vernonia—Voted $40,000 bonds for waterworks. C. D. White, mayor. Engineer not selected.

Wash., Creston—Voted $16,000 bonds installing water system. Engineer not selected.

Calif., Pasadena—Voted $300,000 bonds for water distribution system and $250,000 bonds to acquire existing water system.

Calif., Sacramento—See "Streets and Roads."

Ont., Toronto—York Twp. plans 6 in. c.i. mains in Avonlea Blvd. $775. Alameda Ave.

Waterworks (Continued)

$4,650, Eglington Ave. $7,350, Gray Ave. $2,150, Larratt Ave. $6,000, Cheyne Ave. $4,400, Kennedy Ave. $2,900, Hamstead Ave. $3,500, Jones Ave. $1,110. F. Barber, 40 Jarvis St., engr.

Ont., Toronto—Plans extension to filtration plant at Toronto Island, increasing capacity by 20,000,000 gal. per day, incl. mechanical rapid sand filters, slow sand filters and drifting sand filters, $300,000; also plans 7,500 lin.ft. 6 in. mains in Orchard View Blvd., Edith and Belsize Drives, Glengarry Ave., Greer, Manor and Tilson Rds. $25,000. R. C. Harris, city engr.

BIDS DESIRED

N. Y., Buffalo—Dec. 27, by A. W. Kreinheder, comr. Pub. Wks., Municipal Bldg., 116 ton standard pipe and fittings, and 5 ton special fittings.

Pa., Phila.—Dec. 29, by F. H. Caven, dir. Pub. Wks., City Hall, furnishing and installing turbo centrifugal pumps, 250 g.p.m. capacity, $20,000, 300 fire hydrants, $10,000; 150 six in 100 eight in., and 50 twelve in. stop valves, $10,000; 400 ton 6, 8 and 12 in. c.i. pipe, 40 ton 6, 8 and 12 in. specials. C E. Davis, City Hall, engr.

Pa., Phila.—Dec. 29, by F. H. Caven, dir. pub. wks., City Hall, furnishing and installing 2 sand machines for removing, washing and replacing sand. $50,000. C. E. Davis, City Hall, engr.

N. C., Albemarle—Jan. 11, by Mayor, constructing brick and concrete addition to filterhouse, concrete filter tubs, concrete coagulation basin, brick and concrete chemical house also filter plant equipment. G. C. White, Durham, engr.

Tenn., Nashville—Dec. 29, by P. Sharpe, mayor, 30 in. gate valves for Water Dept.

O., Cleveland—Comr. of Purchases taking bids 2 steam turbine reduction gear driven forced draught fans, 2 steam turbine driven centrifugal boiler feed pumps, 1 hydraulic driven centrifugal boiler feed pump, 4 hydraulic turbine stoker drives, for Fairmount Pumping Station.

O., Cleveland—Jan. 12, at office of Commissioner Purchases & Supplies, City Hall, constructing inlet and outlet works at Fairmount Reservoir for Div. of Water. A. V. Ruggles, comr. Water; adv. this issue.

Ill., Hinsdale — Jan. 22, by Bd. Local Impvts. furnishing and laying 12,395 ft. 12 in. and 830 ft. 10 in. c.i. mains, with hydrants, valves, etc. $51,000. Krehbiel Co., 730 West Monroe St., Chicago, engrs. Noted Sept. 14.

S. D., Rapid City — Jan. 3, improving waterworks system, incl. 2,000,000 gal. rein.-con. reservoir, furnishing, laying and hauling c.i. pipe, valves, hydrant, etc. $150,000. Burns & McDonnell Eng. Co., 402 Interstate Bldg., Kansas City, Mo., engrs.

CONTRACTS AWARDED

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Astoria, Schurz and Sigel Aves., etc., to F. L. Paino, 572 1st St., Brooklyn, $39,731. Noted Dec. 14.

Pa., Phila.—Water piping in Northeast sewage treatment plant, to Roberts Filter Co., Rawn and Tacowanda Sts., $101,900. Engrs. est. $150,000. Noted Dec. 7.

Miss., Bay St. Louis—For 3 motor driven fire pumps, to Southern Jobbers Supply Co., 515 South Peters St., New Orleans, La., $3,880; steel tower and tank, to Pittsburg Des Moines Steel Co., Praetorian Bldg., Dallas, Tex., $5,540; pipe and specials, steel pipe fittings, to Natl. Cast Iron Pipe Co., Tarrant City, Birmingham, Ala., $26,462; concrete reservoir, hauling pumps, installing same foundation for pump house, building pumphouse and hauling material for same, to Chambers & Bowers, Hammond, La. Noted Nov. 2.

O., Cleveland—For 1 story, 30 x 35 ft., concrete pumphouse and substructure at Lake Shore Blvd. Pumping Plant, to Western Reserve Constr. Co., 2244 Murray Hill Rd., $19,736. Noted Dec. 7.

Ia., Chariton—To A. Phelps & Son, Knoxville, settling basin building, $11,380; Pittsburgh Filter Co., Des Moines (street address not available) filtration plant incl. 2 filters, $6,575. Noted Nov. 23.

Ia., Marshalltown — For 6,000,000 gal. pump, to Allis-Chalmers Mfg. Co., West Allis, (branch of Milwaukee), Wis., $37,700.

Kan., Abilene—To Burt & Tripp, Herington, pipe line, $15,964; to Chicago Bridge & Iron Co., 37 West Van Buren St., Chicago, 250,000 gal. tank on 100 ft. tower, $14,090; to Fairbanks-Morse Co., 1218 Liberty St., Kansas City, Mo., one 75 hp. engine, $5,190, two 250 hp. motors, $1,925.

Sewers

PROPOSED WORK

R. I., Pawtucket—Plans new sewer in sections of Pond St. and Rhode Island Ave. $33,000. Dept. Public Wks., City Hall, engrs.

N. Y., Batavia—Plans to purchase electrically driven automatic lift for sewage disposal plant. $6,000-$12,000. F. D. Emerson, city engr.

Ky., Ashland—Plans sewerage system. $250,000. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, engrs.

Ill., Lemont—Making plans sewerage system. $200,000. Marr, Green & Co., 400 North Michigan Ave., Chicago, engrs.

Ill., Morris — Making plans sewers in North Liberty St. $35,000; in 4th Ward $65,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Wis., Fond du Lac—Haentze Floral Co., c/o R. D. Haentze, 4107 Linden St., plans vitr. clay sewers, watermains, gas mains and connections, and paving on 14th, 15th and Ellis Sts. $25,000. Engineer not selected.

Ia., Earlville — Making plans sanitary sewerage system. $30,000. C. H. Currie Eng. Co., Webster City, engrs.

Ia., Mechanicsville—Making plans complete sewerage system. $30,000. C. H. Currie Eng. Co., Webster City, engrs.

Kan., Ottawa—Making plans new sewage disposal plant. $125,000. Black & Veatch, 701 Mutual Bank Bldg., Kansas City, Mo., engrs.

S. D., White River—See "Waterworks."

Mo., Harrisonville — Jan. 9 to vote on $60,000 bonds sewerage system.

Tex., Denton — Making plans complete disposal plant and sewers. $50,000. Koch & Fowler, Sumpter Bldg., Dallas, engrs.

Tex., Waxahachie—City Comn. had plans prepared and takes bids in January sewer extensions. $25,000. W. M. Finley, Waxahachie, engr.

Calif., Sacramento — See "Streets and Roads."

Calif., Watts—Had plans prepared 64,745 lin.ft. 6 in., 41,180 lin.ft. 8 in., 17,926 lin.ft. 10 in., 2,552 lin.ft. 18 in., 5,660 lin.ft. 15 in., and 5,660 lin.ft. 20 in. cement pipe sewers. To exceed $400,000. Koebig & Koebig, Title Insurance Bldg., Los Angeles, engrs.

BIDS DESIRED

N. J., Newark—Jan. 9, by Passaic Valley Sewerage Comrs., 128 Market St., constructing Newark local sewer connections, in Carlisle Pl., Ogden, Passaic and Clark Sts., 1,405 lin.ft. earth excav. and refilling, in trench, 1,405 lin.ft. 12-18 in. vitr. pipe, 110,000 lb. steel for reinforcement, etc. J. R. Van Duyne, ch. engr.

Va., Richmond—Jan. 16, by Dept. Pub. Wks., sewers in various streets. A. J. Saville, dir. pub. wks.; adv. this issue.

O., Lakewood (Cleveland P. O.)—Dec. 30, 5,250 ft. 48 in. vitr. clay or segmental block intercepting sewer. E. A. Fisher, City Hall, engr.

Wis., North Milwaukee—Dec. 29, by J. H. Fowles, secy., Metropolitan Sewerage Comn. of Milwaukee Co., 508 Market St., Milwaukee, sewer in 32nd St. and Hampton Rd. to 48th St. and Roosevelt Dr., 9,665 lin.ft. 40-60 in. concrete sewer, 1,800 lin.ft. 42 mi. sewer in rock excav. $200,000. F. C. Hatton, 508 Market St., engr.

BIDS RECEIVED

Mich., Detroit—Opened bids (1) Extension 2, Alter Rd. Sewer in Mack Ave. (2) Watson St. Arm east of Bates St. Sewer (3) extension to 3rd Ave. Relief Sewer (4) Byron Ave. Arm south of Highland Park Arm (5) Byron Ave. Arm north of Highland Park Arm, also following Laterals (6) 3794 (7) 3800 (8) 3801 (9) 3802 (10) 3803 (11) 3804 (12) 3806 (13) 3807 (14) 3809 (15) 3810, brick, monolithic concrete, segment block and vitr. crock, from W. Blanck & Co., 827 Ford Bldg., (1) $54,090 (4) $25,530 (7) $22,134 (8) $5,375 (10) $11,194 (13) $5,881 (14) $5,658 (15) $8,056; J. Wagner, 2735 West Grand Blvd., (1) $62,820; J. A. Mercier Co., 216 Hammond Bldg., (1) $58,040 (2) $67,285; Hammen & Co., 4612 Woodward Ave., (2) $64,165 (5) $30,702 (6) $8,332 (14) $6,515; R. D. Baker, 1631 Elmhurst Ave., (2) $67,320 (3) $30,443 (4) $24,120; C. R. Lennane & Co., 2631 Woodward Ave., (3) $30,761; J. Porath, 745 Griswold St., (3) $30,953 (4) $22,635 (5) $29,339; A. Rossi, 5307 Pennsylvania Ave., (5) $30,799; A. Arcari, Detroit (street address not available), (6) $7,921 (9) $4,977; Detroit Drainage Constr. Co., 5099 Lemay Ave., (6) $7,067 (7) $21,494 (8) $5,609 (11) $12,700 (12) $6,000; Western Constr. Co., 1208 Ford Bldg., (7) $19,517 (11) $11,844 (12) $6,413 (13) $5,470 (14) $6,027 (15) $8,177; Langley & Barton, Detroit Savings Bank Bldg., (9) $3,900; H. Pontarelli, Wolverine Hotel, (10) $11,167 (12) $6,086 (15) $8,661; A. G. St. John, 400 Penobscot Bldg., (10) $9,600 (11) $11,300.

Tex., Harlingen—For 7 mi. sewers in various streets, incl. 34,040 ft. 8-18 in. pipe, 9 manholes, 16 flush tanks, from Krueger & Hayner, Moore Bldg., San Antonio, $61,054. Noted Nov. 30.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to J. A. Murphy, sewer in East 17th St., 97% of engrs. est. ($6,695); to Manmill Constr. Co., 2035 Douglass St., Ocean Ave., 122% of engrs. est. ($600), Riverdale Ave. 123.8% of engrs. est. ($1,602), sewer basins in Snyder St., 109% of engrs. est. ($350), 87th St., 128% of engrs. est. ($650); to G. L. Schrade, 693 Flatbush Ave., sewer in East 37th St., 88.4% of engrs. est. ($3,691), 15th Ave., 127.27% of engrs. est. ($2,346); to Gustin Morris Contg. Co., Creek St. and Anabel Pl., Long Island City, Brooklyn Ave., 131% of engrs. est. ($2,232). Noted Dec. 7.

Pa., Phila.—To R. Lombardi Lincoln Bldg., sewer in York Rd., $28,404; to J. Lombardi, Lincoln Bldg., sewer in Salmon, Stockley, Walker and Watts Sts., 67th and Torresdale Aves., $26,672; to J. J. McHugh, 1716 Race St., sewer in Haines, Howard and McCollum Sts., $27,025; to W. H. Garson, 5033 Brown St., sewer in McKean, Oxford and Sansom Sts., $18,835, Erie Ave., Darson, 54th and 55th Sts., $27,227; to E. T. Bennis, 641 East Chelten Ave., sewer in Washington Lane, Ellett and Ognotz Sts., $33,365; to E. Leva, 3851 North 10th St., sewer in 65th Ave., American, Atlantic, Kingston, Venango and Ognotz Sts., $34,039; to E. Pascuzzi, Lincoln Bldg., sewer in Abbotts Ave., Louden and Arnold Sts., $29,877; to A. Joffola, 1203 Tree St., intercepting sewer in 40th Ward lowlands $43,586. Noted Dec. 7.

Fla., Jacksonville — Constructing storm water and sanitary sewers, Sects. A and E, to Bryan & Co., Jacksonville, (street address not available), $29,809 and $58,122 respectively; Sects. C, D and F, to Adams-Evans & Co., Atlantic Bank Bldg., $26,890, $50,023 and $28,373 respectively; Sect. B, to Adams-Evans & Co., Atlantic Bank Bldg., and Bryan & Co., Jacksonville, (street address not available). Noted Nov. 9.

Mich., Springwells—B. P. Esper, village clk., Sect. 20 trunk sewer, to C. R. Lennane, 2631 Woodward Ave., Detroit, $74,618; Sect. 21 trunk sewer, to Detroit Drainage Constr. Co., 5099 Lemay Ave., Detroit, $40,854. Noted Dec. 14.

Kan., Syracuse — To Burt & Tripp, Hutchinson 19;110 ft. 8 in. vitr. pipe $0.40, 8,120 ft. 10 in. $0.55, 9,020 ft. 12 in. $0.70, etc., total $36,006. Noted Nov. 16.

Waste Disposal

BIDS RECEIVED

Ont., Toronto — Opened bids 400 ton municipal garbage incinerator, from Francis Hankin Co., 20 St. Nicholas St., Montreal, Que., representatives of C. O. Bartlett & Snow Co., Cleveland, O., $203,000; Laurie & Lamb, Bd. Trade Bldg., Montreal, Que., representatives of Heenan & Froud, England, $227,910.

CONTRACTS AWARDED

Tex., Waco—For 20 ton incinerator, to Superior Garbage & Incinerator Co., Dallas, (street address not available), $18,500. Noted Oct. 26.

Bridges

PROPOSED WORK

Conn., Hartford—Pub. Wks. Dept. plans bridge over Park River on Bonner St. $36,000. R. N. Clark, City Hall, engr.

Fla., Gainesville—Alachua Co., plans 200 ft. steel bridge over Swannee River. D. F. Thomas, Gainesville, engr.

Wisconsin—See "Street and Roads."

Wis., Milwaukee—Park Bd., City Hall, and Chicago & Northwestern Ry., West Jackson Blvd. and Franklin Sts., Chicago, having plans prepared rein.-con. viaduct on Mason St., one 120 ft. span and two 40 ft. spans, 80 ft. wide. $230,000. Park Bd. takes bids in spring. Railway appropriated $130,000 toward cost. A. C. Clas, 445 Milwaukee St., engr.

Ia., Ft. Dodge—Webster Co. had plans prepared 288 ft., 6 span, cantilever, deck girder bridge, concrete, at North limits of Ft. Dodge. $32,300. Iowa Hy. Comn., Ames, engrs.

Bridges (Continued)

Missouri—State Hy. Dept., Jefferson City, plans three 80 ft. steel truss and five 20 ft. rein.-con. slab spans, 20 ft. roadway, 3 rein.-con. piers, etc., over St. Francis River, on Sta. 1 plus 00, on road from Kennett to Poplar Bluff, Federal Aid Project 221, Dunklin Co.; three 60 ft. steel truss spans-skewed, concrete floor with one 20 ft. rein.-con. slab approach span each end, 18 ft. roadway, 2 rein.-con. piers, etc., over Shoal Creek, on Sta. 1780 plus 64 on road from Granby to Monett, Federal Aid Project 155, Newton Co.; one 140 ft. steel truss and six 20 ft. I-beam spans, approach spans each end, 20 ft. roadway, 2 rein.-con. piers, etc., over west fork of Grand River on Sta. 480 plus 10 on road from Stanberry to Albany, Federal Aid Project 37B, Gentry Co.; one 140 ft. steel truss span, 20 ft. roadway, 2 rein.-con. abutments, etc., over Little St. Francis River, on Sta. 700 plus 00, on road from Ironton to Fredericktown, Federal Aid Project 203, Madison Co.; two 85 ft. steel truss spans, 20 ft. roadway, 1 rein.-con. pier, etc., over Floodway Drainage Ditch, on Sta. 442 plus 93 on road from Kennett to Hayti, Federal Aid Project 212, Dunklin Co.; two 100 ft. steel truss spans, 20 ft. Roadway, 1 rein.-con. pier, etc., over Auxvasse River on Sta. 213 plus 90 on road from Fulton to St. Louis near Fulton, Federal Aid Project 144, Callaway Co.; two 100 ft. steel truss spans, 20 ft. roadway, 1 rein.-con. pier, etc., over James River on Sta. 255 plus 00, on road from Springfield to Ozark, near Gallaway, Federal Aid Project 162, Greene Co.; one 90 ft. and two 60 ft. rein.-con. arch spans, open spandrel, 20 ft. roadway, 2 rein.-con. piers, etc., over Salt Fork River on Sta. 35 plus 40 on road from Marshall to Arrow Rock, near Marshall Junction, Federal Aid Project 16, Saline Co.; one 120 ft. and two 80 ft. steel truss spans, 20 ft. roadway, 2 rein.-con. piers, 1 rein.-con. and 1 mass concrete abutments, etc., over Big Piney River on Sta. 1091 plus 00 on road from Cabool to Houston, Federal Aid Project 90 C, Texas Co.; one 140 ft. steel truss span, 20 ft. roadway, 2 rein.-con. bents, 2 rein.-con. retaining walls, etc., over Drainage Ditch 8, on Sta. 799 plus 00 on road from Marble Hill to Advance, Federal Aid Project 208, Bollinger Co., eight 40 ft. rein.-con. deck girder, one 120 ft. and two 76 ft. steel truss spans, 20 ft. roadway, 4 rein.-con. piers, 8 rein.-con. bents, etc., over Castor River Diversion Channel, on road from Advance to Marble Hill, Federal Aid Project 208, Bollinger Co. B. H. Piepmeier, state highway engr.

Tex., Ft. Worth—See "Streets and Roads."

Wash., Colfax—Whitman Co. voted $25,000 bonds 78 ft. steel girder bridge, 1,400 cu.yd. concrete in girder, 150 ton reinforcing. L. R. Sampson, Colfax, engr.

Ontario—See "Railways."

Ont., Scarboro—Scarboro Twp. having plans prepared one 30 ft. and several 20 ft. concrete highway bridges in Dist. 1, slab, beam, girder and arch types. $40,000. C. E. Fraser, Stop 19, Kingston Rd., Toronto, engr.

BIDS DESIRED

Missouri—See "Streets and Roads."

Missouri—Dec. 27, by State Hy. Dept. at div. office Neosho, three 60 ft. steel truss spans-skewed concrete floor with one 20 ft. rein.-con. slab approach span each end, 18 ft. roadway, 2 rein.-con. piers and 2 rein.-con. bents, over Shoal Creek, on Sta. 1780 plus 64 on road from Granby to Monett, Federal Aid Project 155, Newton Co. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 28, by State Hy. Dept. at div. office Carthage one 70 ft. and two 60 ft. rein.-con. arch spans, 20 ft. roadway spandrell filled, 2 rein.-con. abutments and 2 rein.-con. piers, over Spring River, on Sta. 581 plus 00, on road from Carthage to Joplin, Federal Aid Project 84, Jasper Co. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 28, by State Hy. Dept., at div. office Platte City, three 120 ft. and one 60 ft. steel spans, 18 ft. roadway, 2 rein.-con. bents and 3 rein.-con piers, over Platte River, on Sta. 7 plus 00, on road from Kansas City to St. Joseph, Federal Aid Project 93, Platte Co. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 28, by State Hy. Dept. at div. office Springfield, two 100 ft. steel truss spans, 20 ft. roadway, concrete piers and abutments, over James River on road from Springfield to Ozark, Federal Aid Project 162, Greene Co. B. H. Piepmeier, Jefferson City, state highway engr.

BIDS RECEIVED

Alabama—State Hy. Dept., Montgomery, 566 ft. bridges on Opelika-Waverly Rd., Lee Co., 18 ft. roadways, one 80 ft. steel span, remainder concrete girder type, from Mitchell Bros., Birmingham (street address not available) $34,790; Stanley & Singer Constr. Co., Lafayette, $37,221; F. M. Dobson & Son, 107 Pine St., Montgomery, $37,306. Noted Nov. 16.

Missouri—State Hy. Dept., Jefferson City, opened bids Dec. 2, (1) one 40 ft., one 45 ft. and three 35 ft. I-Beam spans, 20 roadways, 2 concrete bents on concrete filled tubes, on road from Poplar Bluff to Fisk, Federal Aid Project 204, Sect. B, Butler Co. (2) six 8 ft. rein.-con. slab spans, skewed, 24 ft. roadway, concrete piers and abutments on rock fill, on Sta. 12 plus 37 on road from Mexico eastward, State Project Route 22, Sect. 9, Audrain Co. (3) three 15 ft. rein.-con. slab spans, 20 ft. roadway, concrete piers and abutments, over north fork of Cave Creek, and one 50 ft. steel truss span, 20 ft. roadway, etc., over south fork of Cave Creek, on road from Poplar Bluff to Elsinore, State Project Route 16, Sect. 73, Carter Co (4) two 70 ft., one 50 ft. and one 60 ft. steel truss spans, 20 ft. roadways, concrete piers and concrete pile bents, over branch of Bee Creek, on road from Faucette to New Market, State Project Route 1, Sect. 34, Buchanan Co. (5) one 100 ft. steel truss span, 20 ft. roadway, and four 20 ft. rein.-con. slab spans, concrete piers and bents, over Fox River on Sta. 88 plus 50, also one 60 ft steel truss span, 20 ft. roadway and four 15 ft. rein.-con. slab spans, concrete piers and concrete pile bents, over branch of Sugar Creek, on Sta. 192 plus 00 on road from Wayland to Canton, State Project Route 9, Sect. 7, Clark Co. (6) one 60 ft. steel and two 25 ft. rein-con. deck girder spans, 20 ft. roadways, concrete abutments, on road from West Co. line to Hamilton, State Project Route 8, Sect. 13, Caldwell Co. (7) one 140 ft. steel truss and one 20 ft. rein.-con. slab spans, on road from Fairfax to Tarkio, State Project Route 1, Sect. 7, Atchison Co. (8) one 35 ft. rein.-con. deck girder and one 80 ft. steel truss spans, 20 ft. roadways, concrete abutments on road from West Co. line to Hamilton, State Project Route 8, Sect. 12, Caldwell Co., from Robertson, Ellis & Taylor, Poplar Bluff, (1) $14,438; Service Constr. Co., Poplar Bluff, (1) $15,180; W. A. Leach, Poplar Bluff, (1) $15,304 (3) $10,537; Henderson-Washam, Alexandria, (2) $4,105; C. P. O'Reilley, Wainright Bldg., St. Louis, (2) $4,387; Coopers Constr. Service Co., Federal Reserve Bank Bldg., St. Louis, (3) $10,480; H. E. Pyley, Walnut Ridge, Ark., (3) $11,639; F. F. Marsh & Co., Jefferson, Ia., (4) $57,812; O. H. Schmitt, St. Joseph (street address not available), (4) $58,235; Missouri Valley Bridge & Iron Co., 4th and Walnut Sts., Leavenworth, Kan., (4) $59,971; General Constr. Co., Syndicate Trust Bldg., St. Louis, (5) $30,282; Washam & O'Dell, Alexandria, (5) $30,469; Riley & Bailey Constr. Co, International Life Bldg., St. Louis, (5) $31,301; Harrison Eng. & Constr Co., Wichita, Kan. (street address not available), (6) $26,795 (8) $23,331; Koss Constr. Co., 2818 5th Ave., Des Moines, Ia., (6) $28,194 (8) $24,673; Cameron Joyce & Co., Keokuk, Ia., (6) $28,883; W. R. Larson Constr. Co., 519 Secy. Natl. Bank Bldg., Sioux Falls, S. D., (7) $29,109; Cook & O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, (7) $29,929; Phelan-Shirley Co., 306 South 24th St., Omaha, Neb., (7) $30,685; Widell Co., 1st Natl. Bank Bldg., Mankato, Minn., (8) $22,146.

Calif., Los Angeles—Bd. Supervs. Los Angeles Co. constructing (1) bridge on State Highway over mouth San Gabriel River at Alamitos Bay (2) bridge on State Highway over Topango Creek near Santa Monica, from W. Ledbetter Co., Pacific Electric Bldg., (1) $42,300 (2) $47,600; Wheeler Co., Los Angeles (street address not available), (1) $43,672 (2) $46,000; Mercereau Bridge & Ccnstr. Co., 313 North Ave. 22, (1) $45,145; F. H. Greene, 1328 South Western Ave., (2) $41,700. Noted Nov. 9.

CONTRACTS AWARDED

Georgia—State Hy. Dept., Atlanta, 576 ft. rein.-con. bridge on Hawkinsville Abbeville Rd., to M. Atkinson, Thomasville, $25,277. Noted Nov. 16.

Georgia—See "Streets and Roads."

Tex., Glen Rose—Sommerville Co., 2 concrete and steel bridges over Glen Rose and Booker Crossings on State Highways 10A and 25, to J. E. Harris Co., Colorado, $28,224. Noted Dec. 7.

Tex., Jefferson—Marion Co. 470 ft. steel and concrete bridge over Cypress River, one 150 ft. steel and twenty 16 ft. concrete spans, to Cock & Turner, Marshall, $40,000. Noted Nov. 23.

Wash., Seattle—Bd. Pub. Wks., superstructure for bridge over West Waterway, West Spokane St., City design, furnishing and delivering steel at site, to Bethlehem Shipbuilding Corp., Morris Bldg., Phila., $276,871; erecting steel, to Gerrick & Gerrick Co., Cenrtal Bldg., $106,151; furnishing electrical equipment, to Westinghouse Electric and Mfg. Co., Alaska Bldg., $23,295. Total $406,317. Noted Dec. 14.

Dams

PROPOSED WORK

Ont., Timmins—See "Industrial Works."

Railways

PROPOSED WORK

Missouri—Bd. Directors, St. Louis Southwestern R.R. (Cotton Belt System), Ry. Exch. Bldg., St. Louis, approved $5,000,000 improvement program to include reballasting during next 3 years, line from Illmo, Mo., to Texarkana, Tex., and replacing 75 lb. rails with 85 lb. rails on 100 mi. main line in Malden, Mo., and Stuttgart, Ark., districts, also new machinery for shops at Pine Bluff, Ark., and Tyler, Tex., cost $1,200,000 to $1,472,000; purchasing 500 steel-frame and 500 automobile type box cars and 200 convertible coal cars, $3,000,000; converting engines used in Texas from coal to oil burners, $528,000. W. S. Hanley, Tyler, Tex., ch. engr.

Ontario—Temiskaming & Northern Ontario Ry., North Bay, instead of electrifying main line as proposed, have decided to build line to James Bay, 100-125 mi. from Oil Can Portage, on Abitibi River, incl. 80 lb. rails, trestles, bridges, telegraph lines, etc. $6,000,000. S. B. Clement, ch. engr. Noted Nov. 9, under Miscellaneous.

Excavation, Drainage, Irrigation

PROPOSED WORK

Michigan — Oakland Co., (Pontiac), Wayne Co., (Detroit) and Washtenaw Co., (Ann Arbor) had plans prepared for 8,300 ft. drain, 6 ft. wide at bottom, average depth 8.6 ft., in Northville, Lyon and Salem Twps. G. A. Dingman, County Bldg., Detroit, engr.

Mont., Franklin — Franklin Irrigation Dist., Franklin, plans dam in Musselshell River, pipe lines, laterals, flumes, etc., to irrigate 40,000 acres in Wheatland and Golden Valley Counties. $700,000. Gerharz & Jaqueth, 514 1st Natl. Bank Bldg., Great Falls, engrs.

Wash., Washougal—Clark Co. formed Washougal Dyking Dist. and plans to improve 3,000 acres. $120,000. Address Washougal Dyking Dist. Com., Washougal. Engineer not selected.

Ore., Scappoose — Scappoose D. D. lets contract about Feb. 1, for canals, dikes, tide-gates, electrically operated pumps, etc., to drain 5,000 acres of Columbia River overflow land, in Columbia Co. $200,000. E. E. West, pres. Barr & Cunningham, Spalding Bldg., Portland, engrs.

Calif., Big Pine—G. B. Warren plans to irrigate 640 acres, involving 3½ mi. canal, small dam to store 360 ac.ft. and pumping plant to lift stored water to high land.

BIDS DESIRED

Ind., Logansport—Dec. 29, by Comrs. Cass and Miami Counties at Logansport, 6.5 mi. Graham-Spence Drain, 370,000 cu.yd. excav. Bids to include removal and replacement of all bridges on public highways affected by work. Bidders must also state kind of dredge, length of boom, etc.

Calif., Terra Bella—See "Miscellaneous."

BIDS RECEIVED

Minn., Owatonna—Steele Co. opened bids Dec. 1, Judicial Ditch 12, 65,052 lin.ft. 6-32 in. tile, 2 timber bridges, 5 floodwater control structures, 1 rein.-con. headwall, 58 surf water inlets: material from National Cement Co., Mankato, $24,000; labor from Morristown Block and Tile Co., Morristown, $20,000. Noted Nov. 23.

Wash., Seattle — Improving Wetmore Slough Drain, from T. Hanson, 105 North 84th St., $19,555, $19,005, $26,535 and $25,985; J. N. Clapp, Burke Bldg., $24,490, $26,852, $25,045 and $37,407; C. L. Creelman, Walker Bldg., $28,281, $29,230, $36,200 and $37,150, Romano & Co., 1102 East Denny St., $27,110, $26,170, $38,500, $37,560, Engrs. est. $24,990 open drain, $32,470 closed drain.

Excavation, Drainage and Irrigation
(Continued)

Calif., Patterson—Concrete lining 2½ mi. main laterals, from N. M. Ball, Porterville, $0.06 per sq.ft.; W. Knutson, Patterson, $0.08; Carlson Bros., Turlock, $0.095.

CONTRACTS AWARDED

Wis., Juneau—Dodge Co. Farm Drainage Bd.,Mayville, 7,800 ft. 10-14 in. tile drain, one concrete bulkhead, equal amount of open ditch work, to Maunesh Drainage Co., Waterloo. Engrs. est. $25,000 Noted Oct. 5. Oct. 5.

Calif., Blythe—Palo Verde Joint Levee Dist., constructing Raab Shoo-fly, 341,500 cu.yd. excav., 341,500 cu.yd. team embankment, 30 acres clearing, to P. B. Engh, Pacific Electric Bldg., Los Angeles, $57,420; Raab Cut-off, 247,200 cu.yd. excav., 125 acres clearing, Hauser Cut-off, 195,700 cu. yd. excav., 75 acres clearing, Casad Cut-off, 81,200 cu.yd. excav., to C. Thompson. Hotel Clark, Los Angeles, $153,406. Noted Oct. 5.

Calif., Meridian—Recl. Dist. 70, cleaning out and enlarging main drainage canal, involving 160,000 cu.yd excav., deepening ditches, 750 lin.ft. 8 in., 16 gauge, 80 lin. ft. 12 in., 14 gauge and 80 lin.ft. 24 in. 12 gauge, corrugation iron culvert, etc., to Haas & Doughty, Merchants Exch. Bldg., San Francisco, $32,000.

Streets and Roads

PROPOSED WORK

N. C., Greensboro—City Council having surveys made widening, grading, curbing and guttering Greene, West Lee, West Sycamore and Depot Sts. To exceed $25,000. P. C. Painter, city mgr.

Fla., Bradentown—Manatee Co. election Jan. 9, to vote on $100,000 bonds macadam surfacing 16 mi. road from Myakka to De Soto Co. line; $50,000 bonds 20 mi. Sandy, Edgville and Duette Rds. McElroy Eng. Co., Giddens Bldg., Tampa, engrs.

Fla., Palatka—Comrs. Putnam Co. take bids in January constructing 22 mi. Florahome Rd., 54,000 cu.yd. grading, 12,820 cu.yd. sand clay surfacing. R. J. Hancock, clk.

La., Springville—Police Jury of Livingston Parish will sell $80,000 bonds Jan. 2 constructing roads in Dist. 3. H. B. Berthelot, pres.

Kentucky—State Hy. Dept., Frankfort, having plans prepared and soon takes bids surfacing 15 mi. road in Bullitt, Spencer and Nelson Counties; surfacing with waterbound macadam or gravel 9 mi. Vanceburg-Maysville Rd. from Tollesboro to Valley Station; grading 31 mi. Mayo Trail, from Louisa to Paintsville, Lawrence and Johnson Counties. J. Boggs, state highway engr.

Ohio—Dept. Highways and Pub Wks., Columbus, cancelled bids which were to be received Dec. 19, grading, bridging and paving 1.545 mi. Sect. "B" Dayton-Lakeview Rd., Clark Co., rein.-con., $50,827, bituminous macadam, tar or asphalt $42,105. Noted Dec. 7.

O., Columbus — Plans grading, curbing, laying mains and paving 2 mi. Parsons Ave. from Livingston Ave. to viaduct, 44 ft. brick $172,813, asphalt $163,948; 754 ft. Taylor Ave. from viaduct to 5th Ave., 26 ft., brick $21,803, asphalt $19,638; 2,040 ft. Leonard Ave. from viaduct to Brighton Ave., 36 ft., asphalt $39,980, brick $45,408. R. H. Simpson, City Hall, engr.

Ind., Albion—Noble Co. plans grading and graveling 15,125 ft. Clarence Leiter Rd., 20 ft., $26,050; 27,258 ft. F. L. Gandy Rd., 16 ft., $25,652; concrete and gravel surfacing 8,310 ft. William Appleman Rd., 16 ft., 5,421 sq.yd. concrete, $27,389. W. T. Knox, Albion, engr.

Ind., Columbia City—Whitley Co. plans grading and graveling 45,158 ft. Aaron Mishler Rd., 16 ft., $49,868; 18,577 ft. Austin Hibely Rd., 16 ft., $29,304; 10,585 ft. County Rd. 2, 18 ft., $25,245; paving crushed stone, 7,992 ft. Rd. 3, 30 ft., $26,769. C. M. Auspaugh, Columbia City, engr.

Ind., Columbus—Bartholomew Co. plans grading, gravel and stone surfacing 29,154 ft. Sawyer Rd., 16 ft. $50,000. H. C. Thomas, Elizabethtown, engr.

Ind., Kokomo—Howard and Miami Counties plan paving 2 mi. Charles E. Leeson Rd., 16 ft., concrete. $55,000. E. Hunt, Kokoma, engr.

Ind., Marion — Grant Co. plans paving 2,125 ft. Dempsey Seybond Rd., 30 ft., stone and asphalt. $26,035. G. Swisher, Marion, engr.

Ind., Vincennes—Knox Co. plans gravel surfacing 12,885 ft. Royse Davis Rd., 16 ft., $25,348; 7,920 ft. John R. McClure Rd., 30 ft., $30,543. G. A. Haskin, Vincennes, engr.

Ind., Washington—Daviess Co. plans grading and graveling 17,530 ft. Andrew T. Myers Rd., 16 ft. $26,232. W. L. McCormick, Washington, engr.

Michigan—State Hy. Dept., Lansing, plans 282 mi. pavement, 81 mi. macadam, 449½ mi. gravel, and 120½ mi. grading and culvert work in 1923, costing $14,522,300. Program in detail by counties as follows: Alger Co., 7 mi. macadam, 5 mi. gravel, $110,000; Allegan Co. 2.75 mi. pavement, 6.75 mi. gravel, $156,500; Alpena Co., 4.75 mi. gravel, $44,500; Antrim Co., 9.5 mi. gravel, $77,000; Arenac Co. 0.3 mi. gravel, $4,000; Baraga Co., 18 mi. gravel, $90,000; Barry Co. 2.5 mi. pavement, 15 mi. gravel, $218,500; Bay Co. 13.5 mi. pavement, 8.5 mi. grading, $383,000; Benzie Co., 9.3 mi. gravel, $68,000; Berrien Co., 5.28 mi. pavement, $158,000; Branch Co., 4 mi. gravel $25,000; Calhoun Co., 4.7 mi. pavement, $141,000; Cass Co., 9.5 mi. pavement, 11 mi. macadam, $472,000; Charlevoix Co., 4.25 mi. pavement, 4 mi. gravel, $138,000; Cheboygan Co., 0.7 mi. pavement, 10 mi. gravel, 1.8 mi. grading, $126,500; Chippewa Co., 9 mi. macadam, 2 mi. gravel, $116,000; Clare Co., 1 mi. pavement, 6.85 mi. gravel, $71,000; Clinton Co., 5.25 mi. gravel, $52,500; Crawford Co., 6.5 mi. gravel, 2 mi. grading, $70,000; Delta Co., 1.4 mi. pavement, $30,000; Dickinson Co., 1.5 mi. pavement, 10 mi. gravel, $108,000; Eaton Co., 5.75 mi. pavement, $165,000; Emmet Co., 2 mi. pavement, 1.25 mi. macadam, $83,000; Genessee Co., 8 mi. pavement, 1 mi. grading, $248,000; Gladwin Co., 4 mi. gravel, $45,000; Gogebic Co., 14 mi. gravel, $83,000; Grand Traverse Co., 1.75 mi. pavement, 1 mi. gravel, $66,000; Gratiot Co., 5.5 mi. pavement, $165,000; Hillsdale Co., 2.75 mi. pavement, 5.5 mi. gravel, $138,900; Houghton Co., 5.5 mi. gravel, $55,000; Huron Co., 3 mi. pavement, 19 mi. gravel, $330,000; Ingham Co., 15 mi. pavement, $455,000; Ionia Co., 4.25 mi. pavement, 9.75 mi. gravel, $219,500; Iosco Co., 7.5 mi. gravel, $71,500; Iron Co., 5.5 mi. macadam, 9 mi. gravel, $144,000; Isabella Co., 0.6 mi. pavement, 0.5 mi. gravel, $24,000; Jackson Co., 15 mi. pavement, $500,000; Kalamazoo Co. will expend $157,500; Kalkaska Co., 9 mi. gravel, $74,000; Kent Co., 12.83 mi. pavement, 5 mi grading, $372,000; Keweenaw Co., 6 mi. gravel, $60,000; Lake Co., 5.5 mi. gravel, $44,000; Lapeer Co., 3.25 mi. pavement, 0.75 mi. gravel, $106,000; Leelanau Co., 6 mi. gravel, $36,000; Lenawee Co., 8 mi. pavement, 15 mi. grading, $330,000; Livingston Co., 5.85 mi. pavement, 1 mi. gravel, $183,000; Luce Co., 6 mi. macadam, $60,000; Mackinaw Co., 5 mi. macadam, 45 mi. gravel, $554,000; Macomb Co., 14.5 mi. pavement, $435,000; Manistee Co., 2 mi. macadam, 7 mi. gravel, $88,700; Marquette Co., 17 mi. macadam, 4.5 mi. grading, $376,500; Mason Co., 6 mi. pavement, 2 mi. gravel, $211,700; Mecosta Co., 2 mi. gravel, etc., $18,700; Menominee Co., 18.6 mi. gravel, $202,000; Midland Co., 5.5 mi. gravel and 5.5 mi. grading, $55,000; Missaukee Co., 6.75 mi. gravel, $57,000; Monroe Co., 9.5 mi. pavement, 1.4 mi. grading, $400,000; Montcalm Co., 9 mi. gravel, $69,000; Montmorency Co., 7 mi. gravel, $69,000; Muskegon Co., 6.5 mi. pavement, 1 mi. macadam, $199,000; Newaygo Co., 0.88 mi. pavement, 6.75 mi. gravel, $78,300; Oakland Co., 16 mi. pavement, 0.75 mi. grading, $495,000; Oceana Co., 0.5 mi. macadam, 7.26 mi. gravel, $201,000, Ogemaw Co., 0.5 mi. pavement, 2.8 mi. gravel, $39,000; Ontonagon Co. 5.5 mi. macadam, 22 mi. gravel, $256,000; Osceola Co., 1 mi. pavement, 5.25 mi. gravel, $100,000; Oscoda Co., 7 mi. gravel, $53,000, Otsego Co., 5.9 mi. gravel, $57,000; Ottawa Co., 11.12 mi. pavement, 1 mi. grading, $303,000; Presque Isle Co., 1 mi. pavement, 5 mi. gravel, $65,000; Roscommon Co., 6 mi. gravel, $46,000; Saginaw Co., 7.6 mi. pavement, 6 mi. grading, $270,000; Sanilac Co., 2.5 mi. pavement, 32 mi. gravel, $413,000; Schoolcraft Co., 10 mi. macadam, 2.5 mi. gravel, 10 mi. grading, $176,000; Shiawassee Co., 3 mi. pavement, $88,000; St. Clair Co., 15 mi. pavement, $459,500; St. Joseph Co., 9 mi. pavement, 8 mi. gravel, $430,000; Tuscola Co., 5.5 mi. gravel, $55,000; Van Buren Co., 3.25 mi. pavement, 7.5 mi. gravel, $172,500; Washtenaw Co., 11.4 mi. pavement, 1 mi. gravel, 25.8 mi. grading, $494,000; Wayne Co., 15 mi. pavement, 12.5 mi. grading, $518,000; Wexford Co., 2.5 mi. pavement, 1 mi. gravel, 1.25 mi. grading, $81,000. F. F. Rogers, state highway comr.

Mich., Detroit—Having plans completed paving with 3½ in. sheet asphalt on 8 in. concrete, 2,200 sq.yd. Wager St. from Savery to McQuade Sts., 26 ft., $14,180, 2,000 sq.yd. Eastlawn Ave. from Charlevoix to Mack Aves., 26 ft., $11,490, 10,000 sq.yd. Tireman Ave. from Livernois Ave. to Detroit Terminal R.R., 30 ft., $58,600, 7,500 sq.yd. Glendale Ave. from Linwood to Dexter Aves., 26 ft., $40,150, 3,500 sy.yd. Dodge St. from city of Hamtramck (branch of Detroit) to Mt. Elliott Ave., 26 ft. $1[illegible]50, 900 sq.yd. Linsdale Ave. from Colfax Ave. to Epworth Blvd., 26 ft., $4,900, 2,6[illegible] sq.yd. Fleming Ave. from Six Mile Rd. to [illegible]tender Ave., 26 ft., $13,310, 2,000 sq.yd. Quincy Ave. from Hazelwood Ave. to Joy Rd., 26 ft., $11,390, 600 sq.yd. Gibson Ave. from Tuscola to Selden Aves., 18 ft., $3,6[illegible], 3,800 sq.yd. Casper Ave. from St. Stephens to Michigan Aves., 20 ft., $21,760, 1,0[illegible] sq.yd. Hussar St. from Dragoon to Artillery Aves., 26 ft., $5,800, 2,900 sq.yd. Nardin Ave. from Bordeau to Burlingame Aves., 26 ft., $15,130, 3,000 sq.yd. Burton Ave. from Michigan to Pelouze Aves., 26 ft., $16,320. J. W. Reid, city engr.

Ill., De Kalb—Making plans paving various streets. $60,000. W .Hay, city engr. Consoer Eng. Co., 140 South Dearborn St., Chicago, consult. engrs.

Ill., Dwight—Making plans paving various streets. $60,000. W. Hay, city engr. 140 South Dearborn St., Chicago, engrs.

Ill., Lemont—Making plans paving various streets. $100,000. Marr, Green & Co., 400 North Michigan Ave., Chicago, engrs.

Wisconsin—Following are county appropriations for state and county aid road and bridge construction during 1923. Douglas Co. $305,727, C. Hanson, Superior, comr.; Wood Co. $230,994, E. Morris, Wisconsin Rapids, comr.; Burnett Co. $17,057, G. E. Miller, Webster, comr.; Door Co. $50,203, J. Laurie, Sturgeon Bay, comr.; Winnebago Co. $243,103, J. Binning, Oshkosh, comr.; Fond du Lac Co. $1,325,059, G. Treleven, Fond du Lac, comr.; Dunn Co. $72,750, F. Stewart, Menomonie, comr.; Barron Co. $116,947, E. Gleason, Barron, comr.; Manitowoc Co. $134,651, J. Connell, Manitowoc, comr.; Vernon Co. $245,372, A. Ristow, Viroqua, comr.; Waupaca Co. $65,169, J. Huffcut, Waupaca, comr.; Bayfield Co. $68,471, J. Friberg, Washburn, comr.; Kenosha Co. $131,954, J. F. Herzog, Kenosha, comr.; Green Co. $500,000 incl. concrete road on Trunk Highways 20 and 42, C. J. Smith, Monroe, comr.; Trempealeau Co. $143,853, E. F. Rotering, Whitehall, comr.; Washington Co. $721,955, C. Johnson, West Bend, comr.; Clark Co. $99,817, O. J. Weyhmiller, Neillsville, comr.; Iowa Co. $75,599, C. Wonn, Dodgeville, comr.; Marathon Co. $158,062, J. H. Vogt, Wausau, comr.; Monroe Co. $170,841, C. Millard, Sparta, comr.; Kewaunee Co. $98,886, M. Shaw, Algoma, comr.; Columbia Co. $192,884, J. T. Henton, Portage, comr.

Wis., Elkhorn—Walworth Co. plans to improve following roads in 1923; Elkhorn-Burlington Rd., State Trunk Highway 20, 18 ft., concrete $150,000; 1.48 mi. Sharon-Darien Rd., 9 and 18 ft. concrete $35,000; 4.5 mi. Whitewater Rd., Trunk Highway 12, 18 ft. concrete, $130,000; Lake Geneva-Genoa Junction Rd., Trunk Highway 12, 18 ft. concrete, $270,000; 1.5 mi. Elkhorn-Tibbit Rd., 16 ft. concrete $35,000; East Troy-Beulah Rd., 15 ft. gravel $22,000, Delavan-Walworth Rd., 15 ft. gravel $24,000; Spring Prairie-East Troy Rd., 15 ft. gravel $15,000; 4.7 mi. Delavan-Millard Rd., 15 ft. gravel, $25,000. H. J. Peters, comr.

Wis., Fond du Lac—See "Sewers."

Wis., Fond du Lac — Plans paving 7th, 8th, Park Ave. to McKinley Sts., 5th, McWilliams, Pucker, Connell, Garfield, Johnson, Ruggels, Western Sts., 25-30 ft., 1 or 2 course concrete, sheet asphalt or asphaltic concrete, concrete curb and gutter. A. M. Hunter, city clk. Engineer not selected.

Wis., Oshkosh — Making plans paving Elm, Cleveland, Lemmer, Grove, Irving, Monroe, Ashland, Arlington and 9th Sts., 25-30 ft., asphalt or concrete, concrete curb and gutter. G. H. Randall, city engr.

Wis., Racine—Racine Co. plans to grade and gravel 5 mi. North Point Rd., town of Caledonia, 18 ft., $3,000, Six Mile road in Raymond, 18 ft. $6,000, High St. Rd. in Waterford, 18 ft., town Line Rd., in Dover and Burlington, 18 ft. $6,000, English Settlement-Rochester Rd. in Dover, 18 ft., $3,000; bond issue construction, grading and concrete surfacing River Rd. in Caledonia, 18 ft., $100,000; Union Grover-Twelfth St. Rd. in Union Grove, 18 ft. $90,000, Browns Lake Rd. in Burlington, 18 ft., $67,000, Wind Lake relocation in Norway, 18 ft., $21,144, Burlington-Geneva Rd. in Burlington, 18 ft., $36,144. W. A. Bechthold, comr.

Ia., Dyersville—Making plans paving 52 blocks, rein.-con., vibrolithic, asphaltic concrete and brick block. $150,000. N. B. Barber, Waterloo, engr.

Ia., Williamsburg—Completing plans and takes bids Feb. 1 for 50 blocks paving, various types. Currie Eng. Co., Webster City, engrs. Noted Oct. 5.

Missouri—State Hy. Dept., Jefferson City, plans grading, etc., 18 mi. road from Hol-

Streets and Roads (Continued)

com northwestwardly, 26 ft., State Project 221, Dunklin Co.; 1.363 mi. road from Clark northwestwardly, 24 ft., State Project 20.140 Randolph Co.; 1.218 mi. road from Warrenton southwardly, 26 ft., State Aid Project 20.221, Warren Co.; 5.498 mi. road from New London northwardly and southwestwardly, 26 ft., State Aid Project 20.168, Ralls Co.; 1809 mi. road from Hayti southeastwardly toward Caruthersville, 26 ft., State Aid Project 20.224, Pemiscot Co.; 20.226 mi. road from Koshkonong northwestwardly, 26 ft., State Aid Project 20.226, Oregon Co.; 2.433 mi. road from West Ely westwardly, 26 ft., State Aid Project 20.188, Marion Co.; 1.748 mi. road from Warrensburg southwardly, 26 ft., State Aid Project 20.200, Johnson Co.; 0.5 mi. road from Fulton eastwardly, 26 ft., State Aid Project 20.227, Callaway Co.; 1.4 mi. road from Maysville westwardly, 26 ft., State Aid Project 20.203, De Kalb Co.; 1.046 mi. road from Troy eastwardly, 26 ft., State Aid Project 20.69B, Lincoln Co. B. H. Piepmeier, state highway engr.

Tex., Angleton—Brazoria Co. plans grading, shell surfacing and bituminous topping 13.82 mi. State Highway 19 and 19 A, 16 ft. $156,000. E. N. Gustafson, co. engr.

Tex., Cameron—Milam Co. plans to improve State Highway 43 in. Rd. Dist. 5. $75,000. State Highway Comn., Austin, granted Federal Aid. A. F. Mitchell, co. engr.

Tex., Cisco—Making plans and takes bids about January 14 paving ¼ mi. various streets, 40 ft., brick. $30,000. Elrod Eng. Co., Dallas, (street address not available), engrs.

Tex., Corsicana—Navarro Co. takes bids early next year surfacing 7.71 mi. State Highway 31, 12 ft., 12,139 cu.yd. crushed rock. $80,900. W. W. McClendon, co. engr.

Tex., Dallas—Election in January to vote on $49,000 bond issue paving White Rock Blvd. G. D. Fairtrace, city engr.

Tex., Ft. Worth — Attorney Generals Dept., Austin, approved $1,200,000 bond issue for roads and bridges in Tarrant Co. R. V. Glenn, co. engr.

Tex., Ft. Worth — Comrs. Tarrant Co. take bids about January 1 graveling, grading, etc., 6½ mi. Mansfield Webb Rd., 14 ft., $30,000; 3 mi. Grapevine Cappell Rd., 14 ft., $25,000. R. V. Glenn, co. engr.

Tex., Granbury—Hood Co. plans gravel surfacing 14 mi. State Highway 10, 16 ft. $25,500. S. J. Cox, co. engr.

Tex., Houston—Attorney General's Dept., Austin, approved $250,000 bond issue for paving. J. C. McVea, city engr.

Tex., Paris — Lamar Co. making plans gravel surfacing 18.63 mi. State Highway 19 north and south of here, between Delta and Red River County lines, 12 ft. $45,000. W. M. Fooshee, co. engr.

Idaho, Lewiston—W. Osborn, dist. engr., state highway dept., having preliminary surveys made for 20 mi. road from Castle Creek to Grangeville, 16-20 ft. $400,000.

Ore., Portland—Takes bids about Feb. 1 grading, paving and curbing East Oak St. from 55th to 57th St., $2,018, Kingston Ave. from Ashby Heights to Fairview Ave., $4,435; paving and curbing East 73rd St. from Glison to Hasselo Sts., $8,685, Haight Ave. from Balandena to Alberta Sts., $5,076, East Salmon St. from East 41st to East 44th Sts., $7,140; also constructing sewer in Vaughn St. $2,008. O. Laurgaard, city engr.

California—State, Sutter Co. (Yuba City) and Sacramento Co (Sacramento), having preliminary plans prepared constructing 26 mi. road from north end of Natomas Blvd. to Oswald. $600,000. E. Von Geldern, Yuba City, Sutter Co. engr. D. Butler, Sacramento, Sacramento Co. engr.

Calif., Oakland—Had plans prepared improving Holly St. between Jones St. and 100th Ave., 42,780 sq.ft. grading, 1,437 lin. ft. concrete curb, 3,084 sq.ft. concerte gutter, 20,811 sq.ft. oil macadam pavement, 7,640 sq.ft. concrete walks; Madeline St. between Laguna and Peralta Sts., 2,655 cu.yd. excav., 988 lin.ft. concrete curb, 2,016 sq.ft. concrete gutter, 13,020 sq.ft. oil macadam pavement, 5,421 sq.ft. cement walks; Tyrrell St. between 47th St. and Courtland Ave., 2,371 cu.yd. excav., 772 lin.ft. concrete curb, 1,584 sq.ft. concrete gutter, 11,025 sq.ft. oil macadam pavement, 4,752 sq.ft. cement walks; Fullington Ave. from 39th Ave. southeasterly, 17,015 sq.ft. grading, 841 lin.ft. concrete curb, 1,701 sq.ft. concrete gutter, 8,437 sq.ft. oil macadam pavement, 4,254 sq.ft. cement walks; East 27th St. from Peralta Ave. northwesterly, 13,359 sq.ft. grading, 628 lin.ft. concrete curb, 1,315 sq.ft. concrete gutter, 7,051 sq. ft. oil macadam pavement, 3,087 sq.ft. cement walks; Porter St. from 39th Ave. southeasterly, 17,712 sq.ft. grading, 866 13,359 sq.ft. grading, 628 lin.ft. concrete gutter, 8,782 sq.ft. oil macadam pavement, 4,428 sq.ft. cement walks; 17th St. between Telegraph to Harrison Sts., 45,919 sq.ft. grading, 1,361 lin.ft. concrete curb with steel guard, reset 209 lin.ft. granite curb, 1,479 sq.ft. concrete gutter, 30,479 sq.ft. asphaltic concrete pavement, 362 lin.ft. 8 in .and 355 lin.ft. 12 in. pipe, etc. W. W. Harmon, city engr.

Calif., Sacramento—Plan election to vote on $1,250,000 bonds for street improvements, sewer and water main extensions, and constructing subways leading to city. A. Givan, city engr.

Ont., Toronto—Council passed by-law to widen Bloor St. from 66 to 86 ft. between Sherbourne St. and Spadina Ave., distance of ⅜ mi. $1,500,000. R. C. Harris, city engr.

BIDS DESIRED

N. Y., Brooklyn—Dec. 28, by Park Bd. at office Dept. Parks, Municipal Bldg., New York City, grading and sheet asphalt paving, etc. Bay Parkway from Ocean Parkway to 59th St., here. F. D. Gallatin, pres.

N. Y., Long Island City—Dec. 29, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., curbing, laying sidewalks and paving 48th St. from Jackson to Polk Aves., 2nd Ward, McKinley Ave. from Central to Myrtle Aves.; paving Olmstead Pl. from Edsall to Central Aves., 2nd Ward, all foregoing permanent sheet asphalt on concrete; grading, curbing and laying sidewalks on Olmstead Pl. from Edsall to Central Aves. incl. 2 receiving basins on southerly corner of Edsall Ave.; grading, curbing and laying sidewalks on Linden St. from Forest to Prospect Aves.; repaving Grand St. from Flushing Ave. to (Old Flushing Rd.) Creek St., improved granite block on concrete.

N. Y., New York—Dec. 26, by J. Miller, pres. Manhattan Boro, Municipal Bldg., regulating and repaving Bway. at its intersection with Canal St., Bway. at its intersection with Chambers St., West St. and 5th Ave., all foregoing with granite block, Lenox Ave. and Dykman St., sheet asphalt; widening and repaving Canal St., granite block; curbing, recurbing, flagging, reflagging and paving West 190th St., etc., granite block.

N. Y., Richmond Hill—Dec. 28, by Park Bd. at office Dept. Parks, Municipal Bldg., New York City, improving main drive in Forest Park from Woodhaven Ave. to Union Turnpike, here. F. D. Gallatin, pres. Noted Dec. 14.

N. C., Albemarle—Jan. 10, by Mayor, 50,000 to 70,000 sq.yd. asphalt or other pavement, 28,000 ft. curb and gutter, 2,500 ft. granite curb, 800 sq.yd. concrete gutter, 26,000 cu.yd. grading, 3,500 ft. storm sewers, 17,700 ft. 6 and 8 in. c.i. water mains, 16,000 ft. 8 in. terra cotta sewer laterals G. C. White, Durham, engr.

Ga., Atlanta—Dec 26, by C. M. Holland, purch. agt., Courthouse, Fulton Co., grading 2 mi. Hemphill Ave. from Peachtree Creek to Moores Mill Rd., 50 ft., 57,000 cu. yd. bituminous macadam, earth and rock excav.; laying sheet asphalt wearing surface on granite block and macadam, 1½ mi. Piedmont Ave. from Ponce De Leon Ave. to East Hunter St., 40 ft., 31,000 sq.yd. asphalt. H. N. Hurt, Courthouse, engr.

La., New Roads—Jan. 2, by J. C. Cole, Lettsworth, chn. Bd. Supervs. Point Coupee Parish, grading 4.962 mi. Williams Highway, Rd. Dist. 7.

Ohio—Dec. 29, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties:

Columbiana Co., Sec. "R," Cleveland-East Liverpool Rd., 2.325 mi., brick $85,431.

Columbiana Co., Sec. "B," Petersburg-Unity Rd., 1.327 mi., bituminous macadam, asphalt or tar $62,827, rein.-con. $64,978.

Cuyahoga Co., Sec. "J," Elyria-Twinsburg Rd., 5.324 mi., rein.-con. and brick $284,923, bituminous concrete and brick $284,923.

Cuyahoga Co., Sec. "A," Chagrin Falls-Cuyahoga Falls Rd., 2.75 mi., rein.-con. $103,750, brick $146,844, bituminous concrete $128,240, bitulithic $134,390, bitsolag $134,390; Kentucky rock asphalt $118,450.

Fulton Co., Sec. "Wauseon," Bryan-Wauseon Rd., 0.619 mi., rein.-con. $23,659.

Lorain Co., Sec. "R," Oberlin-Elyria Rd., 2.035 mi., brick $108,285, bituminous concrete $96,755, bitulithic $102,252.

Montgomery Co., Sec. "R," Dayton-Greenville Rd., 3.965 mi., Kentucky rock asphalt $139,419, rein.-con. $139,804.

Montgomery Co., Sec. "R," Germantown-Middletown Rd., 2.494 mi., grading and bridging $38,317.

Stark Co., Sects. "D2" and "E," Alliance-Minerva Rd., 3.96 mi., brick $163,452. L. C. Herrick, dir. highways.

Ind., Logansport—Dec. 30, by Auditor Cass Co., grading and graveling 18,480 ft. Charles V. Cotner Rd., 16 ft. $28,027. J. Bennett, Logansport, engr.

Ind., Winamac—Dec. 29, by Auditor Pulaski Co., grading and graveling 74,185 ft. Jacob Getz Rd., 16 ft. $50,000. R. E. Nutt, Winamac, engr.

Michigan—Dec. 28, by State Hy. Dept., Lansing, grading and gravel surfacing 3.005 mi. Assessment Dist. Rd. 446, Van Burne and Cass Counties, 17,384 cu.yd. excav., 16,043 sq.yd. gravel. F. F. Rogers, state highway comr.

Ia., Iowa City—Dec. 27, by Auditor Johnson Co., grading 9.073 mi. primary road northwest of North Liberty, 105,796 cu.yd. excav., etc. Iowa Hy. Comn., Ames, engrs.

Ia., Onawa—Dec. 27, by Supervs. Monona Co., grading 6.67 mi. Primary Rd. Project 38, southeast of Soldier, and portion Mapleton-Ute Rd. $25,000. M. T. Kneal, co. engr.

Kan., Independence—Jan. 3, by Comrs. Montgomery Co. paving 9.365 mi. Independence Caney Rd., Federal Aid Project 121 A-D, 18 ft. $300,000. H. K. Hibbard, co. engr.

Kan., Wichita—Jan. 11, by Comrs. Sedgwick Co., c/o J. A. Clark, clk., paving, etc., 11 mi. Federal Aid Project 130, Sects. A includes 274.7 yd. concrete, 50,726 yd. paving, 24,287 lb. reinforcing, etc., Sect. B, 311.8 yd. concrete, 22,253 lb. reinforcing, 63,644 yd. pavement, etc. $350,000-$500,000. M. Roseberry, Courthouse, co. engr.

Missouri—Dec. 26, by State Hy. Dept. at div. office Greenfield, grading, etc., 5.5 mi. road from Greenfield northwardly, 24 ft., Federal Aid Project 213 A, Dade Co. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 26, by State Hy. Dept. at div. office Harrisonville, 4.11 mi. road from Pleasant Hill eastward, 24 ft., State Aid Project 20.174, Cass Co., 14,432 cu.yd. earth excav., 5,869 cu.yd. borrow, 150.2 cu.yd. concrete masonry, etc. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 26, by State Hy. Dept. at div. office Marble Hill, grading and 12 ft. gravel surface on 16.4 mi. road from Fredericktown to Marble Hill, 24 ft., Federal Aid Project 202, and 16 mi. road from Fredericktown to Marble Hill advance, 24 ft., Federal Aid Project 208, both in Bollinger Co. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 26, by State Hy. Dept. at div. office Maysville, grading, graveling, bridging, etc., 1.4 mi. road from Maysville westward, 24 ft., State Aid Project 20.203, De Kalb Co. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 26, by State Hy. Dept. at div. office Salem, grading and graveling 2.12 mi. road from Salem southwestwardly, 24 ft., State Aid Project 20.205, Dent Co. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 27, by State Hy. Dept. at div. office Fredericktown, grading and 12 ft. gravel surface on 13.813 mi. road from Fredericktown westwardly, 24 ft., Federal Aid Project 203 A, Madison Co. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 27, by State Hy. Dept. at div. office Houston, grading, etc., 11.1 mi. road from Houston southwardly, 26 ft., Federal Aid Project 90-C, 26 ft., Texas Co. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 27, by State Hy. Dept. at div. office Neosho, grading, 12 ft. graveling and bridging 4.62 mi. road from Oklahoma to St. Louis, 24 ft., Federal Aid Project 155, Newton Co. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 27, by State Hy. Dept. at div. office Ozark, grading and 200 ft. bridge, etc., on road from Ozark northwardly, 18 ft., Federal Aid Project 36, Christian Co. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 27, by State Hy. Dept. at div. office Troy, grading, etc., 1.046 mi. road from Troy to Winfield, 16 ft., State Aid Project 20.69 B, Lincoln Co., 5.525 lin. ft. grading and 9,989 sq.yd. gravel pavement. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 27, by State Hy. Dept. at div. office Warrensburg, 1,748 mi. road from Warrensburg southwardly, 24 ft., State Project 20.200, Johnson Co., 6,544 cu.yd. earth and 274 cu.yd. rock excav., 733 cu.yd. borrow, 37.2 cu.yd. concrete masonry, etc. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 28, by State Hy. Dept. at div. office Caruthersville, 1.809 mi. road from Hayti to Caruthersville, 16 ft., State Aid Project 20.224, Pemiscot Co., 3,652 cu. yd. earth excav., 614 cu.yd. borrow, 13,343

Streets and Roads (Continued)

sq.yd gravel pavement, etc. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 28, by State Hy. Dept. at div. office Cassville, grading, etc., 4.571 mi. road from Cassville northwardly, 26 ft., Federal Aid Project 151, Barry Co. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 28, by State Hy. Dept. at div. office Fulton, grading, graveling and bridging road from Fulton northeastward, Federal Aid Project 20.227; grading and 12 ft. gravel and macadam surface on 4 mi. Natl. Old Trails Rd. from St. Louis to Kansas City through Calwood-Williamsburg Special Rd. Dist., 24 ft., Federal Aid Project 144; grading and 12 ft. graveling 18 mi. road from Jefferson City to Fulton, through New Bloomfield Special Rd. Dist., 24 ft., Federal Aid Project 97, all Callaway Co. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 28, by State Hy. Dept. at div. office Joplin, grading and 18 ft. concrete surface on 0.343 mi. road from Joplin to Carthage, on Carthage Special Rd. Dist., Federal Aid Project 84, Jasper Co. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 28, by State Hy. Dept., at div. office Kennett, 5.696 mi. road from Senath to Clay, 16 ft., Federal Aid Project 209 A, Dunklin Co., 13,636 cu.yd. earth excav., 8,593 cu.yd. borrow, 31,470 sq.yd. 1 course plain concrete, 24,436 sq.yd. gravel surfacing, etc.; grading and gravel surfacing 7 mi. road from Kennett eastwardly and westwardly, 24 ft., Federal Aid Project 212, Dunklin Co.; grading, etc., 18 mi. road from Holcomb northwestwardly, 24 ft., Federal Aid Project 221, Dunklin Co. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 28, by State Hy. Dept. at div. office Platte City, grading, etc., 1.016 mi. road from Platte City westwardly, 24 ft., Federal Aid Project 93, also grading and 18 ft. brick pavement on concrete base, etc., on 4.703 mi. road on Jefferson Highway from north line of Parkville Special Rd. Dist. to east line of Platte Co., 24 ft., both in Platte Co. B. H. Piepmeier, Jefferson City, state highway engr.

Missouri—Dec. 28 by state Hy. Dept. at div. office Springfield, grading and constructing bridge and approaches on road from Springfield to Ozark, 26 ft., Federal Aid Project 162, Greene Co. B. H. Piepmeier, Jefferson City, state highway engr.

Tex., Austin—Dec. 28, by G. S. Matthews, judge Travis County, grading, gravel and crushed stone surfacing 5.6 mi. State Highway 3 A, Garfield Rd., 16 ft., 792.1 sq.yd. concrete, 21,461 cu.yd. roadway, 23,241 cu.yd. borrow excav., 16,754 cu.yd. gravel, 1,125 cu.yd. crushed stone, 1,500 lin.ft. concrete piling. $65,000. O. Leonard, co. engr.

Wash., Spokane—Jan. 23, by A. Baker, Courthouse, paving 7.5 mi. Plaza West, 20 ft., 90,000 sq.yd. concrete, $187,500; 8 mi. Trent Rd. from Trent Bridge to Idaho State Line, 20 ft., 96,000 sq.yd. concrete, $200,000; 10 mi. Chattaroy-Elk Rd., 20 ft., 120,000 sq.yd. concrete, $250,000; 6 mi. Five Mile Rd., 20 ft., 72,000 sq.yd. concrete, $150,000; 7.5 mi. Hite Rd. west of Deep Creek, 20 ft., 90,000 sq.yd. concrete, $187,500.

Wash., Tacoma—Jan. 2, by Pierce Co., paving 3 mi. Sumner-Buckley Highway, Bond Rd. 8, concrete; Alexander Ave. from East 11th St. to its terminus near Todd Shipyards, concrete; constructing Burnham Hunt Rd. from southerly end of Burnham Hunt pavement at Gig Harbor, thence south 1,582 ft. to site of proposed outside ferry landing. E. A. White, Tacoma, co. engr.

Calif., Rio Vista—Jan. 4, by F. J. Kalbep, town clk., paving with warrenite-bitulithic on bituminous base with header boards, concrete curbs and gutters, corrugated metal culverts, various street in Dists. 1 and 2. To exceed $25,000. Noted Oct. 5.

BIDS RECEIVED

Pa., Ebensburg—Supervs. Cambria Co. opened bids Dec. 11, paving 5,800 lin.ft. Jacksontown Twp. Rd. to Summerhill, vitr. brick on concrete, from McClure & Bigner, Johnstown, $66,603; G. T. Morgan Constr. Co., Woolf Blk., Johnstown, $72,220; Owen & Plummer, Inc., Otto Bldg., Johnstown, $74,528. Noted Nov. 23.

Alabama—State Hy. Dept., Montgomery, grading, surfacing and bridging (1) 10.04 mi. section and (2) 8.63 mi. section of road between Montgomery Co. line and Union Springs, Bullock Co., grading and gravel surfacing (3) 13.897 mi. Opelika-Waverly Rd., Lee Co., from D. R. Cook & Co., Selma, (1) $225,878 (2) $100,350; Vaugh-Davis Constr. Co., Montgomery, (street address not available), (1) $229,194; Kenan & Kyser, Selma, (2) $91,915; P. A. Goldsmith, 743 North Decatur St., Montgomery, (1) $229,953; Lawrence, Nixon & Phillips, Jackson, Miss., (2) $99,595; R. D. Chambers & Co., West Point, Ga., (3) $172,049; Stanley & Singer Constr. Co., Lafayette, (3) $176,465; Mitchell Bros., Birmingham (street address not available), (3) $181,569. Noted Nov. 16.

Louisiana — State Hy. Dept., Reymond Bldg., Baton Rouge, opened bids Dec. 1, grading and gravel surfacing 16 mi. Project 114, Monroe-Ruston Highway, Sect. B, from Meyer-Greenwald Co., Monroe, $136,390; Lawrence, Nixon & Philips, Jackson, Miss., $147,649; J. D. Reilly, New Orleans (street address not available), $166,146. Noted Nov. 23.

Missouri—State Hy. Dept., Jefferson City, opened bids Dec. 2, (1) 4.964 mi. road from Clinton Co. line to Hamilton, 18 ft., State Project Route 8, Sect. 12, Caldwell Co. (2) 4.94 mi. road from Warrensburg southward, 30 ft., Johnson Co. (3) 4.974 mi. road from Kansas City to St. Louis, 26 ft., Jackson Co. (4) 4.942 mi. road from Blue Ridge east, State Project Route 2, Sect. 5, Jackson Co. (5) 4.469 mi. road from Opolis to Asbury, 18 ft., State Project Route 57, Sect. 2, Jasper Co. (6) 3.15 mi. road from Lexington to Wellington, 18 ft., State Project Route 20, Sect. 10, Lafayette Co. (7) 3.53 mi. road west of Bethany, 18 ft., State Project Route 4, Sect. 24, Harrison Co., from Harrison Eng. & Constr. Co., Wichita, Kan. (street address not available) (1) $210,156 (3) $223,570 (4) $163,544; Widell Co., 1st Natl. Bank Bldg., Mankato, Minn., (1) $241,133; Koss Constr. Co., 2818 5th Ave., Des Moines, Ia. (1) $226,248 (4) $167,816; A. L. Cook, Ottawa, Kan. (2) $33,987; G. A. Woods Constr. Co., Smithville (2) $35,863; C. L. Johnson, Warrensburg, (2) $35,975 (6) $112,816; Cook & O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, (3) $201,839 and $222,931 (4) $159,469 (6) $112,535; V. E. Koch, Box 604, Joplin, (5) $76,200; Carterville Constr. Co., Carterville, (5) $78,336; Du Bois & Co., 126 East 1st St., Wichita, Kan., (5) $80,385; J. O. Patterson & Constr. Co., 310 Ridge Bldg., Kansas City (6) $116,700; Rand Constr. Co., 1007 New York Life Bldg., Kansas City (7) $114,845. Noted Nov. 23.

Mo., St. Louis—Bd. Pub. Serv., City Hall, opened bids Dec. 12, grading (1) 8,600 ft. Esther Ave., 5,025 cu.yd. grading, 500 cu.ft. macadam, 3,470 cu.ft. cinders, etc., engrs. est. $6,250 (2) 3,000 ft. Goodfellow Ave., 9,960 cu.yd. grading, 1,000 cu.ft. macadam, 10,930 cu.ft. cinders, etc., in connection with 18,140 cu.yd. grade, which is to be done by Terminal R.R. (3) 700 ft. Tennessee Ave., 4,860 cu.yd. grading, 500 cu.ft. macadam, 2,835 cu.ft. cinders, etc., engrs. est. $5,200, from Webb-Kunze Constr. Co., 5927 Fyler Ave., (1) $5,037 (2) $10,209 (3) $5,234; Manegold Constr. Co., Title Guaranty Bldg., (1) $5,158 (3) $5,057; Hoolan Constr. Co., Wainwright Bldg., (1) $6,253 (2) $9,038; Fruin-Colnon Constr. Co., Merchants Laclede Bldg, (2) $5,618; F. B. Grant Constr. Co., 810 Chestnut St., (3) $5,055. Noted Nov. 23.

Tex., Edinburg—Hidalgo Co. grading and surfacing with (a) rein.-con. base with 1 in. cold rolled asphalt top, (b) rein.-con. base with 2 in. hot mix asphalt top, (c) macadam base with 2 in. hot mix asphalt top, (d) 2 course rein.-con. using 2 in. trap rock for top course, from F. P. McElwrath, Corsicana, (a) $462,433 (b) $431,696 (c) $461,583; W. L. Pearson & Co., 827 First Natl. Bank Bldg., Houston, (a) $481,098 (b) $490,455 (c) $462,529; Smith Bros., Sumpter Bldg., Dallas, (a) $469,314 (b) $457,969 (c) $492,265. Noted Nov. 9.

Tex., Junction—Kimble Co. grading and gravel surfacing 8.75 mi. State Highway 27, 16 ft., 883 cu.yd. concrete, 41,505 cu.yd. earth roadway and 4,219 cu.yd. loose rock excav., 10,858 cu.yd. gravel surfacing, 73,394 lb. reinforcing, from W. T. Hutto & Sons, Gonzales, $48,118; G. Alvis, Winnsboro, $54,408; Tibbetts Constr. Co., 209½ 8th St., Ft. Worth, $55,860. Engrs. est. $52,157.

Tex., Kaufman—Kaufman Co. grading, etc., (1) 9.37 mi. Highway 15 from Terrell west to Talley-Forney Rd., 24 ft. (2) 10.31 mi. Highway 15 from Van Zant Co. line west, and from Terrell east, 24 ft., from C. W. Burgess, 501 Dallas Co., State Bank Bldg., Dallas, (1) $55,164 (2) $23,590; McClung Constr. Co., Cleburne, (1)$55,620 (2) $25,117; McCoy & Richards, Arlington, (1) $58,620 (2) $25,913. Noted Nov. 23.

Tex., Pecos—Reeves Co. grading, gravel surfacing and bridging (1) 4.54 mi. Highway 27, Federal Aid Project 240-D, 16 ft. (2) 3.75 mi. State Highway 17 A, 16 ft., from Tibbetts Constr. Co., 209½ 8th St., Ft. Worth, (1) $27,180 (2) $17,739; L. B. Westerman, Balmorhea, (1) $30,602 (2) $21,798; Womack Constr. Co., Midland, (1) $32,661 (2) $24,187. Engrs. ests. (1) $31,685 (2) $25,000. Noted Nov. 23.

Wash., Seattle—Opened bids Dec. [illegible] paving 11th Ave. N., et al., 7,300 sq.yd. [illegible] in. concrete, 4,075 lin.ft, concrete and [illegible] lin. ft. asphaltic concrete curbing, 1,800 cu.yd. earth excav., from McHugh Constr. Co., 517 3rd Ave. N., $25,632; V. Ragmalia, 1415 Corliss Ave., $26,323; D. H. Trappagen, Walker Bldg., $26,666. Engrs. est. [illegible]

California—State Hy. Dept., Sacramento, grading (1) 8.9 mi. road between Parkfield Junction and Coalinga, Fresno Co., 152,000 cu.yd. excav. (2) 9.8 mi. road between Hornbrook and Oregon State line, Siskiyou Co., 41,500 cu.yd. excav.; grading and gravel surfacing (3) 11.9 mi. between Willows and Glenn, Glenn Co., 27,500 cu.yd. excav., 41,200 cu.yd. gravel, (4) 4.5 mi. between Gilroy and San Felipe, Santa Clara Co., 35,000 cu.yd. excav., 8,600 cu.yd. gravel; grading and concrete paving (5) 8.5 mi. between Grenada and Yreka, Siskiyou Co., 36,000 cu.yd. excav., 12,900 cu.yd. concrete; surfacing with asphaltic concrete (6) 5 mi. between Roseville and Lincoln, Placer Co., 8,500 ton asphalt, from C. Miles, 2509 L St., Sacramento, (1) $120,803; Bates & Borland, Oakland Bank of Savings Bldg., Oakland, (1) $123,578; A. J. and J. L. Fairbanks, 625 Market St., San Francisco, (1) $140,553 (4) $69,269; Kaiser Paving Co., 1004 American Bank Bldg., Oakland, (2) $69,108 (5) $163,099; Blumenkranz & Vernon, Farmers & Merchants Bank Bldg., Stockton, (3) $136,697 (4) $72,897; V. R. Dennis Constr. Co., McMinnville, Ore., (3) $124,150 (6) $38,080; Pacific Bridge Co., East Water and Salmon Sts., Portland, Ore., (3) $141,861; Tieslau Bros., 1315 Allston Way, Berkeley, (4) $64,556; G. F. Atkinson, 308 Chamber of Commerce Bldg., Portland, Ore., (5) $178,317; J. A. Costello, Jr., 512 Mission St., San Francisco, (6) $35,530; A. Teichert & Sons, 1846 37th St., Sacramento, (6) $37,740. Noted Nov. 23.

Calif., Oakland — Improving 104th Ave. between 12th St. and Sunnyside Ave., (a) 117,759 sq.ft. grading (b) 361 ft. concrete curb (c) 1,719 ft. concrete gutter (d) 84,658 ft. oil macadam (e) 11,815 ft. concrete walks, from Hutchinson Co., 1706 Bway., (a) $0.0425 (b) $0.75 (c) $0.28 (d) $0.115 (e) $0.17; Oakland Paving Co., 5000 Bway., (a) $0.039 (b) $0.70 (c) $0.28 (d) $0.12 (e) $0.165; Bates & Borland, Oakland Bank of Savings Bldg., (a) $0.06 (b) $0.75 (c) $0.28 (d) $0.12 (e) $0.20. Noted Nov. 30.

Calif., Porterville—Improving Oak St., (1) 47,856 sq.ft. 1½ in. warrenite bitulithic on 5 in. hydraulic concrete (2) 1,342 lin.ft. concrete curbing (3) 320 lin.ft. corrugated metal culverts, from Clark & Henery Constr. Co., 38 South St., Stockton, (1) $0.38 (2) $0.675 (3) $4; N. M. Ball, Porterville, (1) $0.375 (2) $0.65 (3) $4.

Calif., San Francisco—City and San Francisco Co. improving north ½ Sloat Blvd. between 19th and 35th Aves., from Eaton & Smith, 407 11th St., $40,267; A. J. Raisch, 46 Kearny St., $40,688; Fay Impvt. Co., Phelan Bldg., $44,285. Noted Nov. 30.

Calif., Stockton—Supervs. San Joaquin Co., improving Brian and Woods Ferry Rd., (a) 4,500 cu.yd. grading (b) 4,170 ton base rock (c) 1,700 ton toprock (d) 770 ton screenings (e) 630 bbl. asphalt oil (f) 40 cu.yd. concrete, from Irey & Holden, Lodi, (a) $0.35 (b) $2.20 (c) $3.05 (d) $3.15 (e) $4 (f) $27; Blumenkranz & Vernon, Commercial Savings Bank Bldg., (a) $0.75 (b) $3.40 (c) $3.75 (d) $3.90 (e) $4.50 (f) $30. Noted Nov. 23.

CONTRACTS AWARDED

Rhode Island—State Bd. of Public Roads, Providence, to Lane Constr. Co., 37 Colony St., Meriden, Conn., paving 1.32 mi. Smithfield Ave. from Pawtuxet Ave. to Lonsdale Ave., in Lincoln, $57,987, 1.8 mi. Ten Rod Rd. from Wickford Junction easterly to Tower Hill Rd., in North Kingston, $43,441; to Greenough Constr. Co, South Acton, Mass., 2.46 mi. Kingston Rd. from Usquepang to West Kingston Station, $53,783; to B. C. Jordan, 1244 Elmwood Ave., Providence, 2.05 mi. Apponang Rd. from Pawtuxet Bridge to Elmwood Ave., in Warwick, $58,040. Noted Oct. 19.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, resurfacing Albany Ave. and repaving Ave. R with permanent asphalt, to Cranford Co., 52 9th St., $22,295 and $3,657 respectively; repaving Church Ave., permanent asphalt, to Cleveland Trinidad Paving Co., Flushing, $20,574. Noted Nov. 23.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, paving Eldert Lane, to Sicilian Asphalt Paving Co., 41 Park Row, New York, $22,000; grading, curbing and flagging 78th St., to T. B. Scott, 671 Halsey St., $1,787; Ave. I and laying cement sidewalks on Flatbush Ave., to A. E. Castle, 331 Tilden Ave., $2,111 and $522 respectively. Noted Dec. 7.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, paving from end of Richmond Turnpike at lineoleum

Streets and Roads (Continued)

factory gate to Carteret Ferry, concrete, to J. J. Kelly, 1150 Forest Ave., West New Brighton, $25,716. Noted Dec. 14.

Pa., Phila.—To Barber Asphalt Paving Co., Land Title Bldg., grading and paving Landsdowne Ave., $44,913; to D. DeLisle, 4842 Lightgow St., paving Bridge St., $25,212; to Byrne & Davis, 20th and Clearfield Sts., paving Churchview St., $40,422. Noted Dec. 7.

North Carolina—State Hy. Dept., Raleigh, grading, reconstructing base course and 110,300 sq.yd. asphaltic concrete surface on 10.64 mi. State Project 351, New Hanover Co., to Norfolk Equipment Co., Paul-Gale-Greenwood Bldg., Norfolk, Va., $189,545.

Georgia—State Hy. Dept., Atlanta, sand clay surfacing 10.1 mi. Washington-Lexington Rd., and one concrete bridge, Federal Aid Project 293, Wilkes Co., to W. C. Hill, Abbeville, S. C., $37,342; 7.2 mi. Washington-Thomason Rd., Federal Aid Project 295, Wilkes Co., to Stanley & Singer, La Fayette, Ala., $35,064; 6.6 mi. Washington-Elberton Rd., and one concrete bridge, Federal Aid Project 314, Wilkes Co., to Nichols Constr. Co., Trust Co., Georgia Bldg., Atlanta, $35,945; 10.58 mi. Washington-Lincolnton Rd., and one concrete bridge, Federal Aid Project 315, Wilkes Co., to Oglesby & Stark, Elberton, $71,468; clay gravel 6.848 mi. Odel-Valdosta Rd., Federal Aid Project 279, to L. H. Smith, Elberton, $77,676.

Fla., Bronson—Constructing 18 mi. clay road from here to Cedar Keys, to J. A. Byrd, Lake Wales, $100,000.

Fla., Tampa — Hillsborough Co., paving 4.78 mi. Seffner-Thonotossa Rd., 15,000 cu. yd. excav., 50,466 lin.ft. concrete curbing, 25,233 sq.yd. asphalt block, 3 in. thick, also 27 mi. Tuskin (Bayshore) Rd., 295,874 lin.ft. concrete curbing, 150,000 cu.yd. excav., 246,561 sq.yd. asphalt block, to Warren & Carroll, Tampa, (street address not available) $74,456 and $647,859 respectively; 2.02 mi. Waters Ave., 21,302 lin.ft. cement curbing, 6,000 cu.yd. excav., 17,752 sq.yd. asphalt block, also 6.75 mi. Temple Terrace, 20,000 cu.yd. excav., 69,300 lin.ft. concrete curbing, 57,750 sq.yd. asphalt block, to Bruen & Sullivan, Tampa, (street address not available) $45,157 and $146,981 respectively; 14.25 mi. Interbay Rd., 40,000 cu.yd. excav., 165,630 lin.ft. concrete curbing, 129,627 sq.yd. asphalt block, also 3.56 mi. Armenia Ave., 8,000 cu.yd. excav., 37,600 lin.ft. concrete curbing, 31,333 sq.yd. asphalt block, to Cone Bros., Tampa (street address not available) $331,467 and $79,823 respectively; 3.1 mi. Wimanuma and Tampa Bay Blvd., 24,850 lin.ft. concrete curbing, 12,440 sq.yd. asphalt block, to Warren & Carroll, Tampa, (street address not available) $37,007 and Cone Bros., Tampa, (street address not available) $8,392; 11.16 mi. Lithia Rd., 58,907 sq.yd. sheet asphalt, also 17.11 mi. Plant City—Picnic Rd., 70,000 cu.yd. excav., 150,535 sq.yd. sheet asphalt, to McDonald Constr. Co., Orlando, $144,762 and $245,824 respectively; 6.65 mi. Midway Rd., 25,000 cu.yd. excav., 35,113 sq.yd. sheet asphalt, 10.9 mi. Plant City-Thonotosossa Rd., 33,000 cu.yd. excav., 57,580 sq.yd. sheet asphalt, also 6 mi. Lake Magdalene Rd., 53,332 sq.yd. sheet asphalt, to J. G. Yeates, Tampa, (street address not available) $88,846, $135,029 and $72,795 respectively; paving 15.13 mi. Citrus Park Rd., 133,176 sq.yd. asphaltic concrete, also 14.74 mi. Hopewell-Tampa Rd., 35,000 cu.yd. excav., 77,815 sq.yd. asphaltic concrete, to McDonald Constr. Co., Orlando, $263,516 and $260,398 respectively. Noted Nov. 30.

Ala., Birmingham—Grading and paving 1½ mi. Pratt City-Birmingham Rd., 30,000 sq.yd. asphalt on concrete, to Southern Roads Co., Amer. Trust Bldg., $81,306. Noted July 13.

Indiana—State Hy. Dept., Indianapolis, concrete paving 12 mi. Range Line Rd., Hamilton Co., to Miller & Miller, Elkhart, $238,394; 10.5 mi. Michigan Rd., St. Joseph Co., to G. M. Gross Constr. Co., Laporte, $189,264; 11.5 mi. Lafayette Pike, Clinton Co., to G. T. Miller, Lebanon, $218,011; 9 mi. French Lick Rd., Orange Co., to Foulkes Contg. Co., 705 Ohio St., Terre Haute, $239,986; grading 11.5 mi. French Lick Rd., Orange Co., to McBride & Neibert, Columbus, $26,195; grading and culverts, 6.5 mi. French Lick Rd., Orange Co., to E. Traylor, 320 Campbell St., Evansville, $41,529. All foregoing 16 ft. wide.

Michigan—State Hy. Dept., Lansing, grading and surfacing 5.08 mi. State Trunk Line Rd. 48-8, Machinac Co., to S. J. Groves & Sons Co., 120 Manhattan Bldg., Duluth, Minn., incl. 35 acres clearing $90, 25,387 cu.yd. excav. $0.50, 54.2 cu.yd. 1:2:4 concrete $25, 94.6 cu.yd. 1:3:6 concrete $23, 47,672 sq.yd. waterbound macadam $1.05, total $77,631. Noted Nov. 30.

Ia., Dubuque — Dubuque Co., grading 18.239 mi. primary road from southeast of Rickardsville to Clayton Co. line, to S. J. Groves & Sons Co., 306 Globe Bldg., Minneapolis, Minn., 164,575 cu.yd. earth excav. $0.29 per cu.yd., 45,125 cu.yd. $0.28, 9,673 cu.yd. solid rock $1.40 per cu.yd., 16,756 cu.yd. loose rock $0.75, 48,720 cu.yd. $0.74; A. Nelson, Dubuque, 59,050 ft. 6 in. tile $0.133 per ft., 23,043 ft. 6 in. $0.138, 4,025 ft. 8 in. $0.186, 1,495 ft. 8 in.; $0.196 and 1,090 ft. 10 in. $0.292. Noted Nov 30

Ia., Lisbon—Paving 21,000 yd. various streets, brick with asphalt filler, 10,750 ft. curb and gutter, to Hahn Constr. Co., 1109 12th Ave., Cedar Rapids, $87,000. Noted Nov. 30.

Ia., Rock Rapids—Lyon Co. gravel surfacing 12.53 mi. Primary Rd. from South Dakota State Line east through Larchwood and Lester, to Sheehan-Berjkness, Sioux Falls, S. D., 3,120 cu.yd. gravel 1 mi. haul $0.34 per cu.yd., 109,000 units gravel ½ mi. haul $0.095, 9,839 cu.yd. gravel 1 mi. haul $0.31, 6,589 cu.yd. gravel $0.33, 76,600 units gravel ½ mi haul $0.09, 9,838 cu.yd. gravel screening $0.06, 700 cu.yd. gravel screening $0.20, 1,100 cu.yd. excav. $0.20, 4,000 cu.yd. excav., $0.19

Minnesota — State Hy. Dept., St. Paul, State Project 22-21, Sibley and Nicollet Counties, 22,000 cu.yd. gravel surfacing, to Connelly Contg. Co., Rice St. and Merriam Ave., St. Paul, $49,900; 15 mi. State Project 30-21, Federal Aid Project 222, Otter Tail Co., 24,000 cu.yd. gravel surfacing, to Johnson Bros. & Hanson, Fergus Falls, $20,301; 14 mi. State Project 23-21, Federal Aid 234, Benton Co., 22,000 cu.yd. gravel surfacing, to Gatzenmeyer-Lenz Co., 5120 Upton Ave. S., Minneapolis, $21,690; 13 mi. State Project 65-21, Federal Aid Project 248, Clearwater Co., 20,000 cu.yd. gravel surfacing, to P. Mortenson, Hibbing, $21,844. Noted Nov. 16.

Minn., Albert Lea—Freeborn Co., 15 mi. State Project 13-02, Federal Aid Project 285, 210,000 cu.yd. excav., portable and monolithic culverts, grading to Thursdale & Mitchell, Zumbrota, $61,130, culverts to Northfield Iron Co., Northfield, $1,889; 1 mi. State Project 1-06, 21,600 cu.yd. excav., portable and monolithic culverts, grading to Thursdale & Mitchell, Zumbrota, $6,055, culverts to Mikelson Cement Co., Albert Lea, $1,283. Noted Nov. 9.

Minn., Detroit—Becker Co., Job 2205, State Aid Rd. 6, 48,000 cu.yd. excav., 712 lin.ft. 15-36 in. portable culverts, to H. M. Nelson, Chokio, $13,154; Job 2206, State Aid Rd. 1, 65,000 cu.yd. excav., 1,318 lin.ft. 12-18 in. portable culverts, to M. Egan, Detroit, $20,202.

Minn., Minneapolis—Will pave streets, various types, by day labor. $1,250,000. N. W. Elsberg, city engr.

Minn., Worthington—Nobles Co., 7 mi. Job 2210, State Rds. 1 and 10; 10 mi. Job 2301, State Rd. 2; 4.5 mi. Job 2302, State Rd. 9; 20 mi. Job 2303, State Rd. 6, Sects. A and B; 1.5 mi. Job 2207, Sect. B, to G. W. Humphrey, Aberdeen, S. D., $38,000.

Kan., Leavenworth—For 16,000 brick pavement on concrete, to Geiger Constr. Co., Leavenworth, $2.80 per yd.

South Dakota—State Hy. Comn., Pierre, grading, etc., 4.64 mi Federal Aid Project 123, from Belle Fourche to Redwater Creek, Butte Co., grading to E. Parrish, Rapid City, $40,083; concrete work to Concrete Eng. Co., Rapid City. Noted Nov. 2.

Wyoming—State Hy. Comn., Cheyenne, grading and building structures on 7.8 mi. Yellowstone Highway from Bonneville north, Fremont Co., 24 ft., to Wickham Bros. & Sweiger, Lovell, $105,907. Engrs. est. $104,000.

Mo., Maplewood—G. Komar, city clk., City Hall and St. Louis Co. (Clayton) reconstructing 3,100 ft. Greenwood Blvd. from Big Bend Rd. to Canterbury Ave., 30 ft., concrete, to C. M. Berry, Empire Bldg., Webster Groves, $33,997. Engrs. est. $40,000. Noted Dec. 14.

Tex., Beaumont—Jefferson Co. rock asphalt on concrete, 7.35 mi. Voth Rd., State Highway 40, 18 ft., and 15.53 mi. Nome Rd., State Highway 3, 18 ft., to Smith Bros., Crockett, $273,033 and $633,008 respectively. Noted Nov. 30.

Tex., Kerens—Paving Sloss Ave., 11,000 sq.yd. brick, 2,400 lin.ft. curb and gutter, to Panhandle Constr. Co., Lubbock, $45,000.

Tex., Laredo — Webb Co. grading and gravel surfacing, etc., 25.1 mi. Laredo, Mirando City and Torrecillas Rd., 16 ft., 2,052 cu.yd. earth excav., 2,250 cu.yd. concrete, 54,890 cu.yd. gravel surfacing, 191,000 lb. reinforcing, etc., to Peterman, Robinson & Neyland, Laredo, $150,000.

Tex., Sinton—San Patricio Co. surfacing with 1 in. limestone rock asphalt 15.06 mi. Highway 9, 16 ft., (road already graded and surfaced with shell and gravel) incl. 141,332 sq.yd. bituminous macadam, 1,995 cu.yd. limestone screenings, to Uvalde Rock Asphalt Co., 1111-14 City Natl. Bank Bldg., San Antonio, $117,687. Engrs. est. $129,455.

Okla., Tulsa—Tulsa Co concrete paving Tulsa-Sapula Rd., 2½ mi., 27 ft wide, and 1 mi., 18 ft. wide, to Standard Paving Co., 1742 East 6th St., $127,150. Noted Oct. 19.

Calif., Calipatria — Grading, concrete curbing and concrete paving West Main St., to F. Beal, Brawley, 21,000 sq.ft. 6 in. concrete pavement $0.368 per sq.ft., grading $0.856 per lin.ft., etc., total $76,265.

Calif., San Anselmo—Improving streets in Barber Tract, to Heafey, Moore & McNair, 2030 High St., Oakland, $28,923. Noted Dec. 7.

Calif., San Diego—Common Council paving Adams and Works Aves., Utah and 30th Sts., to Fairchild-Gilmore-Wilton Co., 25 14th St., $82,259. Noted Dec. 14.

Calif., Santa Rosa—Paving with 1½ in. warrenite bitulithic on 4 in. asphaltic concrete, 83,000 sq.ft. College Ave. and 41,337 sq.ft. Slater St., to Warren Constr. Co., Bacon Bldg., Oakland, $18,924 and $9,915 respectively. Noted Nov. 9.

Industrial Works

PROPOSED WORK

Mass., Gardner—Nichols Rattan Products Co., Main St., plans 2 story, 90 x 140 ft. factory, rein.-con. and brick, Main St. $75,000. Private plans.

Mass., Lynn — See "Buildings" under Contracts Awarded.

Mass., South Boston (Boston P. O.)—Gillette Safety Razor Co., 41 West 1st St., plans brick and rein.-con. factory, probably 8 story. Architect not announced.

R. I., Providence—City Real Estate Co., 4 Weybosset St., plans 2 story garage and service station, brick, Bway. and Westminster St. $50,000. Private plans.

R. I., Providence—E. A. Smith Realty Corp., Weybosset St., plans 3 story garage and service station, brick and concrete, plain foundation, Chapel St. $100,000. Architect not announced.

N. Y., Brooklyn—Brooklyn Edison Co., 360 Pearl St., soon takes bids new power plant, 400,000 k.w. capacity, Marshall St. $800,000. T. E. Murray, Inc., 55 Duane St., New York, archts. G. L. Knight, 360 Pearl St., engr. Noted Aug. 24.

N. Y., Buffalo—Sinclair Oil Co., Washington St., plans to rebuild major portion of main gasoline and oil plant, Alabama St., recently destroyed by fire. $100,000. Architect not announced.

N. Y., New York—R. Jacobs, c/o R. H. Almirety, archt. and engr., 48 West 46th St., soon takes bids 2 story, 100 x 100 ft., brick, steel and concrete garage, plain foundation, 37 West 65th St. $50,000.

N. Y., Rochester—Empire Ice Co., 76 West Monroe St., Chicago, had plans prepared 48 x 182 ft. refrigeration plant, 22 ft. high, and 67 x 133 ft. storage plant, 22 ft. high, Atlantic Ave., here. $300,000.

N. Y., Syracuse—Mills, Rhines, Bellman & Nordhoff, archts., 1234 Ohio Bldg., Toledo, O., takes bids about Dec. 26, 2 story, 100 x 250 ft., rein.-con., brick and steel plant, Plum St., here, for New Process Gear Co., 500 Plum St. $150,000.

Pa., Blossburg—Blossburg Electric Light & Power Co. plans new light and power plant, here. $1,000,000.

Pa., Lancaster—Berkshire Electric Co., Lancaster, plans $59,000 bond issue for improving and extending plant and lines.

Pa., Scranton — Susquehanna Light & Power Co., plans $100,000 bond issue, to improve and extend system and lines.

Pa., Warren—Crew—Levick Co., plans to rebuild plant recently destroyed by fire. $40,000. Architect not announced.

Md., Hagerstown—Plans $300,000 bond issue for new electric light plant. A. Bowman, mayor.

N. C., Brickhaven (Corinth P. O.)—Carolina Power & Light Co., Raleigh, (street address not available) plans constructing and equipping 15,000 kw. (ultimately 60,000 kw.) steam plant on Cape Fear River, near here. P. A. Tillery, mgr.

N. C., Charlotte — H. M. Wade, South Graham Ext., having plans prepared by Lockwood, Greene & Co., archts., Piedmont Bldg., 4 story, 120 x 150 ft., brick factory. $150,000.

Ky., Louisville—J. F. Furfees Paint Co., 201 East Market St., 5 story, 61 x 204 ft., addition to plant, Floyd and Market Sts. $200,000. Architect not named.

Ky., Louisville—Louisville Garage Co. having plans prepared by Murphy & Bros., archts., Louisville Trust Bldg., 2 story, 150 x 200 ft., brick and steel, garage and

Industrial Works (Continued)

service station, 5th Ave. $225,000. Noted Dec. 14.

O., Cleveland—Peerless Paper Box Co., 3225 East 55th St., had plans prepared by P. Matzinger & Co., archts., Caxton Bldg., 1 story and basement, 59 x 140 ft., brick and steel factory and warehouse, 3221 East 56th St. $40,000.

O., Sandusky — Ajax Rubber Co., 220 West 57th St., New York City, plans 6 story plant, here. $1,000,000. S. M. Green Co., 293 Bridge St., Springfield, Mass., engrs.

O., Youngstown — Brier Hill Steel Co., Stambaugh Bldg., plans new strip steel mill. Architect not announced.

Ind., Cannelton—Cannelton Sewer Pipe Co. plans 4 story, 62 x 208 ft. clay plant, concrete and steel, 8 kilns, 120 ft. radial stack, new power plant, 1,000 ft. additional switching facilities. $240,000. Private plans.

Ind., Indianapolis — Indianapolis Glove Co., having plans prepared by Rubush & Hunter, archts., Amer. Central Life Bldg., 5 story and basement, 100 x 160 ft. factory, rein.-con. and brick, concrete pile foundation, Liberty St. $225,000.

Mich., Muskegon Heights (Muskegon P. O.)—Piston Ring Co., having plans prepared and takes bids about February, 1 story, 120 x 222 ft. rein.-con. and steel foundry. $75,000. Private plans.

Ill., Chicago — Advertising Art Bulletin Co., 190 North State St., plans 1 and 2 story, 163 x 239 ft. garage, rein.-con., brick and steel, Ravenswood Ave. near Peterson St. $100,000. A. H. Knox, 7 West Madison St., archt.

Wis., Green Bay — Press-Gazette, 315 Cherry St., plans 3 or 4 story brick, rein.-con. and steel plant, plain foundation. $100,000. Architect not selected.

Wis., Milwaukee—J. P. Bruecker, archt., 482 Frederick Ave., making plans 3 story, part basement, 100 x 142 ft., brick and timber warehouse, plain foundation, South Side. $45,000. Owner's name withheld.

Wis., Milwaukee—South Side Nash Co., 9th and Forest Home Aves., had plans prepared by Gurdon & Gurdon, archts., 2nd Ave. and Mitchell Sts., 1 story and basement, 72 x 93 ft., garage, plain foundation. $40,000.

Ia., Denison—G. W. Newton plans 2 story, 85 x 150 ft., brick and concrete garage, Main and Chestnut Sts. $40,000. Architect not announced.

Ia., Iowa City—Economy Advertising Co. plans 2 or 3 story and basement printing plant, brick and concrete. $75,000. B. W. Mercer, pres. Architect not selected.

Tex., Ammarillo—U. S. Zinc Corp. had plans prepared and takes bids first of year industrial housing and smelter building. $400,000. Private plans.

Tex., Dallas—Dallas Gas Co., Logan St., takes bids about January 1, 1 story, 60 x 150 ft. garage and workshop, concrete. $65,000. Private plans.

Tex., Houston—Houston Light & Power Co., 1905 Capitol St., making plans building and equipping 20,000 kw. power plant. $1,000,000. C. Bertram, mgr.

Idaho, Weippe — E. T. Chapin Co., Symons Bldg., Spokane, Wash., takes bids in spring for sawmill, here. $100,000.

Calif., Fresno — Herminghaus Estate, plans 1 story, 125 x 150 ft., garage, L St. between Merced and Tuolumne Sts. To exceed $40,000. Architect not selected. Waterman Bros., Tulare and L Sts., lessees.

Calif., Los Angeles—Sam Seelig Co., 1325 Palmetto St., having plans prepared by Milwaukee Bldg. Co., archts., Wright and Callendar Bldg., 5 story, rein.-con. warehouse, Vernon and Alameda Sts. $200,000.

Calif., Petaluma—Fuller & Peters, Main and Bridge Sts., plan 50 x 112 ft. garage, North Main St. Architect not selected.

Calif., San Francisco—G. Hackett, 247 Powell St., having plans prepared by O'Brien Bros., Inc., archts., 240 Montgomery St., 2 story and basement, rein.-con. garage and store building, Ellis St. near Taylor St. $50,000.

Calif., San Francisco—See "Buildings."

Ont., Hamilton—Ontario Shale Brick Co., Sun Life Bldg., plans plant. $100,000.

Ont., North Bay—J. Ferguson, mayor, and Town Council, Town Hall, plan hydro electric power plant on French River at Chaudiere Falls to relieve power shortage here and in surrounding towns, incl. 3 plants 30,000 hp. and 35 mi. transmission line. $3,000,000.

Ont., Sarnia—C. McPhee plans to rebuild garage recently destroyed by fire. $100,000.

Ont., Timmins — Hollinger Consolidated Gold Mines, Ltd., Timmins, plans hydro electric plant on Abitibi River at Island Portage, incl. concrete dam, power house, three 10,000 hp. turbine generators, transformers, cranes, pumps, etc., and 75-80 mi. high voltage transmission line from here to Island Portage. $3,000,000.

BIDS DESIRED

Pa., Pittsburgh—J. M. McCollum, archt., Berger Bldg., taking bids 3 story and basement, 23 x 50 ft. brick and limestone plant, 2nd Ave. and Grant St., for Smith Bros., Inc., 409 Grant St.

Pa., Pittsburgh — Natl. Metal Products Co., Erie and Diamond Sts., will build 1 story, 68 x 138 ft. factory, Chateau and Fayette Sts. $60,000. Work will be done by separate contracts. Private plans.

Pa., Reading—Biehl Auto & Wagon Wks., 31 South 5th St., taking bids 2 story, 85 x 200 ft. brick addition to factory, South 5th St. H. G. Mohn, Mohnton, archt.

Pa., Uniontown—H. Cochrane, c/o H. W. Altman, archt., Uniontown, taking bids 1 story, 90 x 120 ft. brick and steel garage, Baum Blvd. $85,000.

Pa., Wilkinsburg (Pittsburgh P. O.)—C. C. McKallip, Magee Bldg., taking bids 2 story, 50 x 90 ft. sales room and garage, concrete, brick and steel, Penn Ave. $50,000. Private plans.

O., Cleveland—E. Huberty, archt., 8017 Whitehorn Ave., taking bids 2, 3 and 4 story, 73 x 140 ft. bakery addition, brick, steel and concrete, 2701 Barber Ave., for J. Spang Baking Co., 2711 Barber Ave. $125,000.

Mich., River Rouge (Branch of Detroit) —A. Kahn, engr., 1000 Marquette Bldg., Detroit, taking bids and opens same about Dec. 29, 1 and 2 story, 150 x 300 ft. concrete and steel factory, here, for Ford Motor Co., Highland Park (branch of Detroit).

Ill., Chicago—R. F. France, archt., 155 North Clark St., receiving bids 1 story, 106 x 135 ft. garage, rein.-con., brick and steel, Juneway Terrace near Clark St., for F. J. Fadner, c/o architect. $125,000.

Ill., Peru—V. A. Matteson, archt., 8 South Dearborn St., Chicago, receiving bids 2 story and basement, (715,000 cu.ft.) factory, rein.-con., brick and steel, here, for Western Clock Co., Peru. $250,000.

Wis., West Allis—Gas Tank Recharging Co., 1245 23rd Ave., Milwaukee, taking bids 1 story, 41 x 81 ft. carbide storage building, 1 story, 20 x 29 ft. boiler house 1 story, 41 x 81 ft. purifying building, etc., 1 story 41 x 81 ft. shipping and storage building, 1 story, 41 x 100 ft. recharging building, brick, plain concrete foundations. O. C. Randolph, 53 West Jackson Blvd., Chicago, engrs.

BIDS RECEIVED

Mich., Detroit—Detroit Pub. Lighting Comn., 138 East Atwater St., opened bids 1 story, 20 ft. high, 56 x 83 ft. rein.-con., steel and stone substation, Woodward Ave., from Corrick Bros., Owen Bldg., $54,989; M. Bartholomaei Sons & Co., 1574 East Warren Ave., $57,106; Brayton Eng. Co., 907 Kresge Bldg., $57,151. Noted Dec. 14.

Minn., Hibbing—Water, Light, Power and Bldg. Comn. opened bids Dec. 12, 1 story and basement, 66 x 85 ft. addition to gas plant, brick and concrete, from Phelps-Drake Co., Hibbing $89,948; G. Anderson, Hibbing, $96,732; Dohm Bldg. Co., Hibbing, $98,390.

CONTRACTS AWARDED

Mass., Everett — Sexton Can Co., 123 Broad St., Boston, 2 story, 50 x 130 ft. factory addition, brick and timber, plain foundation, also 2 story office addition, Cross St., here, to D. E. McIntire, Inc., 74 Broad St., Boston. Archts. est. $40,000.

Mass., Medford—Amer. Woolen Co., 245 State St., Boston, 5 story, 60 x 120 ft. factory addition, rein.-con., brick and steel, plain foundation, Boston Ave., to C. L. Patton, Melrose Highlands. Archts. est. $100,000.

Mass., South Hadley—Holyoke Gummed Products Co., 9 Suffolk St., Holyoke, 1 story, 140 x 147 ft. factory, brick and timber, plain foundation, here, to Austin Co., 217 Bway., New York City. Archts. est. $40,000.

Mass., Watertown—Vose & Sons Piano Co., 1010 Massachusetts Ave., Roxbury, 5 story, 80 x 220 ft. factory, rein.-con., steel and brick, plain foundation, School, Arsenal and North Beacon Sts., here, to J. J. Prindiville Co., Framingham. Archts. est. $300,000. Noted Oct. 19.

Mass., Worcester—Boulevard Park Associates, c/o J. F. Carberry, agt., 339 Main St., 1 story, 45 x 165 ft. garage and service station, brick and steel, plain foundation, Shrewsbury St., to Keefe Bros. [illegible] Front St. Archts. est. $40,000.

Pa., Allentown — Lehigh Valley Poster Co., 1 story, 60 x 125 ft. rein.-con., brick and steel plant, Jerome Ave., to [illegible] E. Black, Allentown.

Pa., Bethlehem—Kurtz Furniture Co., reconstruction eight 1 story, factory buildings, Ave. B, to R. S. Rathbun Contg. Co., Bethlehem. Archts. est. $750,000. Noted Nov. 23.

Pa., Leechburg—West Leechburg Steel Co., Farmers Bank Bldg., Pittsburgh, 1 story, 120 x 700 ft. rein.-con., steel and corrugated iron addition to mill, to Treadwell Eng. Co., Easton. Archts. est. $1,500,000.

Pa., Phila.—Abbotts Dairy Co., 31st and Chestnut Sts. 3 story, 120 x 140 ft. rein.-con. and brick garage, plain foundation, 3rd and Lombard Sts., to Turner Constr. Co., 1713 Sanson St. Noted Dec. 14.

Pa., Phila. — Schlorer Delicatessen Co., Water and Mifflin Sts., 4 story and basement, 60 x 80 ft. brick and steel factory, plain foundation, to Cramp & Co., Denckla Bldg., $200,000. Noted Dec. 14.

W. Va., Warwood (Wheeling P. O.)—Centre Fdry. and Machine Co., 1 story, 100 x 320 ft., foundry and machine shop, to Riverside Bridge Co., Martins Ferry, O. To exceed $60,000.

O., Cleveland—J. L. Free Co., 1040 Prospect Ave., 1 story, 90 x 135 ft., brick and steel garage and salesroom, plain foundation, 3746 Prospect Ave., to Austin Co., 16112 Euclid Ave. Archts. est. $50,000. Noted June 8.

O., Cleveland—Natl. Screw & Tack Co., 2440 East 75th St., 550 ton steel for 5 story, 56 x 165 ft., factory, Platt Ave., to Riverside Bridge Co., Martins Ferry. Total cost $250,000. Owner will do masonry and carpentry work. Noted Nov. 2.

O., Dayton—Dayton Power & Light Co., South Jefferson St., 4 story, 150 x 182 ft., rein.-con. and brick service building, Monument St., to U. S. Structural Co., Hartford St., $300,000.

O., Norwood—Ford Motor Co., Highland Park, Mich., general contract rein.-con., brick and steel assembling plant, and rein.-con. loading platform, here, to W. E. Wood & Co., 1805 Ford Bldg., Detroit.

Mich., River Rouge (Branch of Detroit) —Ford Motor Co., Highland Park (Branch of Detroit), 260 x 365 ft. concrete, brick and steel plant, plain foundation, to E. Winters, 752 Book Bldg., Detroit. Archts. est. $1,500,000.

Ill., Chicago—Evans Fibre Box Co., 3261 West 47th St., 1 and 2 story, 101 x 483 ft. factory, rein.-con., brick and steel, 4734-60 South Spalding Ave., to Robson Co., 38 South Dearborn St. Archts. est. $150,000.

Wis., Cedarburg—Hansen Canning Machine Corp., Port Washington, 1 story, 112 x 112 ft., concrete and steel factory, plain foundation, here, to Natl. Constr. Co., 490 Virginia Sts., Milwaukee. Archts. est. $40,000. Noted Dec. 7.

Wis., Crandon—F. H. Himes Lumber Co. will build 1 story 40 x 40 ft. saw mill, 14 x 50 ft. warehouse, 50 x 120 ft. shed, timber, plain foundation, by day labor.

Wis., Madison—Madison Supply Co., 615 East Washington Ave., 2 story, 50 x 60 ft. bottling works incl. warehouse, rein.-con. and brick, plain foundation, to W. H. Deason, 337 Washington Bldg.

Wis., Milwaukee — Harley-Davidson Motor Co., 3732 Chestnut St., 1 story, 80 x 145 ft., brick and concrete foundry, plain foundation, to E. S. Steigerwald Co., 3603 Vliet St. Engrs. est. $45,000. Noted Nov. 23.

Wis., Milwaukee—Welch Investment Co., 105 Wells St., 2 story, 75 x 150 ft., brick and concrete garage addition, Grand Ave., to Bentley Bros., 221 Grand Ave. Archts. est. $50,000. Noted Nov. 30.

Wis., Wausau—Durant Motor Car Co., 208 Washington Ave., 2 story, 60 x 60 ft., brick, rein.-con. and steel garage, plain foundation, to W. Anderes, 313 North 3rd St. Archts. est. $40,000. Noted Nov. 23.

Ia., Clinton—Curtis Bros. & Co., general contract, 4 story, 96 x 162 ft., brick and concrete warehouse, to Miller & Ladehoff, 405 Wilson Bldg.

Ia., Dubuque—T. J. Mulgrew, Jones and Iowa Sts., brick and concrete superstructure for ice and cold storage plant, to James Gregory Contg. Co., 1120 Iowa St. Total cost about $75,000.

Minn., Northfield—St. Olafs College, 1 story, 71 x 88 ft. power house and heating plant, general contract to J. F. Kump, Northfield. Total cost $50,000. Noted Dec. 7.

Industrial Works (Continued)

Mo., Kansas City—Holbert & Perrin, 23rd and Grand Sts., 2 story and basement, 75 x 100 ft. garage, Armour Blvd. and Troost St., to Morley Constr. Co., c/o Schiedley Bldg., $42,000. Archts. est. $43,000.

Calif., San Francisco—Roth, Winter & Walsh, 1271 Mission St., 2 story, 91 x 120 ft. packing plant, rein.-con., Townsend St., to Barrett & Hilp, 918 Harrison St., cost plus percentage basis, will exceed $75,000. Noted Dec. 14.

Buildings

PROPOSED WORK

Mass., Lynn—High School—Bd. Educ. having plans prepared by G. A. Cornet, archt., Donaghue Bldg., 2 story, 220 x 225 ft., brick, concrete and steel. $400,000.

Conn., Hartford—Temple—Masonic Hall Assn., 51 Ann St., plans 4 story, brick, stone and steel, Farmington Ave. $600,000. F. I. Cooper Corp., 33 Cornhill, Boston, archts. Noted May 19, 1921.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, soon takes bids P. S. 201, brick, steel and stone, plain foundation, 80th St. and 12th Ave., here. $500,000. C. B. J. Snyder, Flatbush Ave. extension and Concord St., archt. and engr.

N. Y., New York — Apartment—J. H. Springer, c/o C. B. Meyers, archt. and engr., 32 Union Sq., soon takes bids 6 story, 100 x 100 ft., brick, steel and stone, plain foundation, Haven Ave. $150,000.

N. Y., New York — Hospital — Manhattan Eye & Ear Hospital, 208 East 64th St., having preliminary plans prepared by York & Sawyer, archts. and engrs., 50 East 41st St., altering present building and constructing new brick, steel and stone addition, plain foundation. $300,000.

N. Y., New York—Hotel—M. N. Natanson, 522 5th Ave., plans 15 story, 100 x 150 ft., brick, steel and stone, plain foundation, Lexington Ave. and 46th St. $2,000,000. Architect not selected.

N. Y., Troy—Chapel, etc.—House of Good Shepherd, c/o F. J. Morgan, archt., Pioneer Bldg., preparing plans and takes bids in February or March, 1 story and basement, 60 x 120 ft., Peoples Ave. $350,000.

Pa., Llanerch — Church — St. Andrews Methodist Episcopal Church soon takes bids 1 story and basement, 100 x 125 ft. brick, steel and stone, plain foundation. $200,000. W. L. Blithe, 608 Chestnut St., Phila., archt.

D. C., Wash.—Apartment—Speiden & Speiden, archts., 1423 New York Ave., preparing plans for apartment. $400,000. Owner's name withheld.

D. C., Wash.—Apartment—F. R. White, archt., 1410 G St., N. W., preparing plans for apartment. $450,000. Owner's name withheld.

D. C., Wash.—School and Hall—The Misses Maret School, 1724 Connecticut Ave., having plans prepared by H. W. Peaslee, archt., 1504 H St., for school and assembly hall

Va., Charlottesville—Church—St. Pauls Episcopal Church having revised plans prepared by Ludlow & Peabody, engrs. and archts., 101 Park Ave., New York City, brick and limestone, plain foundation. $150,000. Noted Feb. 23.

Miss., Jackson—Hotel—Edwards Hotel, J. L. Ware, prop., takes bids about Feb. 1, 10 story, 132 x 140 ft., (300 room), brick and steel. $1,000,000. W. T. Nolen, 2707 Coliseum St., New Orleans, La, archt.

La., New Orleans—Campanile Executive Com. of Students Memorial Com. plans concrete and brick, 162 ft. high, at entrance to campus, State University, here. $150,000. R. D. Boyd, pres. State University. T. Link, state archt.

O., Akron—Office—United Cigar Stores Co., 44 West 18th St., New York City, soon takes bids 8 story, 50 x 100 ft., brick and steel, concrete pile foundation, Main and Market Sts., here. $800,000. Sommerfeld & Steckler, 31 Union Sq., New York City, archts. J. Gehres, 336 Akron Savings & Loan Co., engr. Noted July 27.

O., Akron—Store and Office—United Cigar Stores Co. of America, 44 West 18th St., New York City, having plans prepared by L. E. Denslow, archt., c/o owner, 8 story, brick, steel and concrete, Main St., here. $350,000.

O., Canton—Arcade—J. Piper, c/o Dime Savings Bank, 301 Tuscarawas St. E., is backing proposition to build 2 story, 66 x 200 ft., Tuscarawas St. E. and Walnut St. S.E. $175,000.

O., Cleveland—Apartment—W. Carver of Common Brick Manufacturers of America, Cleveland Discount Bldg., had plans prepared by Wright & Hohl, archts., 4614 Prospect Ave., 3 story, 21 suite, brick and timber, East 132nd St. and Moreland Circle. $175,000.

O., Cleveland—Apartments—Best Homes Co., c/o A. Pentland, 3313 Cedar Brook Rd., Cleveland Heights, had plans prepared by Wright & Hohl, archts., 4616 Prospect Ave., two 3 story, 21 suites, brick and timber, plain foundations, East 132nd St., here. $175,000 each.

O., Cleveland—Bank and Office—Atlas Savings & Loan Co., c/o J. F. Rybak, pres., 5454 Bway, having plans prepared by J. H. Graham & Co., archts., 8201 Cedar Ave., 5 story and basement, 37 x 100 ft., brick, steel and concrete, 5644 Bway. $200,000.

O., Cleveland—Schools—Bd. Educ., East 6th St. and Rockwell Ave., having plans prepared by W. R. McCornack, archt., East 6th St. and Rockwell Ave., John Hay School of Commerce, 3 story, 40 room, East 107th St. and Fairchild Ave., $1,500,000; also 3 story, 22 room elementary school, East 176th St. and Groveland Ave., $400,000, both brick, steel and concrete, plain foundations.

O., Cleveland Heights (Warrensville P. O.)—School—Bd. Educ., c/o W. G. Nesbit, clk., 1805 Lee Rd., having plans prepared by F. C. Warner, archt., Hippodrome Annex, Cleveland, 2 story and basement, 100 x 211 ft., brick, steel and concrete, Euclid Heights Blvd. $250,000.

Mich., Ann Arbor—Alumnae—Alumnae of University of Michigan, having plans prepared by York & Sawyer, archts., 50 East 41st St., New York City, brick, steel and stone, plain foundation. $1,000,000.

Mich., Pontiac—Temple—Masonic Temple Assn. had plans prepared by Vernor, Wilhelm & Molby, archts., 602 Book Bldg., Detroit, 3 story and basement, 86 x 207 ft. rein.-con., brick, steel and stone, plain foundation, Oakland and South Lafayette Aves. $350,000.

Ill., Chicago—Apartment—A. R. Gurinan, c/o Leichenko & Esser, archts., 38 South Dearborn St., soon lets contract 3 story and basement 140 x 200 ft. rein.-con., brick and steel, South Shore Dr. and 76th St. $350,000.

Ill., Chicago—Apartment—C. F. Henry, c/o R. P. France, archt., 155 North Clark St., having plans prepared 3 story and basement, 145 x 150 ft., rein.-con., brick and steel, Sunnyside Ave. and Malden St. $400,000.

Ill., Chicago—Hotel—S. M. Edison, c/o D. S. Klafter, archt., 64 West Randolph St., having plans prepared 10 story, 108 x 125 ft., rein.-con., brick and steel, Cornelia St. near Sheridan Rd. $1,250,000.

Ill., Chicago—Hotel—Schmidt, Garden & Martin, archts., 104 South Michigan Ave., preparing plans 375 x 465 ft., rein.-con., brick and steel, South Shore Dr. and 55th St. $5,000,000. Owner's name withheld.

Ill., Chicago — School, Convent and Church—Sacred Heart Congregation, 7021 South May St., having plans prepared by Comes, Perry & McMullen, archts., Renshaw Bldg., Pittsburgh, Pa., 5 story and basement, 50 x 140 ft., school, convent and church, 70th and South May Sts. $500,000.

Ill., Crystal Lake — Club — Sunset Valley Country Club, c/o W. G. Uffendell, archt., 39 South State St., Chicago, plans 2 story, rein.-con., brick and steel, here. $500,000.

Ill., East St. Louis—Office or Hotel—H. Redmond et. al., Collinsville Ave., having preliminary plans prepared by Riester & Rubach, archts., Murphy Bldg., 132 x 175 ft., probably 8 story, rein.-con., brick and steel, plain foundation, Collinsville Ave. $750,000.

Ill., Niles Center — Club — Devonshire Country Club, c/o L. D. Levit, pres., 127 North Dearborn St., Chicago, plans 1 and 2 story, rein.-con., brick and steel, Dempster and Church Sts., here. $300,000. A. L. Himelblau, 179 West Washington St., Chicago, archt.

Ill., Oak Park—Apartment—W. G. Kreig, J. T. and M. D. Hetherington, archts., 105 North Clark St., Chicago, preparing plans 3 story and basement, 107 x 120 ft., rein.-con., brick and steel, Washington and Lombard Sts., here. $160,000. Owner's name withheld.

Wis., Kenosha—Clinic—H. A. Robinson, 401 West Park Pl., had plans prepared 2 story and basement, 40 x 110 ft. and 30 x 60 ft., brick and concrete, plain foundation. $150,000. White & Co., Pub. Service Bldg., archts.

Wis., Milwaukee—Apartment—Rosman & Wierdsma, archts., 424 Jefferson St., makiny plans 3 story and basement, brick and concrete, plain foundation, Grand Ave. $150,000. Owner's name withheld.

Wis., Milwaukee—Mercantile—Hartman Furniture Co., 286 West Water St., plans 10 story and basement, 60 x 137 ft., brick and concrete, plain foundation, West Water St. $500,000. Architect not selected.

Wis., Milwaukee—Office—Tate Printing Co., 133 2nd St., having plans prepared by Rosman & Wierdsma, archts., 424 Jefferson St., 8 story and basement, 60 x 120 ft., rein.-con. and brick, plain foundation, Bway. $300,000.

Wis., Racine—Auditorium—Racine Memorial Assn., c/o M. E. Walker, Janes Blk., having plans prepared by H. Shaw, archt., 39 South State St., Chicago, 2 or 3 story, brick, concrete and stone, plain foundation. $300,000.

Wis., Racine—Hotel—New Racine Hotel Co., c/o C. Fowler, Badger Bldg., rejected bids 7 and 8 story, brick and concrete, plain foundation, Main St. $600,000. Will readvertise. W. E. Perry and Fungard & Knapp, 212 East Superior St., Chicago, archts. Noted Aug. 31.

Ia., Keokuk—Schools—Voted $575,000 bonds for 3 schools. Architect not selected.

Ia., Pella—Science and Administration—Central College takes bids about Feb. 1, 4 story and basement, 50 x 60 ft., with 3 story, 60 x 112 ft. wing, rein.-con., brick and stone, on campus, here. $175,000. J. VerHey, Pella, archt. Noted Dec. 14.

Ia., Van Meter—School—Bd. Educ. plans 2 story and basement, rein.-con., brick, tile and stone. $150,000. C. Dunn, secy. Architect not selected.

Minn., Ely—High School—Bd. Educ. plans 3 story and basement, rein.-con., brick and tile. $600,000. H. J. Lockhart, clk. Architect not announced.

Minn., Minneapolis — Temple — Zuhrah Temple Assn., c/o A. A. D. Rahn, archt., 616 Masonic Temple, having plans prepared by Bertrand & Chamberlin, archts., 616 Northwestern Bank Bldg., 3 to 4 story and basement, 206 x 237 x 257 ft., irregular shape, rein.-con., brick and tile, Hennepin Ave. and Erie St. $1,000,000.

Minn., St. Paul—Church, School and Rectory—Church of the Nativity having plans prepared by Damon, O'Meara & Hills, archts., 1123 Merchants Natl. Bank Bldg., 33 x 136 x 155 ft. church and school, 41 x 43 x 59 ft. rectory, brick and concrete, Stanford and Prior Aves. $150,000.

Minn., Winona College—State Bd. of Control, St. Paul, plans 3 or 4 story and basement, rein.-con., brick and tile, at State Teachers' College, here, to replace one destroyed by fire. $500,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt.

Mo., St. Louis—Apartment—A. A. Wagner, 5628 Delmar Blvd., having plans prepared by J. P. Cravens, archt., Chemical Bldg., 7 story, 80 x 200 ft., rein.-con., brick and steel, plain foundation, Clara Ave. $500,000.

Mo., St. Louis—Club, Office, etc.—Town Club, Century Bldg., having plans prepared by Mauren, Russell & Crowell, archts., Chemical Bldg., 5 or more stories, 46 x 110 ft., rein.-con., brick and steel, plain foundation, Locust St. To exceed $175,000.

Mo., University City—Theatre and Apartment—University Co., c/o W. A. Hays, Central Natl. Bank Bldg., plans 5 story and basement, 110 x 143 ft., rein.-con., brick and steel, plain foundation, Delmar Blvd. $400,000.

Tex., Dallas — Apartment — Efficiency Apartment Corp., Great Southwestern Life Bldg., having plans prepared and takes bids early in 1923, 11 story and basement, 100 x 150 ft., rein.-con. and brick, caisson foundation, Wolf and Maple Sts. $1,000,000. Private plans.

Tex., Dallas — Auditorium — City Comn. approved $1,000,000 bond issue for auditorium; election early in 1923. G. Fairtrace, city engr.

Tex., Dallas—Church—East Dallas Christian Church, c/o L. N. D. Wells, pastor, plans 2 story, church, Junius and Peak Sts. $150,000. Architect not selected.

Tex., Dallas—Church—First Methodist Church plans church on Ross and Harwood Sts. $750,000. H. D. Knickerbocker, pastor.

Tex., Denton—Church—First Methodist Church plans church. $150,000. Architect not selected.

Tex., Ft. Worth—Church—Magnolia Ave. Christian Church, 950 West Magnolia Ave., plans church. $300,000. Architect not selected.

Tex., Ft. Worth—Y. M. C. A. plans 4 story and basement, 100 x 150 ft., rein.-con., steel and brick, plain foundation, 5th and Lamar Sts. $325,000. Architect not selected.

Tex., Groesbeck—Court House—Limestone Co. plans rein.-con. and brick, plain foundation, Ellis St. $500,000. Architect not selected.

Tex., Houston—Apartment—J. Jones, Goggan Bldg., having preliminary plans prepared 12 story, 150 x 200 ft. $1,500,000. Architect not selected.

Buildings (Continued)

Tex., Houston—Board of Trade—Houston Cotton Exch. (street address not available), having plans prepared by Sanguinet, Staats & Gottlieb, archts. and engrs., Carter Bldg., 16 story, steel, caisson foundation, Prairie and Caroline Sts. $1,000,000.

Tex., San Antonio—Club—B. P. O. E. plans club, probably 8 story, Pecan and Navarro Sts. $350,000. Engineer and architect not selected.

Calif., Alameda—Apartment—L. Kolisky, Strand Theatre, soon takes bids 3 story, frame, stucco, and brick veneer, Grand St. and Central Ave. $150,000. A. A. Cantin, 68 Post St., San Francisco, archt.

Calif., Berkeley—Dormitory—University of California having plans prepared by J. G. Howard, archt., 1st Natl. Bank Bldg., San Francisco, first unit women's dormitory buildings. $328,000.

Calif., Fresno—Lodge, etc.—Fraternal Order of Eagles, Aerie No. 39, plan 6 story, lodge, club and office building, M and Fresno Sts. $500,000. Building association being organized to finance construction. M. P. Hall, 921 Terrace St., treas.

Calif., Fresno—Theatre—Fresno Junior Dramatic Club, plans theatre. $150,000. W. B. Slater, pres. Architect not selected.

Calif., Irvington—High School—Washington Union High School Dist., to vote on $150,000 bonds, Jan. 20, to construct high school.

Calif., Los Angeles—Mercantile—Cooper Dry Goods Co., c/o Curlett & Beelman, archts., Union Bank Bldg., having plans prepared 10 story and basement, 150 x 200 ft., Los Angeles and 9th Sts. To exceed $500,000.

Calif., Los Angeles—Office—A. C. Blumenthal, et. al., Loew State Bldg., receiving competitive sketches from several architects two 12 story, office buildings, Mercantile Pl. $2,000,000. S. Schnaittacher, 233 Post St., San Francisco, retained as professional advisor.

Calif., Pasadena—Church—First Baptist Church having plans prepared by C. M. Winslow, archt., Van Nuys Bldg., Los Angeles, church, Union St. $500,000.

Calif., Sacramento—Lodge and Club—Knights of Columbus, 1214 K St., plan lodge and club. $200,000. Architect not selected.

Calif., Sacramento—Market—L. Glide, c/o J. Morgan, archt., Merchants Exch. Bldg., San Francisco, having plans prepared 2 story and basement, 160 x 170 ft., 13th and J Sts. $200,000.

Calif., San Francisco—Amusement and Store—H. Shermund, archt., Hearst Bldg., prepared plans 6 story, rein.-con., Turk and Taylor Sts. $200,000. Owner's name withheld.

Calif., San Francisco—Apartment—D. J. Clancy, 2884 Folsom St., had plans prepared by Baumann & Jose, archts., 251 Kearny St., 6 story and basement, 57 x 75 ft., concrete, southeast Turk and Polk Sts. $150,000.

Calif., San Francisco—Office—Medical Center Corp., c/o G. S. Millberry, secy., 1041 Clayton St., plans 10 story and basement, 137 x 137 ft., office with garage for 150 cars, etc., Mason and Post Sts. $1,250,000. Architect not selected.

Calif., San Francisco—School—City and San Francisco Co. having plans prepared by J. Reid, Jr., archt., 1st Natl. Bank Bldg., 16 classroom annex to Portola School, 10 classroom addition to North Beach Primary School, auditorium and annex to High School of Commerce, and new building for Mission High School, latter to cost $1,000,000.

Calif., San Jose—Lodge and Club—San Jose Council, Knights of Columbus, c/o J. J. Jones, Bank of Italy Bldg., plans 4 story, 69 x 137 ft., North 1st St. $160,000. Architect not selected.

Que., Montreal—College—St. Laurent College, (street address not available), having plans prepared and will take bids in January for 50 x 60 ft. addition to college. $375,000. Architect's name withheld.

Ont., London—Home—Trustees Victoria Hospital, Ottaway Ave., defeated $300,000 by-law for nurses' home.

Ont., Toronto—Hospital—Hospital for Incurables, Dunn Ave., plans 3 story and basement, concrete, brick and steel addition. $250,000. A. Kent, pres. Architect not selected.

Ont., Windsor—Business—M. McGregor, McGregor Blk., plans to rebuild business block recently destroyed by fire. Loss $200,000.

BIDS DESIRED

R. I., Providence—School—Jan. 2, by Bd. of Contract and Supply, 3½ story, 83 x 151 ft., brick and steel, plain foundation, Summit Ave. $300,000. Public Buildings Dept., City Hall, archts.

N. Y., Brooklyn—Apartment—Kelner & Kelner, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., New York, 4 story, brick, steel and stone, plain foundation, Lincoln Pl. $250,000. Work will be done by separate contracts under supervision of architects.

N. Y., Brooklyn—Hotel—H. Kornblum, 26 Court St., 4 story and basement, 45 x 135 ft., brick, steel and stone, plain foundation, Joralemon and Clinton Sts. $350,000. Work will be done by separate contracts. Private plans.

N. Y., New York—Apartment—Benheim Constr. Co., c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., 9 story, 65 x 85 ft., brick, steel and stone, plain foundation, 138 East 52nd St. $165,000. Work will be done by separate contracts under supervision of architects.

N. J., Camden—High School—Dec. 26, by C. S. Adams, archt., 2036 Spruce St., Phila., 3 story and basement, 240 x 285 ft. cut stone and brick, plain foundation, Park Blvd. and Empire St., here, for Bd. Educ., City Hall. $350,000. Noted Oct. 5.

N. J., Newark—Clubhouse—Jan. 6, by N. J. Convery, archt., 942 Broad St, Newark, and Warren & Wetmore, associated archts, 16 East 47th St., New York City, 12 story, 100 x 150 ft., brick, steel and stone, plain foundation, Broad and Camp Sts., here, for B. P. O. E. No. 21, 27 Green St. $1,000,000. Noted Oct. 12.

Pa., Merion—Academy—F. F. Durang, archt., 1220 Locust St., Phila., taking bids 3 story and basement, 65 x 162 ft. brick, steel and stone, plain foundation, for Sisters of Mercy, Merion. $200,000.

Pa., Phila.—Hotel—H. Trumbauer, archt., Land Title Bldg., taking bids 16 story, basement and sub basement, 194 x 230 ft. brick, steel and stone, caisson foundation, 9th and Chestnut Sts., for Benjamin Franklin Hotel Co., c/o A. H. Mershon, Land Title Bldg. $1,500,000.

Del., Dover—School—Jan. 2, by Bd. Educ. c/o W. B. Thornburgh, 2 story and basement, 80 x 224 ft., stone and brick, plain foundation. $150,000. W. H. Thompson, 1211 Walnut St., Phila., archt.

Ga., Rome—School—Jan. 2, by M. A. Cooper, chn. building com., 2 story and basement, 45 x 258 ft., rein.-con. Spiker & Lose, Forsyth Bldg., Atlanta, engrs. Pringle & Smith, Atlanta Trust Bldg., Atlanta, archts.

O., Farmersville—School—Jan. 3, by J. R. Heiney, clk. Bd. Educ., 3 story and basement, brick and rein.-con., concrete foundation. $175,000. Walker & Norwich, 1301 Amer. Bldg., Dayton, archts.

Ill., Chicago—Hotel—A. S. Hecht, archt., 155 North Clark St., receiving bids 7 story, 53 x 108 ft., rein.-con., brick and steel, Buena Park and Hazel St., for Buena Park Hotel Corp., c/o architect. $380,000.

Ill., Chicago—Hotel—Feb. 1 by Holabird & Roche, archts., 104 South Michigan Ave., Hotel Stevens, 25 story, 173 x 402 ft., rein.-con., brick and steel, Michigan Blvd. between 7th and 8th Sts., for J. W. and E. J. Stevens, c/o La Salle Hotel. $15,000,000. Noted Oct. 19.

Ill., Chicago—Office—Holabird & Roche, archts., 104 South Michigan Ave., receiving bids 5 story, 100 x 135 ft. addition, rein.-con., brick and steel, La Salle and Madison Sts., for L. J. McCormick, c/o architects. $500,000.

Ill., Evanston—Apartment—J. A. Ostrand, 5434 North Ashland Ave., receiving bids 3 story, 100 x 135 ft., rein.-con., brick and steel, Michigan Ave. and South Blvd. $150,000. C. W. Westerlind, 179 West Washington St., Chicago, archt.

Mich., Detroit—Mercantile—Dec. 26, by Smith, Hinchman & Grylls, archts., 800 Marquette Bldg., 10 story, basement and sub-basement, 150 ft. high, 36 x 100 ft., rein.-con., brick and steel, plain foundation, Woodward Ave., for J. L. Hudson Co., Woodward Ave. Noted July 20.

Mich., Detroit—School—Jan. 5 by Bd. Educ., 2 story and basement, 46 ft. high, 110 x 145 ft. rein.-con., brick and steel, plain foundation, Kirby Ave. $150,000. Malcomson, Higginbotham & Palmer, 405 Moffat Bldg., archts.

Mich., Grand Rapids—Junior High School—Jan. 10, by H. H. Turner, archt., 923 Michigan Trust Bldg. ,2 and 3 story, 85 x 178 ft., rein.-con., brick, steel and terra cotta, Lee St., for Bd. Educ. $150,000. H. Morrill, business mgr.

Mich., Hancock—School—Dec. 28, (change of date) by Bd. Educ., 3 story and basement, 80 x 336 ft., concrete, brick and steel. $300,000. G. L. Lockhart, 1353 University Ave., St. Paul, Minn., archt. Noted Nov. 30.

Ia., Monticello—High and Grade School—Jan. 19, by School Bd., 3 story and basement, 102 x 215 ft., rein.-con., brick and stone. A. H. Koop, secy. Keffer & Jones, 204 Masonic Temple, Des Moines, archts. Noted Nov. 2.

Minn., Aitkin—Court House—Dec. [illegible], by H. C. Beecher, aud. Aitkin Co., 3 story and basement, rein.-con., brick and tile. $200,000. Toltz, King & Day, 1410 Pioneer Bldg., St. Paul, archts.

Mont., Butte—Hotel—Dec. 28, by New Finlen Hotel Co., Finlen Hotel, 9 story and basement rein.-con., brick, tile and stone. $700,000. Shanley & Baker, Great Falls, archts.

Tex., Dallas—Club—Jan. 15, by Lang & Witchell, archts. and engrs., 300 Amer. Exch. Natl. Bank Bldg., 12 story and basement, rein.-con., brick and steel, plain foundation, for Dallas Athletic Club. $1,250,000. Noted Dec. 14.

Tex., Lockhart—School—Dec. 28, by A. D. Mebane, pres. School Bd., 2 story, 120 x 206 ft., T shaped, rein.-con., tile and brick. C. H. Page & Bros., Austin Natl. Bank Bldg., Austin, archts.

BIDS RECEIVED

Mass., Boston—Police Station—Public Buildings Dept., City Hall, opened bids Dec. 12, 10 story, 65 x 90 ft., brick and steel, plain foundation, Mill and Sears Sts., from M. Seretto, 3 Tremont Row, $530,000; J. Bowen, 184 Dudley St., $543,000; J. Slotnick, 448 Bway., Chelsea, $548,084. Noted Dec. 7.

N. Y., Freeport—High School—Bd. Educ. opened bids Dec. 4, brick, steel and stone, plain foundation, Pine St., from Moody Constr. Co., 90 West St., New York, $575,131-$557,581, omitting 2 units; L. M. Neckerman, 103 Park Ave., New York, $575,950-$556,950 omitting 2 units; G. T. Kelley, 2 Hudson St., Yonkers, $588,000-$566,000 omitting 2 units. Noted Nov. 23.

N. J., Bordentown—High School—Fowler & Seaman, archts., Broad St. Bank Bldg., Trenton, opened bids Dec. 11, general contract for 2 story and basement, 92 x 121 ft., brick and steel, here, for Bd. Educ., from J. H. Morris & Co., 211 North Montgomery St., Trenton, $124,161; Wills, Bill & Co., 1708 Sansom St., Phila., $130,258; C. J. Smith Constr. Co., 202 Academy St., Trenton, $136,625. Noted Dec. 7.

D. C., Wash.—High Schools—Dist. Comrs., 509 Dist. Bldg., opened bids Dec. 12 for MacFarland and Langley Junior High Schools, from M. Serretto, Main Treasury Bldg., $592,000; G. E. Wyne, Home Life Bldg., $604,600; M. A. Long, 2016 West North Ave., Baltimore, Md., $679,149. Former bids rejected. Noted Nov. 30.

Calif., Lodi—School—Lodi Union High School Dist., (1) 2 story science building, 2 story auditorium and 1 story manual training building, (2) addition to swimming tank, (3) buildings and tank, from Gould & Johns, 119 South California St., Stockton, (1) $248,299, (2) $16,391, (3) $261,701; R. W. Moller, Call Bldg., San Francisco, (1) $248,552 (2) $11,890 (3) $260,442; Betz & Maubrey, Ochsner Bldg., Sacramento, (1) $255,929 (2) $14,881 (3) $269,827. Noted Nov. 23.

Calif., San Jose—School—St. Patrick's Church, 2 story, rein.-con. and brick, East Santa Clara and 9th Sts., from J. L. McLaughlin, 251 Kearny St., San Francisco, $150,000.

CONTRACTS AWARDED

Mass., Boston—Apartment and Store—Owner, c/o D. Somes, archt., 119 Water St., four 2 story and basement, 40 x 100 ft., brick and steel, plain foundations, Charles and River Sts., to Joslin & Landry, 107 Massachusetts Ave. Archts. est. $340,000.

Mass., Lynn—Hotel—Lynn Shore, Inc., c/o Seibert & Young, archts., 177 State St., Boston, 6 story, brick, stone and concrete, Lynn Shore Blvd., to Boyle-Robertson Constr. Co., Evans Bldg., Wash., D. C., $1,850,000. Archts. est. $2,000,000. Having plans prepared for garage in connection with above.

Mass., Roxbury (Boston P. O.)—Synagogue—Temple Mishkan Tefila, c/o Krokyn, Brown & Rosenstein, archts., 7 State St., Boston, 3 story, brick, concrete and steel, plain foundation, Seaver St., to B. W. Marcus, Dean Rd., Brookline (Boston P. O.). Archts. est. $350,000. Noted Oct. 12.

Mass., Springfield—Hotel—Hampden Hotel Co., 140 Chestnut St., 10 story, 40 x 51 ft., brick and steel addition, plain foundation, Chestnut St., to E. F. Carlson Co., 244 Main St. Archts. est. $150,000. Noted Nov. 9.

Mass., Springfield—Store and Office—F. L. Dunlap, 293 Bridge St., superstructure for 2 story, 112 x 130 ft., cast stone and steel, Chestnut St., to L. S. Wood, 1[illegible] Stockbridge St. $200,000.

Buildings (Continued)

Mass., Worcester—Chapel—Holy Cross College, College St., 1 story and basement, 49 x 100 ft., brick, stone and steel, plain foundation, on Campus, to J. P. Keating, 80 Boylston St., Boston. Archts. est. $300,000.

Conn., Stamford — Apartment — Harris Constr. Co., 352 Atlantic St., has been awarded contract for 5 story and basement, brick, stone, steel and concrete, plain foundation, Rippowam Pl. and South St. Archts. est. $1,000,000. Owner's name withheld.

N. Y., Brooklyn—Apartment—J. Horowitz, c/o McCarthey & Kelley, archts. and engrs., 159 Remsen St., 6 story, 80 x 100 ft., brick, steel and stone, plain foundation, Prospect Park West, by day labor. $150,000.

N. Y., Brooklyn — Apartment — J. A. Mears, c/o Slee & Bryson, archts. and engrs., 154 Montague St., 6 story, 125 x 170 ft., brick, steel and stone, plain foundation, Union St., by day labor. $175,000.

N. Y., Brooklyn—Exchange—McKenzie, Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., New York, brick, steel and stone, plain foundation, 7701 3rd Ave., here, to Gillies-Campbell Co., 101 Park Ave., New York, for New York Telephone Co., 15 Dey St., New York. Archts. est. $425,000. Noted Dec. 7.

N. Y., Flushing—Dormitories, etc.—C. B. J. Snyder, supt. School Buildings of Bd. Educ., Flatbush Ave. extension and Concord St., Brooklyn, dormitories, master's house, barns, etc., for Parental School on westerly side of road between here and Jamaica, about 1,700 ft. south of North Hempstead Turnpike, here, to T. A. Clark, Inc., 122 Livingston St., Brooklyn, $447,000. Noted Dec. 14.

N. Y., New York—Apartment—A. Herschkowsky, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., 5 story, 75 x 100 ft., brick, steel and stone, plain foundation, Crotona Parkway, by day labor. $150,000.

N. Y., New York—Apartment—Hudson Builders, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., 5 story, 50 x 100 ft., brick, steel and stone, plain foundation, Wadsworth Ave., by day labor. $150,000.

N. Y., New York—Apartment—S. and J. Levy, c/o G. F. Pelham, 200 West 72nd St., 5 story, 105 x 165 ft., brick, steel and stone, plain foundation, St. Nicholas Ave. and 163rd St., by day labor. $170,000.

N. Y., New York—Apartment—M. B. Rich, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., 5 story, 50 x 100 ft., brick, steel and stone, plain foundation, Bway. and 171st St., by day labor. $150,000.

N. Y., New York—Office—N. C. Partos, 1350 Bway., 20 story, brick, steel and stone addition, plain foundation, 35th St. and Bway., to Fleischman Constr. Co., 531 7th Ave. Archts. est. $1,500,000.

N. Y., White Plains—Store and Office—M. Marx, c/o Moore & Landseidel, archts. and engrs., 148th St. and 3rd Ave., 2 story, 100 x 150 ft., brick, steel and stone, plain foundation, by day labor. $300,000.

N. J., Ocean City—Hotel—Ocean Front Hotel, c/o J. H. Slocum, superstructure for 9 story and basement, 230 room, Beach front, to Roydhouse-Arey Co., 112 North Broad St., Phila., $500,000. Total cost $1,000,000.

Pa., Phila.—School—St. Callistus Roman Catholic Church, 67th and Landsdowne Aves., 3 story and basement, 62 x 142 ft., rein.-con., brick and steel, plain foundation, to Doyle & Co., 1517 Sanson St. $150,000. Noted Nov. 16.

W. Va., Harrisville — Court House — Comrs. Ritchie Co., superstructure for 3 story and basement, 96 x 98 ft., rein.-con., stone and steel, to Foreman & Putman, Marietta, O. Archts. est. $150,000. Noted Nov. 2.

O., Cleveland—Apartment—Superior-86th St. Co., c/o G. Scobell, Cook Bldg., 3 story and basement, 44 x 206 ft., brick and timber, plain foundation, 1316 East 86th St., to Craig-Curtiss Co., Cook Bldg., 4616 Prospect Ave. Archts. est. $250,000.

O., Cleveland—High School— Bd. Educ. East 6th St. and Rockwell Ave., 2 story, 40 room, brick, steel and concrete, plain foundation, West 46th St. and Hyde Ave., to J. F. Hohloch, Davis & Farley Bldg. Archts. est. $800,000. Noted Dec. 14.

O., Sandusky—Bank and Office—Commercial Bank & Trust Co., 3 story and basement, 37 x 119 ft., brick, steel and concrete, plain foundation, to Boldt Constr. Co., 5902 Euclid Ave., Cleveland. Archts. est. $150,000.

Ill., Chicago—Apartment — E. Carson, 5037 Dorchester Ave., 3 story and basement, 100 x 250 ft., rein.-con., brick and steel, 3918-26 Pine Grove Ave., to Olson & Carson, 5037 Dorchester Ave. Archts. est. $300,000.

Ill., Chicago—Apartment and Store—Schoenlank & Kirschner, 6570 Sheridan Rd., 4 story and basement, 80 x 155 ft., rein.-con., brick and steel, 4868-72 North Ashland Ave., to A. E. Johnson, 5356 Belle Plaine Ave. Archts. est. $150,000.

Ill., Chicago—Bank, Store and Office—Central Park State Bank, c/o Loewenberg & Loewenberg, archts., 111 West Monroe St., 2 story, 100 x 124 ft., rein.-con., brick and steel, Roosevelt Rd. and Central Park, to Douglas Constr. Co., 3140 West 15th St. Noted Oct. 26.

Ill., Chicago—Office—J. Hunt, archt., 30 North Michigan Ave., 5 story, rein.-con., brick and steel addition, at 30 North Michigan Ave., to J. B. French, 30 North Michigan Ave. Archts. est. $500,000. Owner's name withheld. Noted Dec. 8.

Ill., Evanston—Apartment—F. W. Freutel, c/o H. J. Liedberg, archt., 154 West Randolph St., Chicago, 3 story and basement, 96 x 150 ft., rein.-con., brick and steel, Forrest Ave. near Main St., here, to H. Janisch & Co., 1813 Winona St., Chicago. Archts. est. $150,000.

Ia., Corydon—High School—Bd. Educ. general contract, 2 story and basement, 67 x 121 ft., rein.-con., brick, tile and stone, to Hannon-Rogers Co., Newton, $81,896. Noted Nov. 23.

Mo., Kansas City—Hotel—Stats Hotel Co., c/o S. J. Stats, Plaza Hotel, general contract 10 story and basement, 50 x 142 ft., rein.-con., brick, stone and terra cotta, 12th and Wyandotte Sts., to Mosby-Goodrich Constr. Co., 902 New York Life Bldg., $290,000; plumbing work, to A. McKinley Plumbing & Heating Co., 1012 Troost St., $68,000.

Mo., St. Louis — Apartments — Wagner Constr. Co., 617 Chestnut St., will build thirteen 3 story and basement, 50 x 97 ft., rein.-con. and brick, plain foundations, Delmar Garden addition, $350,000, by day labor.

Mo., St. Louis—Club-Hotel—Bd. Directors City Club, 911 Locust St., 12 story, 60 x 122 ft., rein.-con., brick and steel, Locust St., to Humes-Deal Co., Century Bldg., fee basis. Archts. est $700,000. Noted Dec. 7.

Mo., St. Louis—Office—Planters Realty Co., 329 Pierce Bldg., converting 11 story hotel into office building, 4th St., to J. Stewart & Co., Inc., Ry. Exch. Bldg. Archts. est. $750,000.

Tex., Wichita Falls—High School and College—Wichita Falls Industrial School Dist., 2 story, rein.-con. and brick, plain foundation, to Kreipike & Schaffer, 615 Hersk St., Oklahoma City, Okla., $465,490. Noted Nov. 23.

Colo., Denver—School and Administration —City general contract 2 story and basement, 100 x 125 ft., 14th and Tremont Sts., to F. J. Kirchof Constr. Co., 718 Lawrence St., $143,520. Archts. est. $150,000.

Wash., Seattle—Institution—Order of St. Vincent, 5 story, 276 x 294 ft. Home for Aged and House of Providence, 35th St. S. W. and West Edmunds Sts., brick and rein.-con, to H. Pederson, Alaska Bldg., $1,000,000. Noted Nov. 23.

Calif., Santa Ana—Hall—Orange Co., constructing 1st unit of Hall of Records, general contract to Hudson Co., Marsh-Strong Bldg., Los Angeles; plumbing to S. Hill & Son, Santa Ana; electric wiring to Reid-Farley Co., Fullerton. Archts. est. $250,000.

Ont., Galt—Collegiate—Bd. Educ. general contract 3 story and basement, (20 room) rein.-con., brick and stone, concrete foundation, to G. H. Thomas, Galt. Archts. est. $300,000. Noted Sept. 7.

Federal Government Work

PROPOSED WORK

Va., Norfolk—Dredging—Spec. 4771—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans dredging in harbor, here.

California, Roads—C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., Dept. Agriculture, 881 Mills Bldg., San Francisco, takes bids in January, for 4 mi. road, 12 ft., Salmon River Project, Siskiyou Co., 130,000 cu.yd. excav. Noted May 4.

Calif., San Diego — Storehouse — Spec. 4770—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans paint and oil storehouse at Destroyer Base, here.

Calif., San Diego—Water-Softening Machinery — Spec. 4768 — Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to purchase water-softening machinery.

H. T., Pearl Harbor—Bins—Spec. 4772—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans bins at coaling plant, here.

Cuba, Guantanamo—Distilling Apparatus, etc.—Spec. 4768—Bureau Yards & Docks, Navy Dept., Wash., N. C., plans distilling apparatus and heaters, here.

H. T., Pearl Harbor—Refrigerating Machinery — Spec. 4767 — Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to purchase refrigerating machinery.

BIDS DESIRED

Mass., Boston—Remodeling—Jan. 12, by Treas. Dept., Wash., D. C., remodeling U. S. Post Office and Sub-Treasury, here. J. A. Wetmore, acting superv. archt; adv this issue.

N. Y., Elmira—Extension—Jan. 10 by Treas. Dept., Wash., D. C., for extension to building and driveway at U. S. Post Office and Court House, here. J. A. Wetmore, acting superv. archt.

D. C., Wash.—Fuel Oil—Jan. 9, at office of A. L. Flint, genl. purch. agt., Panama Canal, Wash., D. C., furnishing 200,000 bbl. fuel oil at Christobal or Balboa.

Fla., Key West—Metal Work—Jan. 15, by Supt. of Lighthouses, furnishing metal work complete for light towers; adv. this issue.

La., New Orleans—Furnishing and Placing Rock—Jan. 18, by Supt. of Lighthouses, (1) furnishing rock, (2) furnishing and placing, (3) loading, transporting and placing (rock furnished by Government) around Sand Island Light Station; adv. this issue.

Tenn., Nashville—Hull—Jan. 16, at office U. S. Engineer, steel hull for dipper dredge "Watauga"; adv. this issue. Noted Nov. 16.

Minn., St. Cloud—Extension—Jan. 9, by Treas. Dept., Wash., D. C., for extension to building and driveway at U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

Tex., El Paso—Alterations—Jan. 3, by Treas. Dept., Wash., D. C., alterations in U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

BIDS RECEIVED

Pa., Pittsburgh—Steel Hull—U. S. Engineer, Pittsburgh, for 1 steel dipper dredge hull, from Penn Bridge Co., Beaver Falls, $23,145; Midland Barge Co., Midland, $27,000; Amer. Bridge Co., Marine Dept., Frick Bldg., $29,750. Noted Nov. 9.

Ia., Knoxville—Hospital—Director U. S. Veterans Bureau, at office Quartermaster General, 2306 Munitions Bldg., Wash., D. C., opened bids Dec. 12 for Neuro-Psychiatric Hospital, here, complete incl. water, lighting, heating, systems, etc., from W. D. Lovell, 1415 8th St., S.E., Minneapolis, Minn., $859,400 (375 days); Warner Constr. Co., 730 Waveland Ave., Chicago, $889,974 (240 days); W. Kucharo & Co., 622 Hubbell Bldg., Des Moines, $928,800 (365 days). Noted Nov. 16.

CONTRACTS AWARDED

N. Y., Chelsea—Hospital—Treas. Dept., Wash., D. C., contract for additional work at U. S. Veterans Hospital here, to Northeastern Constr. Co., 101 Park Ave., New York, $217,120 total $636,394. Noted Oct. 26.

Pa., Altoona — Extension, etc — Treas. Dept., Wash., D. C., extension to building and driveway, and remodeling U. S. Court House and Post Office, here, to Garber & Cissell Co., Inc., Bethlehem, (street address not available) $17,418. Noted Nov. 16.

Okla., Shawnee — Post Office — Treas. Dept., Wash., D. C., for U. S. Post Office, complete incl. mechanical equipment, here, to A. M. Lundberg, 5564 Page Ave., St. Louis, Mo., $93,236 (14 months). Noted Nov. 23.

Miscellaneous

PROPOSED WORK

Coarse Aggregate—New York, N. Y.—J. Miller, pres. Manhattan Boro, Municipal Bldg., withdrew bids which were to be opened Dec. 8, furnishing and delivering 1,000 cu.yd. coarse aggregate for concrete. Will readvertise. Noted Nov. 30.

Transmission Line—Lancaster, Pa. — See "Industrial Works."

Brick—Tampa, Fla.—Hillsborough Co. rejected bids furnishing 10,000,000 bricks. A. Pimm, Tampa, engr. Noted Nov. 30.

Gas Mains—Fond du Lac, Wis. — See "Sewers."

Road Machinery—Wisconsin—Following are county appropriations for road machinery during 1923. Douglas Co. $15,000, C. Hanson, Superior, comr.; Burnett Co. $1,000, G. E. Miller, Webster, comr.; Door Co. $4,600, J. Laurie, Sturgeon Bay, comr.; Fond du Lac Co. $10,000, incl. 1 crusher and 2 trucks, G. Treleven, Fond du Lac, comr.; Dunn Co. $12,750, incl. patrol graders and equipment for county repair shop, F. Stewart, Menomonie comr.; Barron Co., screening plant, crusher and trucks, E. Gleason, Barron, comr.; Manitowoc Co. $24,000, incl. drag line, tractor and graders, J. Connell, Manitowoc, comr.; Vernon Co. $9,000, incl. 3 large graders and one large tractor, A. Ristow, Viroqua, comr.; Waupaca Co. $10,000, J. Huffcut, Waupaca, comr.; Bayfield Co. $10,000 incl. 10 patrol graders, J. Friberg, Washburn,

Miscellaneous (Continued)

comr.; Kenosha Co. $5,000, incl. steam shovel and 2 trucks, J. F. Herzog, Kenosha, comr.; Washington Co. $1,500, C. Johnson, West Bend, comr.; Waushara Co. $4,000 incl. wheel scrapers, graders and other small tools, F. Grimm, Wautoma, comr.; Clark Co. $5,000, incl. road graders, O. J. Weyhmiller, Neillsville, comr.; Iowa Co. $5,000, incl. one large tractor and possibly large truck, C. Wonn, Dodgeville, comr.; Marathon Co. $14,000, incl. patrol graders, 1 gravel crusher and screening plant, J. H. Vogt, Wausau, comr.; Racine Co. $12,000, incl. tar kettle, etc., W. A. Bechthold, Racine, comr.; Monroe Co. $10,000, incl. 12 patrol graders, 12 drags, one large grader, trucks, wheelers and slushers, C. Millard, Sparta, comr.; Kewaunee Co. $12,000, incl. portable crushing, screening and loading equipment, M. Shaw, Algoma, comr.; Columbia Co. $35,000, J. T. Henton, Portage, comr.; Trempealeau Co. will probably be in market for large grader and tractor and some gravel pit equipment, E. F. Rotering, Whitehall, comr.

Train Sheds—Wichita, Kan.—Wichita Terminal Assn., Exch. Bldg., plans railroad train sheds, steel, concrete foundation, at Union Station, East Douglas Ave. $100,000. R. R. Vermillion, 923 1st Natl. Bank Bldg., mgr. Engineer not selected.

Box and Coal Cars, etc.—St. Louis, Mo.—See "Railways" under "Missouri.'

Levee—Texarkana, Ark.—Comrs. Impvt. Dist. 2 take bids early in January, 200,000 cu.yd. levee Red River at Buzzards Bluff. C. S. Christian, Texarkana, engr.

Lighting System—Vernonia, Ore.—Vernonia Electric Light & Power Co., has been granted franchise and plans lighting system for city. G. Burdick, pres. Engineer not selected.

Park and Civic Center—Redondo Beach, Calif.—Voted $125,000 bonds to purchase Redondo Hotel tract for park and civic center.

Subway—Sacramento, Calif.—City and Southern Pacific R.R., 65 Market St., San Francisco, plan subway under Southern Pacific tracks, at 16th and B Sts., here. $80,000. A. Givan, city engr.

Subways — Sacramento, Calif. — See "Streets and Roads."

Paving Plant—San Jose, Calif.—I. J. Ryder, surv. Santa Clara Co. preparing estimates for installing and operating plant to construct and repair bituminous roads. H. A. Pfister, clk.

Causeway—Yuba City, Calif.—Sutter Co. having plans prepared 2,000 ft. rein.-con. causeway on concrete piles. E. L. Cope, 58 Sutter St., San Francisco, engr.

Telegraph Lines — Ontario — See "Railways."

Transmission Line—North Bay, Ont.—See "Industrial Works."

Stadium—Toronto, Ont.—Toronto Harbor Comn., Harbor Com. Bldg., City Council, and Toronto Ball Club, plan athletic stadium, probably concrete. $300,000. E. L. Cousens, ch. engr., Harbor Comn.

Electric Lighting System—Wheatley, Ont.—Plans electric lighting and power distribution system. $35,000.

Gold Mine—Timmins, Ont.—Hollinger Consolidated Gold Mines, Ltd., plans to double capacity of mine here, to handle 4,500 tons more per day. Private plans. Will install crushers, drills, conveying equipment, stamp mills, amalgamators, etc.

Transmission Line, Cranes, Pumps, etc.—Timmins, Ont.—See "Industrial Works."

BIDS DESIRED

Cast Iron Water Pipe—Easthampton, Mass.—Town taking bids on quantity lots of 6 in. c.i water pipe. D. J. O'Neil, Town Hall, engr.

Motor Trucks—Long Island City, N. Y.—Dec. 29, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., furnishing and delivering twenty-one 3 to 3½ ton motor trucks.

Rails and Poles, etc.—Cape May, N. J.—Dec. 26, by City Comrs., purchasing 184 short ton street rail with fish plates, etc., 5 short ton frogs and switch rails (6 pieces); and 28 iron trolley poles. L. T. Stevens, city clk.; adv. this issue.

Bulkhead—Jersey City, N. J.—Jan. 15, by Hudson Co. Park Comn., 1 Exch. Pl., bulkhead, etc. at West Side Park; adv. this issue.

Coal Handling Equipment—Phila. Pa.—Dec. 29, by F. H. Caven, dir. pub. wks., City Hall, furnishing and installing coal handling equipment incl. locomotive crane, tractor, steel cars, track and shelter house, grading, etc. $75,000. C. E. Davis, City Hall, engr.

Crane—Phila., Pa.—Dec. 29, by Bureau of Water, 792 City Hall, 1 locomotive crane, 8 wheel steam operated with 46 ft. boom, 1 cu.yd. clamshell bucket, 5,800 bbl. capacity. C. Davis, engr.

Track Scale, etc. — Richmond, Va. — Hackley Morrison Co., Inc., 1708-22 Lewis St., taking bids for one 100 ton track scale standard gauge, and one ¾ yd. caterpillar tread steam shovel. G. W. Booth, purch. agt.

Structural Steel — New Orleans, La. — Jan. 11, by Bd. Port Comrs., Suite 200, New Court Bldg., furnishing, erecting and painting structural steel for Market St. Shed; adv. this issue.

Steel, etc.—Green Bay, Wis.—Green Bay Dock Co., Pearl and Arndt Sts., taking bids ship steel, (plates and shapes), fabricating steel, marine hardware, wire rope sheaves and steel casting. Private plans.

Piling—Milwaukee, Wis.—H. J. Esser, archt., 82 Wisconsin St., taking bids on concrete and wood piling for 8 story and basement 77 x 120 ft. and 58 x 177 ft. store building, brick and terra cotta, for Gimbel Bros., 5 Grand Ave. Total cost $800,000.

Tractor — Luverne, Minn. — Dec. 27, by Rock Co., one 10 ton caterpillar tractor; successful bidder to take 20 ton caterpillar Holt tractor in trade. O. Skyberg, co. aud.

Freight Engines, etc. — Omaha, Neb. — Union Pacific R.R., 15th and Dodge Sts., receiving bids 78 new freight engines and other equipment. $5,900,000. R. L. Huntley, ch. engr.

Bituminous Macadam, etc.—Clayton, Mo.—Dec. 27, by W. Elbring, engr. St. Louis Co., Court House, furnishing 2,792 squares bituminous macadam for Florissant Rd. from northern limits of Ferguson, Mo., to St. Francois St. in St. Ferdinand, Mo., thence along St. Francois St. to Ferdinand St., Ferdinand St. to Graham Rd., 3,200 squares for Bellefontaine Rd. from city limits of St. Louis to Larimore Rd., 2,432 squares for New Halls Ferry Rd. from Old Halls Ferry to Parker Rds., 2,205 squares for Old Halls Ferry Rd. from New Halls Ferry Rd. to Black Jack, and Parker Rd. from Old Halls Ferry Rd. eastward 1,000 ft.; furnishing 124,101 gal. refined tar or Bermudez asphalt for bituminous macadam pavement for Florissant Rd. from northern limits of Ferguson to St. Francois Sts. in St. Ferdinand thence along St. Francois to Ferdinand Sts., Ferdinand St. to Graham Rd., 128,000 gal. for Bellefontaine Rd. from city limits of St. Louis to Larimore Rd., 97,266 gal. for New Halls Ferry Rd. from Old Halls Ferry to Parker Rds., 88,200 gal. for Old Halls Ferry Rd., from New Halls Ferry Rd. to Black Jack and Parker Rds., 1,000 ft. eastward; 1,713 ton roofing gravel for Florissant Rd., St. Fracnois and Ferdinand Sts., 1,756 ton for Bellefontaine Rd., 1,342 ton for New Halls Ferry Rd., 1,217 ton for Old Halls Ferry and Parker Rds. Former bids rejected.

Steel Water Pipe, etc.—Terra Bella, Calif.—Jan. 2, by E. R. Clems, secy. Terra Bella Irrigation Dist., 1st Natl. Bank Bldg., furnishing riveted steel water pipe, f.o.b. Ultra on or before Feb. 1, as follows: 700 ft. 4 in., 6,700 ft. 6 in., 700 ft. 7 in. and 2,700 ft. 8 in.; ditching and laying 2 mi. of 4, 6, 7 and 8 in. riveted steel water pipe.

Cement—Cottam, Ont.—E. G. Bowers, Cottam, taking bids on large quantity of cement. $30,000.

Grain Elevator—Port Arthur, Ont.—Dec. 30, by N. Bawlf, pres. N. Bawlf Co., 571 Grain Exch. Bldg., Winnipeg, Man., 200 x 250 ft. grain elevator, 80 ft. high, rein.-con. bins, brick workhouse, 1,500,000 bu. capacity, on waterfront, here. $800,000. C. D. Howe Co., Port Arthur, archts. and engrs.

Crushed Stone—Toronto, Ont.—Dec. 31, by W. A. McLean, deputy minister of highways, Parliament Bldgs., 200,000 ton crushed stone for 1923. $400,000. G. Hogarth, ch. engr.

Dry Dock Machinery—Esquimalt, B. C.—Jan. 31, (change of date) by R. C. Desrochers, secy. Dept. Pub. Wks., Ottawa, pumping and other machinery for dry dock, here. Noted Dec. 14.

BIDS RECEIVED

Steel—Flushing, N. Y.—Transit Comn., 49 Lafayette St., New York, opened bids Dec. 14, furnishing and erecting steel for elevated portion of Rapid Transit R.R., Flushing Route, extending over and along Roosevelt Ave., private property and intersecting streets from Alburtis to Riverside Aves., here, from Phoenix Bridge Co., 132 Nassau St., New York, $615,880; Jobson Gifford Co., 30 East 42nd St., New York, $652,873; C. Meads Co., 217 West 14th St., New York, $665,962. Noted Dec. 7.

Portland Cement—New York, N. Y.—H. Bruckner, pres Bronx Boro Tremont and 3rd Aves., opened bids Dec. 14, furnishing and delivering 2,500 bags Portland cement, from E. E. Buehler, 103 Park Ave., $1,825, C. J. Mallett, 2554 Raymond Ave., $1,850, Anderson Brick Co., $1,875, J. P. Duffy Co., 207 East 138th St., $1,875; 6,000 gal. motor gasoline, from Standard Oil Co., 26 Bway., $1,278, Texas Co., 17 Battery Pl., $1,440, Tidewater Oil Sales Co., 11 Bway., $1,313. Noted Dec. 7.

Wharf — New Orleans, La. — Bd. Port Comrs., New Court Bldg., opened bids Dec. 14, reconstructing Robin St. wharf, incl. substructures retaining walls, fire walls and surfacing (1) 21,000 yd. 6 in. concrete, and (2) 5,600 yd. 8 in. concrete, from E. T. Malloy, 4117 St. Perets St., (1) $3.17 (2) $4.17, etc., total $203,000, (270 days) J. Reiss, Carondelet Bldg., (1) $2.38 (2) $4.17, (220 days) O. M. Gwinn, New Orleans, (street address not available) (1) $3.59 (2) $4.59, (200 days). Noted Nov. 30.

Portland Cement, etc.—St. Louis, Mo.—G. H. Oetting, supply comr., opened bids Dec. 12, (1) 1,258 bbl. Portland cement in cloth sacks for Fairground locker building (2) 90 ton 4 and 6 in. c.i. pipe, engrs. est. $4,500 (3) 430 ton Mississippi River sand (3B) 60 ton Meramec River sand, delivered in wagon lots to Fairground locker building (4) 140 squares ¾ in. macadam in wagon lots at Fairground locker building, from Missouri Portland Cement Co., Post Dispatch Bldg., and St. Louis Material & Supply Co., 314 North 4th St., (both bids same amounts), (1) $3.30 per bbl. delivered in wagon lots less $0.40 for sacks, $2.80 per bbl. in car lots f.o.b. less $0.40 for sacks, (3a) $2.05 delivered in wagon lots and $1.20 in car lots f.o.b. St. Louis (3b) $2.30 delivered in wagon lots and $1.45 in car lots f.o.b. St. Louis; Hammond-Byrd Iron Co., Amer. Trust Bldg., Birmingham, Ala., (2) $45.50; U. S. Cast Iron Pipe & Fdry. Co., Amer. Trust Bldg., Birmingham, Ala., (2) $46.60; Union Quarry & Constr. Co., 4687 Natural Bridge Rd., (4) $7.73 per square; Independent Quarry & Constr. Co., 4875 Ashland St., (4) $7.98; Bambrick Bros. Constr. Co., 5229 St. Louis St., (4) $8. Noted Dec. 14.

Levees—Sacramento, Calif.—State Recl. Bd., Forum Bldg., opened bids constructing levees, 2,600,000 cu.yd. clamshell work, 1,100,000 cu.yd. long boom excavator work, for Recl. Dist. 1660, Sutter Co., from P. B. Engh, Pacific Electric Bldg., Los Angeles, $913,950.

Grandstand — Tanforan, Calif. — Pacific Coast Jockey Club, 1st Natl. Bank Bldg., San Francisco, constructing steel frame and wood grandstand, 5,000 seats, here, from Grace & Bernieri, Claus Spreckels Bldg., San Francisco, $125,000; Clinton Constr. Co., 136 Townsend St., San Francisco, (amount not available). Noted Nov. 9.

CONTRACTS AWARDED

Refined Asphalt, etc.—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, furnishing and delivering 60,000 gal. refined asphalt, to Warner-Quinlan Co., 79 Wall St., New York, $3,600; 700 cu.yd. binder stone, to Calvin Tompkins Co., 30 Church St., New York, $1,421; 2,000 cu.yd. asphalt sand, to Hygrade Builders Supply Co., 6th St. and 2nd Ave., $4,620; 600 net ton limestone dust, to E. Meyer Co., 25 Church St., New York, $3,270; 2,000 cu.yd. paving sand, to T. E. McCormick, 701 East New York Ave., $2,350; 3,300 cu.yd. 1½ in. gravel, to J. T. Cunningham, $9,207. Noted Dec. 7.

Railings and Stairs—Phila., Pa.—Metal railings and stairs at Northeast sewage treatment plant, to F. and E. Auble, 2503 Germantown Ave., $33,105. Engrs. est. $50,000. Noted Dec. 7.

Canal Cover, etc.—New Smyrna, Fla.—For wall and cover canal, 3,000 ft. long, 9 ft. wide, 9 ft. deep, 2,500 sq.yd. concrete slab, 1,400 cu.yd. concrete in walls, to Hickey Bros., Furnace and Mound Sts., Columbus, O., $36,000. Noted Nov. 16.

Lumber—New Orleans, La.—Bd. Port Comrs., Court Bldg., furnishing creosoted piles of various lengths, to Hattiesburg Creosote Co., Hattiesburg, Miss., $12,342; also creosoted timber, to Creosoted Materials Co., Queen and Crescent Bldg., $13,262. Noted Dec. 7.

Foundation—Milwaukee, Wis.—Grand & Sixth Bldg., Inc., 425 East Water St., plain and wood pile foundation for 7 story and basement, 150 x 205 ft., brick, concrete and steel, Grand and 6th Sts., to S. M. Siesel, 160 Ogden Ave. Total cost $1,500,000. Noted Oct. 26 under "Buildings."

Foundation — Milwaukee, Wis. — Tate Printing Co., 133 2nd St., plain foundation for 8 story and basement, 60 x 120 ft., rein.-con. and brick office building, Bway., to R. Reisinger & Co., 646 Oakland Ave. Archts. est., building complete, $300,000.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: **Jan. 2.**

Sewer

Wilkes-Barre, Pa.

Sealed **proposals will be received by Fred** H. Gates, **City Clerk, Wilkes-Barre, Pennsylvania, for constructing a four and six-foot circular brick or segmental block sewer, about seventeen hundred feet in length. Bids close Tuesday, January 2nd, 1923, at 12 o'clock noon, and will be opened by City Council on the same day at three o'clock P.M. Plans and specifications may be had from B. K. Finch, City Engineer, upon making a deposit of $10.00, said deposit to be refunded upon receipt of bid or upon return of specifications to City Engineer on or before January 15th, 1923. Each bid must be accompanied by a certified bank check of bidder in the sum of $1.000.00 made payable to the City of Wilkes-Barre. Successful bidder must furnish to said city a surety company bond in the full amount of contract. Proposals to be endorsed "Proposals for Sewer" and addressed to Fred H. Gates, City Clerk, City Hall, Wilkes-Barre, Pennsylvania. The City Council reserves the right to reject any or all bids received.**

Bids: Dec. 26.

Road Improvement

Mineola, N. Y.

Sealed proposals will be received by the Board of Supervisors of Nassau County in its Chambers, in the Court House at Mineola, Long Island, on Tuesday, December 26, 1922, at 11 a.m. for the Improvement of the Long Beach Road between Barnum Island Creek and the Upland by the construction of bulk head and filling.

Plans and specifications may be seen at the office of the County Engineer at Mineola, Long Island.

Each bid must be accompanied by a certified check on a solvent bank in the sum of three per cent of the amount of the total contract, made payable to the County of Nassau.

The **Board of Supervisors reserves** the right to **reject any or all bids, waive any** informality in the bids, and to accept the bid which it deems most favorable to the interest of the County.

By order of the Board of Supervisors.

By **JESSE MERRITT,**
Clerk.

Dated at Mineola, L. I., December 11, 1922.

Bids: Dec. 26.

Rails and Poles

Cape May, N. J.

Sealed proposals will be received by the Commissioners of the City of Cape May, N. J., on Tuesday, December 26, 1922, at eleven o'clock A.M., for the purchase of the following:

184 Short Tons of Street Rail with Fish Plates, etc.: Five Short Tons Frogs and Switch Rails (six pieces); and 28 Iron Trolley Poles weighing approximately seven short tons.

The weights given are approximate and are given for the purpose of comparing proposals.

Proposals will be accepted for rail and poles separately or combined.

All proposals must be accompanied by a certified check for five per cent of the amount bid.

Material is stored in the City of Cape May and may be inspected at any time.

The Commissioners reserve the right to reject any or all bids.

Dated, December 12, 1922.

LEWIS T. STEVENS,
City Clerk, pro tem.

OFFICIAL PROPOSALS

Bids: Jan. 11.

Furnishing, Erecting and Painting Steel for Shed

New Orleans, La.

Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans at their office, Suite 200, New Court Building, until 3:00 P.M., January 11th, 1923, and then publicly opened for furnishing, erecting and painting of the structural steel required for the Market Street Shed.

A deposit of $1,000.00 in cash or certified check is required with each proposal.

A bond to the amount of 50% of the sum bid is required with notarial contract.

Specifications and proposal forms are on file in the office of the Supervisor of Purchases, at No. 1 Canal Street, New Orleans, Louisiana. Complete sets will be furnished to prospective bidders on deposit of $5.00, which will be refunded to depositors who submit proposals, or return sets in good condition.

The right is reserved to reject any or all bids and to waive informalities.

J. H. WALSH,
General Manager.

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Bids: Jan. 16.

Sewers

Richmond, Va.

Sealed proposals will be received at this office until 12 oclock noon, Tuesday, January 16, 1923, for the building of Reinforced Concrete, Precast Concrete, Segment Block, Brick and Vitrified Pipe sewers, at various places within the limits of the City of Richmond.

The approximate cost of the work is $700,000.00. Of this amount $250,000.00 will be for various contracts for materials, to be furnished by the City, at the site of the work, and $450,000.00 for various contracts for construction.

A deposit of $10.00 per set is required for plans and specifications before they are delivered to bidder, which amount is returnable after bidder's proposal is received.

Forms of proposals can be obtained on application.

A certified check for amount stated on proposals must accompany each bid as a guaranty of execution of contract. Director of Public Works reserves the right to reject any and all bids.

ALLEN J. SAVILLE,
Director of Public Works.

OFFICIAL PROPOSALS

Bids: Jan. 1.

Road Bed, Bridges and Culverts

Kelso, Wash.

Sealed proposals for the construction of roadbed, bridges and culverts for approximately eight and one-half (8½) miles of railroad in Cowlitz County, Washington, will be received by the Longview, Portland & Northern Ry. Company at its offices at Kelso, Washington, up to 2 o'clock P.M., January 1st, 1923, when they will be opened and read, such eight and one-half (8½) miles being regarded by the company as the first unit of contemplated construction expected to total twenty-six (26) miles, contract expected to be let early in 1923.

Drawings, specifications and form of proposal, contract and bond are on file in the office of the Chief Engineer, Kelso, Washington, and may be inspected by prospective bidders; or same will be furnished to interested parties on deposit of Ten Dollars ($10.00), which will be refunded upon return of papers in good condition.

Bids must be made on proposal forms to be furnished by the company and in the manner designated therein, same to be inclosed in sealed envelope bearing the name and address of the bidder and to be marked "Bid for Railroad Construction."

The principal quantities involved are approximately as follows:

153,580	cubic yards common excavation.
39,300	cubic yards loose rock excavation.
59,300	cubic yards solid rock excavation.
222,660	cubic yards embankment borrow.
649,710	station yards overhaul.
924	lin. feet 18 in. concrete culvert pipe.
672	lin. feet 24 in. concrete culvert pipe.
60	lin. feet 30 in. concrete culvert pipe.
380	lin. feet 36 in. concrete culvert pipe.
70	lin. feet 42 in. concrete culvert pipe.
43,860	lin. feet piling.
514,500	ft. B.M. lumber for trestles.

Each proposal must be accompanied by a certified check payable to the Longview, Portland & Northern Ry. Company for not less than five (5) per cent of the total amount of the bid as a guarantee that contract will be entered into if awarded.

The person or persons, if any to whom the contract is awarded will be required to file a bond in a sum not less than 50 per cent of the total amount bid, with good and sufficient sureties, to guarantee the faithful performance of the contract.

Special attention of the bidder is called to "Information for Bidders" included in the proposal forms.

The right is reserved to reject any and all bids.

LONGVIEW-PORTLAND & NORTHERN
RY. COMPANY.
By WESLEY VANDERCOOK,
Chief Engineer.

Bids: Jan. 5.

Municipal Building

Bath, N. Y.

Sealed proposals will be received at the office of the Village Clerk on or before noon, Jan. 5, 1923, for the construction of a Municipal Building.

Plans, specifications, and blank proposal form may be obtained from John W. Taggart, Village Clerk, Bath, N. Y., upon application and deposit of certified check for twenty-five ($25.00) dollars.

The right is reserved to reject any or all bids.

JOHN W. TAGGART
Village Clerk.

OFFICIAL PROPOSALS

Bids: Dec. 27.

Dock Wall

TERMINAL CONTRACT NO. 53-B.

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Wednesday, December 27th, 1922, at which place and hour they will be publicly opened and read, for the construction of barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and amendatory laws, and Chapter 402 of the Laws of 1920, as follows:

TERMINAL CONTRACT NO. 53-B.

For constructing certain portions of the dock-wall at Ohio Basin, Buffalo.

Contract plans, sheets 1 to 3, inclusive.

Plans may be seen and detailed specifications, engineers' estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works, at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

CHARLES L. CADLE,
Superintendent of Public Works.
November 23rd, 1922.

OFFICIAL PROPOSALS

Bids: Dec. 30.

Ditch Construction

Greenfield, Ind.

Sealed bids will be received at the Surveyor's Office, Room L, Court House, Greenfield, up until 2 P.M. on Saturday, December 30, 1922, for the construction of the George W. Putterbaugh, et al., Ditch.

The following are the approximate quantities of materials:

4,000 lineal feet 30 inch tile.
1,100 lineal feet 14 inch tile.
8 catch basins.
3,000 cubic yards of excavation.

The 30 inch tile may be of either clay, shale, or concrete as specified.

Plans and specifications will be mailed to any address upon receipt of check for **$10.00** made payable to the engineer.

CHARLES BOONE,
Engineer.
Greenfield, Indiana.

A Bonding Company's Suggestion to Official Proposal Advertisers

"A large part of our contract bond business is submitted to us by wire, and I am a constant reader of the Official Proposals in order to find out the size and nature of the work that is referred to in the bond application. Very frequently I am unable to get any clear idea of what the advertisers are asking bids on, and of course the prospective bidder or contractor is also at a loss to know what kind of a job is being advertised.

"Traveling expenses are heavy at the present time, and contractors pay out considerable sums during the course of a year in investigating prospective contracts. This of course is a large charge that the owners eventually pay, and anything that will reduce the general overhead of contract work will eventually be to the advantage of the owner.

"One way to reduce this overhead is to word the advertisement so that the contractor sitting in his office will know whether or not he should investigate and prepare a bid on the proposed work."

OFFICIAL PROPOSALS

Bids: Dec. 26.

Road Work

Penns Grove, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Common Council of the Borough of Penns Grove for the construction of certain streets in the Borough of Penns Grove, in the County of Salem, with a bituminous macadam surface; estimated amount of pavement required is 20,793 square yards; and opened and read in public at the Borough Hall, Penns Grove, N. J., December 26th, 1922, at 8 P.M., standard time.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Keasbey & Sparks, Engineers, have been filed in the office of the said engineers at Salem, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blueprints of the drawings by the engineers on proper notice.

By order of the Mayor and Common Council of the Borough of Penns Grove.

CLYDE W. STRUBLE, Clerk.

Bids: Jan. 15.

Bulkhead

Jersey City, N. J.

Sealed proposals will be received by the Hudson County Park Commission at its office, 1 Exchange Place, Jersey City, N. J., on Monday, January 15th, 1923, at 11 o'clock a.m., for the construction of a Bulkhead at West Side Park, Jersey City, N. J., and work connected therewith in accordance with plans and specifications on file at the office of the Hudson County Park Commission.

Blank form of bid showing estimate of quantities must be obtained at the office of the Hudson County Park Commission.

Each bidder must accompany his bid with a certified check drawn to the order of the Hudson County Park Commission to the amount of 5% of his bid.

The successful bidder will be required to furnish a surety company's bond to be approved by the Hudson County Park Commission in the full amount of his bid with satisfactory security conditioned for the faithful performance of his contract.

There shall be two contracts ,the original and copy which shall first be signed and executed by the successful bidder and presented to the Hudson County Park Commission for signature.

Bids must be enclosed in sealed envelopes indorsed "Proposals for Bulkhead and Reclamation, West Side Park, Jersey City, N. J.," directed to the Hudson County Park Commission and delivered to the Secretary of the Commission at or before the hour above specified. The Commission reserves the right to reject any or all bids.

Dated: December 18, 1922.
Hudson County Park Commission.
BY JOSEPH FILORAMO, JR.,
Secretary.

WILL SUBLET

About 40,000 cu.-yds. Excavation on two miles road work in Penn. Suitable for small shovel and teams material consists of earth and loose rock and can be worked all winter.

M-399, Engineering News-Record
Real Estate Trust Bldg., Philadelphia, Pa.

Christmas Greetings!

May this Christmas be for you one of glory and gladness!

May true happiness come to those most dear to you!

May the incoming year greet you with prosperity in abundance!

May every dawn bring with it some new delight for you!

May every morning add to your joys, and every evening bring you peace and contentment!

Harmon V. Swart
92 William Street, New York City

OFFICIAL PROPOSALS

Bids: **Jan. 5** (Date of closing extended).

Reservoir Dam

Bluefield, W. Va.

Sealed proposals or bids for the construction of a clay or earthen dam, containing about 40,000 cubic yards of material, to be sluiced into place, will be received at the office of the BLUEFIELD WATER WORKS & IMPROVEMENT COMPANY, at Bluefield, West Virginia, until three o'clock P.M., on the 5th day of January, 1923, when they will be publicly opened and read. All proposals shall be enclosed in an envelope furnished by the above styled company and shall be accompanied by a certified check on some national bank, in the sum of five (5%) per cent of the amount of the proposed bid. The contractor to whom the award is made will be required to furnish surety company bond in the sum of thirty five (35%) per cent of the amount of the contract, within thirty days after official notice of the award of contract and in accordance with the terms of the specifications. The right is reserved to reject any or all bids. Drawings, specifications and blank forms of proposals may be consulted at the office of company, 601 Princeton Avenue, Bluefield, West Virginia, or they will be forwarded by mail upon request if $4.00 accompanies the order. This amount will be refunded upon return of the plans and specifications in reasonably good order.

BLUEFIELD WATER WORKS & IMPROVEMENT COMPANY.
WM. McCARTHY,
Superintendent.

November 23rd, 1922.

U. S. GOVERNMENT

TREASURY DEPARTMENT, Supervising Architects Office, Washington, D. C., December 18, 1922.—Sealed proposals will be opened in this office at 3 p.m., January 12, 1923, for Remodeling in the U. S. Post Office and Sub Treasury, Boston, Mass. Drawings and specifications may be obtained, in the discretion of the Supervising Architect, at this office, or at the office of the Supervising Chief Engineer, Room 437, Post Office Building, Boston, Mass. Jas. A. Wetmore, Acting Supervising Architect.

OFFICIAL PROPOSALS

Bids: Jan. 12.

Inlet and Outlet Works

BALDWIN FAIRMONT PROJECT,
CONTRACT 18

Cleveland, Ohio.

Sealed proposals will be received at the Office of the Commissioner of Purchases and Supplies, Room 219, City Hall, until 12.00 o'clock noon, official Cleveland time, January 12, 1923, for constructing inlet and outlet works at Fairmont Reservoir for the Division of Water, and will be opened and read in the Council Chamber immediately thereafter.

Each bid must be accompanied by a certified check on a solvent bank for $2,500 drawn payable to the City of Cleveland as surety for the acceptance of the contract. Each bid must be made in accordance with the plans and specifications which may be obtained at the Division of Water, Drafting Room 213, City Hall, upon the deposit of five dollars ($5.00) per set. Said deposit to be redeemed upon the return of said copies in good condition.

No proposal will be entertained unless made on the blank form furnished by the Division of Water and delivered at the Office of the Commissioner of Purchases and Supplies previous to 12:00 o'clock noon on the day above specified.

The city reserves the right to reject any or all bids.

Cleveland Water Department.
A. V. RUGGLES,
Commissioner of Water.

U. S. GOVERNMENT

SEALED PROPOSALS will be opened by the Supt. of Lighthouses, New Orleans, La., 2 o'clock P.M., January 18, 1923, for (1) furnishing f.o.b. cars approximately 1,800 tons of rough quarried rock; (2) furnishing and placing approximately 1,800 tons of rock protection around Sand Island Light Station, Ala.; (3) loading, transporting, and placing around Sand Island Light Station, Ala., 1,800 tons of rock to be furnished by the Government. Separate proposals for each item of service. Information upon application.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, WILMINGTON, N. C., Nov. 25, 1922. Sealed proposals will be received here until 12 M., December 26, 1922, and then opened for constructing one 60-foot by 22-foot by 4-foot steel barge. Further information on application.

PROPOSALS FOR OFFICERS' QUARTERS.—Sealed proposals will be received by Constructing Quartermaster, U. S. Army, Edgewood Arsenal, Md., until 11:00 a.m., December 27, 1922, and then opened for the construction of twenty sets of frame officers quarters at Edgewood Arsenal, Md. Plans and specifications obtainable upon deposit of $10.00, which will be refunded upon return of same in good condition. Right is reserved to accept any or to reject all bids.

SEALED PROPOSALS, indorsed "Proposals for Roads, Tupper Lake, N. Y., Specification No. 4727," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., December 28, 1922, and then and there publicly opened, for concrete roads and sidewalks, concrete culverts, macadam roads, cobble stone gutters, inlets, catch basins, and terra cotta piping, all at the U. S. Veterans' Hospital, Tupper Lake, N. Y. Drawings and Specifiation No. 4727 may be obtained on application to the Bureau of Yards and Docks, Navy Department, Washington, D. C., or to the Officer in charge of construction U. S. Veterans' Bureau, Tupper Lake, N. Y. Deposit of a check or postal money order for $10, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the drawings and specification. L. E. GREGORY, Chief of Bureau, December 5, 1922.

U. S. ENGINEER OFFICE, Florence, Alabama. Sealed proposals will be received here until 11 a.m., December 30, 1922, and then opened, for the construction and delivery of one 15-inch dredging pump for dredge Pettus. Further information on application.

U. S. ENGINEER OFFICE, CINCINNATI, O. Sealed proposals will be received here until Jan. 5, 1923, and then opened for the construction of one 24-inch pipe line dredge. Further information on application.

U. S. ENGINEER OFFICE, HUNTINGTON, W. VA., Nov. 29, 1922. Sealed proposals will be received here until 11 a.m. (Eastern time) December 30, 1922, and then opened, for constructing a Fireproof Powerhouse at Dam No. 30, Ohio River. Further information on application.

SEALED PROPOSALS will be opened by the Supt. of Lighthouses, Key West, Fla., 2 P.M., January 15, 1923, for furnishing and delivering f.o.b. shipping point, metal work complete for ten (10) light towers. Information upon application.

U. S. ENGINEER OFFICE, NASHVILLE, TENN. Sealed proposals will be received here until 11 A.M., January 16, 1923, and then opened, for steel hull for dipper dredge Watauga. Further information on application.

SEALED PROPOSALS will be received and publicly opened by the Director, U. S. Veterans' Bureau, in the Office of the Quartermaster General, 2306 Munitions Building, Washington, D. C., at 11 A.M., January 16, 1923, for construction of a Neuro-Psychiatric Hospital at American Lake, Tacoma, Washington, for the Veterans' Bureau. Work will include construction of twenty-eight buildings of reinforced concrete, tile and brick, complete with water, lighting, heating and sewer systems, roads and walks. Plans and specifications may be obtained after December 9, 1922, from the Quartermaster General, Room 2306, Munitions Building, Washington, D. C., upon deposit of $100. One set of plans and specifications will be on exhibition at each of the following stations: Constructing Quartermasters at 39 Whitehall St., New York City, and Fort Mason, California, and Quartermaster Supply Officers at 1819 West Pershing Road, Chicago, Ill., Second and Arsenal Sts., St. Louis, Mo., Stacy Street Terminal, Seattle, Washington, and New Post Office Building, Portland, Oregon. If bidders on the coast will wire the Quartermaster General's Office, date they are mailing check for deposit, this will be taken as evidence of good faith and plans and specifications will be mailed them at once.

Wanted—Correspondents
for Engineering News-Record

If you want to earn some extra money and are a resident in one of the cities named below;

If you can spare an hour or two a day *during business hours* for calling upon architects, contractors, engineers and city departments;

Then write me concerning your qualifications and present connection, if you live in

ALABAMA
Anywhere
ARIZONA
Bisbee
Globe
Tuscon
ARKANSAS
Little Rock
CALIFORNIA
Los Angeles
CONNECTICUT
Hartford
INDIANA
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South Bend
IOWA
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KENTUCKY
Louisville
MISSOURI
St. Joseph
MONTANA
Butte
NEBRASKA
Lincoln
NEVADA
Carson City
NEW JERSEY
Except Trenton
NEW YORK
Binghamton
Schenectady

OREGON
Astoria
Medford
Salem
SOUTH CAROLINA
Except Columbia
SOUTH DAKOTA
Sioux Falls
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THE ABOVE RATES ARE FOR ADVERTISEMENTS SET UNDISPLAYED. FOR DISPLAY RATES SEE "EQUIPMENT" HEADING.

E. N. R.

POSITIONS VACANT

A DISTRICT engineer wanted for a large company doing work all over the United States, for permanent position on variety of engineering service in Mississippi and Louisiana wth headquarters at Meridian, at salary of $300 a month. Southern man with long experience in one or both of above states preferred. Address P-345, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

AN experienced railroad draftsman wanted in the chief engineer's office, Pittsburgh. State age, education, experience, references, salary expected, and submit a small sample of work. R. P. Forsberg, Principal Assistant Engineer, P. & L. E. R.R., Pittsburgh, Pa.

DRAFTSMAN, experienced, wanted for structural steel buildings; apply by mail only, giving age, nationality, education, experience and salary expected. Post & McCord, 101 Park Ave., New York.

DRAFTSMAN, preferably with designing experience on engines or air compressors. Location Ohio. Apply, giving full particulars, P-348, Eng. News-Record, 10th Ave. at 36th St., New York City.

DRAFTSMAN wanted, familiar with steam and street railway special track work. State salary, experience, etc. P-410, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

ENGINEER and draftsman wanted by consulting engineer in North Carolina. Good opportunity and permanent position for the right man. State in application age, qualifications and salary desired. P-386, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

ENGINEER wanted, mechanical and electrical, as assistant to the superintendent of a portland cement plant in the East; must be good, competent, trustworthy young man, with practical experience (cement not necessary); excellent chance for advancement if you can make good. State age, nationality, experience and wages expected. P-319, Eng. News-Record, Real Estate Trust Bldg., Philadel-

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ENGINEER wanted, familiar with street railway special track work, to work into sales organization. Give full details in first letter. P-409, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

Construction Men

Learn "Line" and "Grade" by Actual Practice.

Level, Transit, and Plane Table Work.
"Running" of Farm, Stadia, Highway and Railroad Surveys.

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Day and evening courses. Booklet.

The Pan-American Engineering School
39 West 17th St., New York City

POSITIONS VACANT

ESTIMATOR and salesman. Structural steel and ornamental iron. Cleveland firm. Engineering experience desired. Good chance for right man. State age, experience and salary expected. All replies strictly confidential. P-414, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

EXPERIENCED plane table man wanted by city in middlewest for several months survey. Send references, experience and name salary. P-408, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

FIRST class structural steel detailers and checkers with experience on mill buildings, office buildings, etc. Position in Pittsburgh district. State experience and salary desired. P-525, Eng. News-Record, Leader-News Bldg., Cleveland, O.

ONE concrete engineer, experienced in preparing complete designs and estimates for reinforcing materials. One engineering salesman familiar with fireproof building materials. Give age, education, references, detailed experience, salary desired, and earliest reporting date. P-350, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

SEVERAL first class structural draftsmen to make and check shop drawings. None but competent and experienced men are desired. Reply giving full information, Whitehead & Kales Company, Detroit, Mich.

POSITIONS VACANT

STRUCTURAL steel detailers and checkers wanted for building work in New York district. Give age, experience, record, nationality and salary desired. P-385, Eng. News-Record, 10th Ave. at 36th St., New York City.

STRUCTURAL steel draftsmen and checkers wanted. Apply Hay Foundry & Iron Works, Newark, N. J.

SUPERINTENDENT wanted on road job near New York City. Heavy rock excavation. Large amount dry rubble walls. Long job. P-401, Eng. News-Record, 10th Ave. at 36th St., New York City.

WANTED—Writer in Civil Engineering subjects; must be a college graduate with practical experience as well as experience in technical writing. Position requires residence in eastern city of 150,000. State education and experience, also initial salary expected in first letter. New York or Philadelphia interview. P-415, Eng. News-Record, 10th Ave. at 36th St., New York City.

WANTED at once an architect with broad general experience, preferably licensed in North Carolina. This is an excellent opportunity for a live man. Give full details on training, age, experience and salary considered. P-412, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

The Erie Employment & Supply Co.
8701 Union Ave., Cleveland, Ohio

Boarding Camps, and Commissaries, operated for Railroads, Manufacturers, Contractors, Coal Mines, etc. We furnish laborers, mechanics and all classes of skilled help. Employment offices at Cleveland, O., Cincinnati, O., Toledo, O., Columbus, O., St. Louis, Mo., Indianapolis, Ind., Chicago, Ill., Danville, Ill., and Buffalo, N. Y.

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CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Dec. 29	Phila., Pa.	Dec. 21
Jan. 2	New Ulm, Minn.	Dec. 28
Jan. 3	Rapid City, S. D.	Dec. 21
Jan. 11	Albemarle, N. C. Adv. Dec. 28	Dec. 21
Jan. 12	Cleveland, O.	Dec. 21
Jan. 15	Cyril, Okla.	Dec. 14
Jan. 22	Hinsdale, Ill.	Dec. 21
Feb. 1	Spokane, Wash.	Nov. 16

SEWERS

Bids Close		See Eng. News-Record
Dec. 30	Lakewood (Cleveland P. O.), O.	Dec. 21
Jan. 2	Wilkes Barre, Pa Adv. Dec. 14 to 28.	Dec 14
Jan. 3	Brooklyn, N. Y.	Dec. 28
Jan. 9	Newark, N. J.	Dec. 21
Jan. 15	St. Petersburg, Fla. Adv. Dec. 28.	Dec. 28
Jan. 15	Wash., D. C. Adv. Dec. 28.	Dec. 23
Jan. 16	Richmond, Va. Adv. Dec. 21 and 28.	Dec. 21

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Jan. 24	Fargo, N. D.	Dec. 7

BRIDGES

Bids Close		See Eng. News-Record
Jan. 9	Ft. Wayne, Ind.	Dec. 28
Jan. 13	Cambridge, Mass. Adv. Dec. 28.	Dec 28
Jan. 23	Spokane, Wash	Sept. 21
Apr. 1	Wilkes-Barre, Pa.	Dec. 14
Sept. 1, 1923,	Sydney, New South Wales, Australia	Aug. 3

DAMS

Bids Close		See Eng. News-Record
Jan. 5	Bluefield, W. Va. Adv. Nov. 30 to Dec. 28.	Nov. 30

RAILWAYS

Bids Close		See Eng. News-Record
Jan. 1	Washington	Dec. 7

EXCAVATION, DRAINAGE, IRRIGATION

Bids Close		See Eng. News-Record
Dec. 29	Logansport, Ind.	Dec. 21
Dec. 30	Greenfield, Ind.	Dec. 14
Jan. 3	Brooklyn, N. Y.	Dec. 28
Jan. 9	Glencoe, Minn.	Dec. 14

STREETS AND ROADS

Bids Close		See Eng. News-Record
Dec. 29	Long Island City, N. Y.	Dec. 21
Dec. 29	Winamac, Ind.	Dec. 21
Dec. 30	Logansport, Ind.	Dec. 21
Dec. 30	Quebec	Nov. 23
Dec. 30	Quebec	Nov. 2
Dec. 30	Quebec	Nov. 9
Dec. 30	Quebec	Nov. 16
Dec. 30	Quebec	Nov. 30
Jan. 2	St. Louis, Mo.	Dec. 7
Jan. 2	Tacoma, Wash.	Dec. 21
Jan. 2	Richmond, Va.	Dec. 23
Jan. 3	Independence, Kan.	Dec. 21
Jan. 4	Rio Vista, Calif.	Dec. 21
Jan. 4	Vincennes, Ind.	Dec. 28
Jan. 4	Marion, Ind.	Dec. 28
Jan. 4	Brooklyn, N. Y.	Dec. 23
Jan. 4	Columbia City, Ind.	Dec. 28
Jan. 5	Washington, Ind.	Dec. 28
Jan. 5	Larned, Kan.	Dec. 7
Jan. 5	Ohio	Dec. 28
Jan. 5	Elizabethtown, Ind.	Dec. 28
Jan. 6	Albion, Ind.	Dec. 28
Jan. 6	Lafayette, Ind.	Dec. 28
Jan. 7	Duluth, Minn.	Sept. 28
Jan. 8	San Diego, Calif.	Dec. 28
Jan. 9	Modesto, Calif.	Dec. 28
Jan. 10	Albemarle, N. C. Adv. Dec. 28	Dec. 21
Jan. 10	San Francisco, Calif.	Dec. 28
Jan. 10	Florida	Dec. 28
Jan. 10	Elkader, Ia.	Dec. 28
Jan. 11	Wichita, Kan.	Dec. 21
Jan. 11	Atlantic City, N. J. Adv. Dec. 28.	Dec. 28
Jan. 11	Louisiana	Dec. 28
Jan. 11	Virginia Adv. Dec. 28.	Dec. 28
Jan. 16	Michigan	Dec. 28
Jan. 23	Spokane, Wash.	Dec. 21
Jan. 24	Faribault, Minn.	Dec. 14
Jan. 25	Ft. Smith, Ark.	Dec. 28
Jan. 30	Quebec	Dec. 28

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Jan. 2	St. Louis, Mo.	Dec. 7
Jan. 4	Delaware, O.	Dec. 14
Jan. 10	Waco, Tex.	Dec. 28
Jan. 15	Great Falls, S. C.	Dec. 28

BUILDINGS

Bids Close		See Eng. News-Record
Jan. 2	Olean, N. Y.	Nov. 9
Jan. 2	Duluth, Minn.	Nov. 23
Jan. 2	Lawrence, Kan.	Dec. 14
Jan. 2	Providence, R. I.	Dec. 21
Jan. 2	Rome, Ga.	Dec. 21
Jan. 2	Dover, Del.	Dec. 21
Jan. 3	Cleveland, O.	Dec. 14
Jan. 3	Farmersville, O.	Dec. 21
Jan. 3	Baltimore, Md.	Dec. 28
Jan. 4	Arlington, O.	Dec. 14
Jan. 4	Baker, La.	Dec. 14
Jan. 5	Bath, N. Y.	Dec. 14
Jan. 5	Detroit, Mich.	Dec. 21
Jan. 6	Newark, N. J.	Dec. 21
Jan. 10	Nashville, Tenn.	Dec. 7
Jan. 10	Grand Rapids, Mich.	Dec. 21
Jan. 10	Baltimore, Md.	Dec. 28
Jan. 11	Elizabeth, N. J.	Dec. 14
Jan. 15	Dallas, Tex.	Dec. 21
Jan. 19	Monticello, Ia.	Dec. 21
Feb. 1	Chicago, Ill.	Dec. 21
Mar. 23	Shreveport, La.	Nov. 9

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Dec. 30	Power House — Huntington, W. Va. Adv. Dec. 7 to 28.	Dec. 7
Dec. 30	Dredging Pump—Florence, Ala. Adv. Dec. 7 to 28.	Dec. 7
Jan. 3	Piers—Pearl Harbor, H. T.	Nov. 16
Jan. 3	Drainage System—Del Rio, Tex.	Dec. 14
Jan. 3	Alterations—El Paso, Tex.	Dec. 21
Jan. 5	Dredge—Cincinnati, O. Adv. Dec. 7 to 28.	Dec. 7
Jan. 9	Fuel Oil—Wash., D. C.	Dec. 21
Jan. 9	Extension — St. Cloud, Minn.	Dec. 21
Jan. 10	Extension—Elmira, N. Y.	Dec. 21
Jan. 12	Remodeling—Boston, Mass.	Dec. 21
Jan. 15	Metal Work — Key West, Fla. Adv. Dec. 21 and 28.	Dec. 21
Jan. 15	Pipe Line Dredge—Cincinnati, O.	Dec. 14
Jan. 15	Dredging—Virginia	Dec. 28
Jan. 15	Scows—Wilmington, Del. Adv. Dec. 28.	Dec. 28
Jan. 15	Scows—Phila., Pa.	Dec. 28
Jan. 16	Hospital—Tacoma, Wash. Adv. Dec. 14 to 28.	Dec. 14
Jan. 16	Hull—Nashville, Tenn. Adv. Dec. 21 and 28.	Dec. 21
Jan. 17	Dredging—Phila., Pa.	Dec. 28
Jan. 17	Piers—Astoria, Ore.	Dec. 28
Jan. 18	Remodeling—Boston, Mass. Adv. Dec. 28.	Dec. 28.
Jan. 18	Furnishing and Placing Rock —New Orleans, La.	Dec. 21
Jan. 22	Bridges—Alaska	Dec. 28
Jan. 23	Lock Operating Machinery, etc. —Huntington, W. Va. Adv. Dec. 28.	Dec. 28
Jan. 24	Levee Work—St. Louis, Mo. Adv. Dec. 28.	Dec. 28
Jan. 24	Refrigerating and Ice-Making Plant—Pearl Harbor, H. T.	Dec. 14
Feb. 15	Furnishing Stone, etc.—Crescent City, Calif.	Dec. 28

MISCELLANEOUS

Bids Close		See Eng. News-Record
Dec. 29	Crane—Phila., Pa.	Dec. 21
Dec. 29	Coal Handling Equipment — Phila., Pa.	Dec. 21
Dec. 29	Motor Trucks—Long Island City, N. Y.	Dec. 21
Dec. 30	Grain Elevator—Port Arthur, Ont.	Dec. 21
Dec. 30	Asphalt, Crushed Stone, Sand, etc.—Phila., Pa.	Dec. 28
Dec. 31	Crushed Stone — Toronto, Ont.	Dec. 21
Jan. 1	Transmission Line—Spokane, Wash.	Nov. 9
Jan. 2	Steel Water Pipe, etc.—Terra Bella, Calif.	Dec. 21
Jan. 2	Road Levee and Bridge—Redwood City, Calif.	Dec. 28
Jan. 3	Portland Cement — Wisconsin	Dec. 28
Jan. 3	Motor Gasoline — New York, N. Y.	Dec. 28
Jan. 8	Rock Crusher and Grader — Minneapolis, Minn.	Dec. 28
Jan. 8	Wharf—Detroit, Mich.	Dec. 28
Jan. 9	Gravel—Louisiana	Dec. 28
Jan. 11	Structural Steel—New Orleans, La.	Dec. 21
Jan. 15	Bulkhead — Jersey City, N. J. Adv. Dec. 21 and 28.	Dec. 21
Jan. 31	Dry Dock Machinery—Esquimalt, B. C	Dec. 21

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

O., Bexley (Columbus P. O.) — See "Streets and Roads.'

O., Fairview—Preparing plans 12,000 ft. 6 in. and 21,000 ft. 12 in. c.i. mains. $70,000. Frazier-Ellms-Sheal Co., 2000 B. F. Keith Bldg., Cleveland, engrs. Noted Oct. 19.

Mich., Jackson—Plans new pumping station. $150,000. Engineer not selected.

Ill., Lyons—See "Sewers."

Ind., Bloomington — Having plans prepared new water supply system. $600,000. Pearce, Greeley & Hansen, 39 West Adams St., Chicago, engrs.

Wis., Iron River—Iron River Water & Light Co. plans to rebuild pump house and power plant, brick, rein.-con. and steel, plain foundation, and 2 rein.-con. and steel dams, recently destroyed by flood. $150,000. L. H. Callahan, mgr. Architect not selected.

Wis., Racine—Having plans prepared new waterworks intake, 7,000 ft. 36 in. c.i. pipe, crib and intake well. $280,000. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, engrs.

Tex., Highland Park—Jan. 16 to vote on $125,000 bond issue for extensive waterworks improvements. M. Costello, city secy.

Okla., Canton — Had plans prepared waterworks system, incl. tank, tower, mains, well and pumping equipment. $53,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Nov. 2.

Okla., Clinton—Having plans prepared water works and electric light extensions. $45,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Guthrie—Voted $22,000 bonds for extending waterworks and $18,000 bonds for sewers. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Nov. 2 under Sewers.

Okla., Nowata—Jan. 23, to vote on $111,000 bonds, new pumps, 2,000,000 gal. reservoir, power plant and mains. Engineer not selected.

Okla., Pauls Valley—Having plans prepared waterworks extensions incl. complete new supply and filter plant. $165,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Poteau—Voted $45,000 bonds for replacing present mains with c.i. pipe and extending present system. J. E. Davis, Poteau, engr.

Okla., Roosevelt—Plans water purification plant, mains, etc. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Snyder—Having plans prepared waterworks extensions. $15,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Weatherford — See "Industrial Works."

Okla., Wetumka — Had plans prepared water purification plant, mains and pumping equipment. $83,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Wash., Usk — W. F. Cochrane plans canals, pumping plant, diversion dam, dike, concrete pipe line. $35,000. R. M. Sandersen, South 321 Lincoln St., Spokane, engr.

Waterworks (Continued)

Ore., The Dalles—Plans prepared for addition to water supply system, incl. 244,000,000 gal. reservoir, with earth and rock fill dam, 88 ft. high, 650 ft. long on top, 8 mi. 16 in. pipe, and new high level reservoir. $375,000. Contract will probably be let next spring. Stevens & Koon, Spalding Bldg., Portland, engrs.

Calif., Palo Alto—Plans election to vote on $110,000 bonds for extensions to water works system. J. F. Byxbee, Jr., city engr.

Ont., Brantford—Having plans prepared waterworks pumping plant. F. Adams, city engr. $30,000. Prices wanted on equipment.

Ont., Galt—City retained James, Proctor & Redfern, engrs., 36 Toronto St., Toronto, to report on waterworks system. It is probable that new mains will be laid and more pumps installed. $50,000.

Ont., Lansing—North York Twp. having plans prepared waterworks system, incl. pumps, pumphouse, c.i. mains, hydrants, valves, reservoir and tank. $125,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Sandwich—See "Streets and Roads."

Ont., Ottawa—Plans water main extensions in Burnham Rd. $2,620, Letchworth Rd. $2,500, Beckwith Rd. $3,230, Glengarry Rd. $2,980, Belgrave Rd. $2,950, Bower St. $4,100, Clegg St. $2,500, Onslow Crescent $4,220, Leonard Ave. $715. A. F. Macallum, city engr.

Ont., Shawville—Takes bids in January building waterworks system. I. D. McCrea, Ottawa (street address not available), engr.

Ont., Scarboro—Scarboro Twp. plans to expend $34,000 on new waterworks area, incl. 8,000 ft. 12 in. c.i. trunk. C. E. Fraser, twp. engr.

B. C., Vancouver—Voted $50,000 by law and soon takes bids for waterworks. C. E. Tisdall, mayor.

BIDS DESIRED

Minn., New Ulm—Jan. 2, by H. Huevelmann, supt. Waterworks Dept., pump equipment for well, 250 g.p.m. pump. F. D. Minium, city engr.

Que., Greenfield Park — Mayor taking bids till end of January for 13,820 ft. watermains in several streets. $34,327. A. Vincent, Longueil, engr.

BIDS RECEIVED

N. Y., Brooklyn — Bd. Water Supply, Municipal Bldg., New York, opened bids Dec. 19, constructing Mt. Prospect conduit a portion of city conduits of Catskill aqueduct from Shaft 24 of city tunnel in Ft Greene Park, along Cumberland St., Lafayette, Washington and Flatbush Aves., to Clarkson Ave., here, from A. Paino, 32 Court St., $995,305 Beaver Eng. & Contg. Co., 51 Chambers St., New York, $995,355; T. A. Gillespie Co., 5 Dey St., New York, $1,013,656. Noted Nov. 30.

CONTRACTS AWARDED

Mich., Detroit—Furnishing and installing 289,000 bronze strainer caps for strainer system of filtration plant, to Michigan Valve & Fdry. Co., 13631 Parkinson St., $30,400. Noted Nov. 16.

Mich., Detroit—Water Bd. will lay 5,800 ft. 6 in. and 1,000 ft. 8 in. c.i. mains in Jane, Robinwood, Josephone, Buena Vista, Meadowbrook, Larkins and Harding Aves., by day labor. $15,000. T. A. Leisen, Water Works Park, engr.

Que., Montreal—R. Bauset, city clk., 46 x 58 x 103 ft. rein.-con., brick and steel distribution control building for new pumping station, Atwater Ave., to E. G. M. Cape & Co., Cathcart St., $167,000. Noted Dec. 14.

Sewers

PROPOSED WORK

O., Bexley (Columbus P. O.)—Preparing plans 8 in. concrete sewer in various alleys. $16,000. Jennings-Lawrence Co., Hartman Bldg., Columbus, engrs.

O., Bexley (Columbus P. O.) — See "Streets and Roads."

Ind., Miller — Plans sewerage system. $300,000. W. P. Cottingham, Gary, engr.

Ill., Lyons—Making plans and takes bids about Jan. 29 for sewer and waterworks project. $130,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ia., Mechanicsville — Takes bids about Feb. 1 for new sanitary sewerage system. Currie Eng. Co., Webster City, engrs. Noted Dec. 21.

WATERWORKS—CLEVELAND, O.

Following are lowest three bids opened Dec. 1, by Dept. of Pub. Utilities, Div. Water, for furnishing and laying Park Lane, Carnegie Ave. and Frank Ave. mains, Baldwin-Fairmount Project, Contr. No. 17, (A) D. Lowensohn, Davis & Farley Bldg. (awarded contract); (B) P. F. Connolly, Commonwealth Bldg.; (C) Stange-Walsh Constr. Co., 2315 Fairmount Rd. The unit bids were as follows:

	A	B	C
12,000 cu.yd. excavation and backfilling	$2.40	$3.24	$3.15
5 M ft. b. m. lumber and wooden sheeting, left in place	30.00	50.00	20.00
2,610 ton furnishing and laying cast iron, straight, bell and spigot pipe	71.00	69.90	70.00
38 ton furnishing and laying cast iron, bell and spigot standard fittings	165.00	150.00	150.00
48 ton furnishing and laying cast iron, bell and spigot special fittings	170.00	150.00	165.00
Setting one 48-in. gate valve furnished by the city	250.00	100.00	200.00
Setting eleven 36-in. gate valves, furnished by the city	200.00	75.00	150.00
Setting two 30-in. gate valves, furnished by the city	150.00	75.00	125.00
Setting one 24-in. gate valves, furnished by the city	125.00	75.00	100.00
Setting one 16-in. gate valve, furnished by the city	100.00	50.00	75.00
40 cu.yd. brick masonry	27.00	30.00	27.00
25 cu.yd. concrete masonry	27.00	20.00	27.00
1,000 lb. steel reinforcement and miscellaneous wrought iron	.07	.10	.06
100 lin.ft. furnishing and laying 12-in. vitrified pipe drains	3.00	3.50	2.50
200 lin.ft. furnishing and laying 6-in. vitrified pipe drains	1.25	2.00	1.50
Furnishing and setting eight 2-in. brass drains; and setting 2-in. valves and valve boxes, furnished by the City	50.00	50.00	50.00
200 lin.ft. furnishing and laying 2-in. galvanized iron pipe	1.25	1.00	1.00
Extended totals	$234,690	$238,819	$239,460

Kan., Jetmore—See "Streets and Roads."

Kan., Wichita — Resolution passed for storm sewers in Dist. 24. $120,000. P. L. Brockway, city engr.

Tex., Rosenberg—Jan. 10 to vote on $50,000 bond issue for modern sanitary sewerage system. E. E. Sands, Mason Bldg., Houston, consult. engr.

Okla., Guthrie—See "Waterworks."

Colo., Denver—Takes bids about Jan. 10, 26,000 ft. 8-10 in. concrete pipe sewer. $34,000. A. K. Vickery, City Hall, engr. Noted Nov. 23.

Wash., Pullman—Having plans prepared sewerage system. $60,000-$65,000. C. H. and H. S. Green, N517 Lincoln St., Spokane, engrs.

Calif., Palo Alto—Plans election to vote on $50,000 bonds extending sewerage system. J. F. Byxbee, Jr., city engr.

Calif., San Mateo — See "Streets and Roads."

Que., Montreal—Plans 6 mi. of 12 ft. sewer from north end of city to Cartierville. $500,000. E. Fusie, supt. Sewer Dept.

Ont., Gravenhurst — Having plans preprepared sewerage system and concrete sewage disposal plant, vitr. tile pipe 8 in. up. $30,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Hamilton—Had plans prepared complete intercepting sewerage system and sewage disposal plant, $2,500,000. First report calls for expenditure of $300,000 for sewage disposal plant, rein.-con. tanks and sedimentation tanks, at west end of city. E. R. Gray, city engr. Gore, Nasmith & Storrie, Confederation Life Bldg., Toronto, consult engrs.

Ont., Sandwich—See "Streets and Roads."

Ont., Toronto—See "Streets & Roads."

BIDS DESIRED

N. Y., Brooklyn—Jan. 3, by E. Riegelmann, boro pres., Boro Hall, sewers in 40th, East 10th, Malta and Bristol Sts., Vanderbilt and Hegeman Aves., Lenox Rd., and Rutherford Pl.

D. C., Wash.—Jan. 15 by Dist. Comrs., 509 Dist. Bldg., for 660 ft. sewer; adv. this issue.

Fla., St. Petersburg—Jan. 15, at office H. T. Davis, dir. of finance, mechanical equipment for sewage screening plant; adv. this issue.

Mich., Lansing — Taking bids storm sewers, incl. 562 ft. 66 in., 4,816 ft. 60 in., 672 ft. 54 in., 391 ft. 48 in., 506 ft. 30 in. and 663 ft. 24 in. rein.-con. or segmental block pipe. $130,000. Private plans.

Calif., San Francisco—T. McDougall (Star Garage), 150 Turk St., receiving bids 2 story, rein.-con. addition to garage. $60,000. J. L. Stewart, Claus Spreckels Bldg., archt. Noted Nov. 23.

CONTRACTS AWARDED

N. Y., Syracuse—Unit price alternate bids for electric driven sewage pumps, received Oct. 10, are given on page 1121. The bids were for motors and equipment of the slip-ring against the brush-shifting type and were compared on the basis of yearly capitalized amortization charges plus annual charges for current.

Pa., Pittsburgh—To T. Cronin Co., South 18th St., sewers in Ravenna and Spohr Sts. $56,320, relief sewers in Wilkins and South Homewood Aves., South Dallas and Reynolds Sts., $61,594.

Mont., Winnett — For ¾ mi. trunk and lateral sewer, to Two Miracle Concrete Co., Ford Bldg., Great Falls, $37,000.

Ont., Hamilton—G. C. Coppley, chn. Bd. Control, 2,480 ft. sewer in King and McKittrick Sts., to Hamilton Contg. Co., Home Bank Bldg., $61,770. Noted Nov. 30.

Ont., Toronto—To Murphy Contg. Co., Toronto, (street address not available), sewers in Farnum Ave. $5,760, Balmoral Ave. $7,940, Grenadier Rd. $3,552; to John McKnight Constr. Co., 88 St. Davids St., sewer extension in Dundas St. $2,285; to Natl. Contg. Co., 9 Garnock Ave., sewer in Riverdale Ave. $2,158, Duplex Ave. $5,898; to F. F. Fry Ltd., 43 Scott St., sewer in Blvd. Drive $20,312. Work involves 10,000 ft. 8-12 in. glazed tile sewers.

Ont., Toronto—Furnishing two 2,880,000 gal. centrifugal electric sewage pumps, and one Venturi meter, to John Inglis Co. Ltd, Strachan Ave., $14,171.

Waste Disposal

PROPOSED WORK

Calif., Fresno—Soon takes bids garbage disposal, bids for collection and disposal, separate bids for collection, city to provide for disposal, by either incinerator or sanitary fill method. W. Stranahan, city comr. pub. wks.

BIDS RECEIVED

Pa., Allentown—M. W. Gross, mayor, Room 301 City Hall, opened bids Dec. 18, garbage incinerator, from Davis Garbage Furnace Co., 110 West 40th St., New York City, $20,594; Roberts-Filter Mfg. Co., Darby, $49,500; Universal Destructor Co., Fulton Bldg., Pittsburgh, $70,000. Noted Nov. 23.

CONTRACTS AWARDED

N. Y., Mayfield—Water system, to H. W. Golden & Son, Inc., Troy, $32,629; steel water tank, to Pittsburgh Des Moines Steel Co., Curry Bldg., Pittsburgh, Pa., $11,000. Noted Oct. 12.

Bridges

PROPOSED WORK

N. Y., Binghamton—Plans 3 span concrete arch bridge from Riverside Dr. to Water St. $375,000. W. E. Weller, Municipal Bldg., engr.

Pa., Pittsburgh—Allegheny Co. having plans prepared rein.-con. bridge 750 ft. main span, with 310 ft. concrete approaches and abutments, California Ave. over Jacks Run to connect city with Bellevue. $400,000. V. R. Covell, Court House, engr.

W. Va., Huntington — Huntington Ohio Bridge Co., c/o W. E. Kellegen, Huntington, plans steel toll bridge over Ohio River, 2 or 3 steel trusses, concrete posts, 2,000 ft. span, double deck, concrete flooring. C. A. Turner Co., Jewelers Exch., Minneapolis, Minn., engrs.

O., Akron—Having plans prepared 700 ft. steel deck girder bridge encased in concrete, 60 ft. wide, 36 ft. roadway, 12 ft. walks on each side, on State St., $250,000; plans three through plate steel girder bridges encased in concrete, 88 ft. wide, with 58 ft. roadway and two 15 ft. walks, over Baltimore & Ohio, Pennsylvania, and Erie Rail Roads on Exchange St., $250,000; through plate girder bridge encased in concrete, 38 ft. roadway and two 14 ft. walks over Baltimore & Ohio, Pennsylvania, and Erie Rail Roads on Center St., $175,000; wood trestle as temporary bridge while new Exchange and Center St. bridges are being built, $50,000; plans prepared for rein.-con. trestle, concrete beam and slab top, on West Market St., $180,000. E. A Kemmler, Delaware Bldg., engr.

Bridges **(Continued)**

Kan., Jetmore—See "Streets and Roads."

Kan., Sedan—Chautaqua Co. had plans prepared 120 ft. steel truss span (Feslers Ford Bridge). C. E. Sperry, Sedan, engr.

Mo., Kansas City—Kansas City Terminal Ry. Co. having plans prepared 1,470 ft. steel and rein.-con. railway and highway bridge; curved bridge $300,000, straight bridge $400,000. J. V. Hanna, ch. engr.

Okla., Pauls Valley—Voted $32,000 bonds for 270 ft. rein.-con. bridge, concrete piers. T. B. Mathews, Durant, engr.

Wash., La Center — State Hy. Comn., Olympia, having plans prepared steel and concrete bridge, viaduct type, about 1,000 ft. long, across east fork of Lewis River on Pacific Highway, south of here. $100,000. J. Allen, state highway engr.

Ontario—See "Streets and Roads."

Ont., Prairie Siding—Kent Co. plans 375 ft. steel lift bridge, about 20 ft. wide, here. $125,000. Kellar & Harrington, Chicago, Ill. (street address not available), engrs.

Ont., Toronto—W. A. Clarke, clk. York Twp., 40 Jarvis St., receiving competitive sketches and plans for 200 ft. rein.-con. arch highway bridge to connect Astley Ave. and Oakdale Crescent. $135,000.

BIDS DESIRED

Mass., Cambridge—Jan. 13, by L. M. Hastings, city engr., furnishing and erecting single leaf movable draw span for 1st St. Bridge over Broad Canal; adv. this issue.

Virginia—See "Streets and Roads."

Florida—See "Streets and Roads."

Ind., Ft. Wayne—Jan. 9, by Auditor Allen Co., steel girder bridge on Coldwater Rd., 111 ft. long, 20 ft. wide. A. W. Grosvenor, Ft. Wayne, engr.

Calif., Redwood City—See "Miscellaneous."

BIDS RECEIVED

North Carolina—State Hy. Dept., Raleigh, constructing rein.-con. bridges and culverts on State Project 201, Carteret Co., from Boney & Hostetler, Williamston, $24,956, Batson-Cook Co., West Point, Ga., $25,396, O. A. Mann & Co., La Grange, Ga., $29,271; constructing 3 rein.-con. bridges on State Project 256, Lenoir Co., from Englehard & Kuelin, Camp Bragg, $52,553, Cornell-Young Co., 4th Natl. Bank Bldg., Macon, Ga., $53,720, Rhyne & Kitchen, Blacksburg, S. C., $57,268; rein.-con. bridge with steel draw span, over Roanoke River at Edwards Ferry, State Project 138 B, Northampton Co., from Pensacola Shipbuilding Co., Amer. Natl. Bank Bldg., Pensacola, Fla., $349,688, Hardaway Constr. Co., 909 Elizabeth Ave., Charlotte, $350,679, Atlantic Bridge Co., Roanoke, Va., $356,102. Noted Nov. 30, under Streets and Roads.

Ohio—See "Streets and Roads."

Kan., Columbus—Cherokee Co., 2 rainbow arch bridges, one 80 ft. other 130 ft., concrete abutments, near Baxter Springs, from Harrison Eng. Corps, Wichita (street address not available) $35,414; Maxwell Constr. Co., Columbus, $37,855; Koss Constr. Co., 2818 5th St., Des Moines, Ia., $41,569. Noted Dec. 7.

S. D., Yankton—Meridian Hy. Bridge Co., opened bids Dec. 11, steel superstructure for double deck bridge 5,820 ft., incl. approaches, 1,680 ft. span length over Missouri River, from Amer. Bridge Co., 208 South LaSalle St., Chicago, $362,570; Mt. Vernon Bridge Co., Mt. Vernon, O., $366,370; Bethlehem Steel Co., Bethlehem, $381,350. Noted Nov. 30.

Missouri—State Hy. Dept., Jefferson City, opened bids Dec. 2, (1) one 20 ft. rein.-con. slab span, 20 ft. roadway, concrete abutments, over Meeks Branch on road from Neosho to Arkansas State line, State Project Route 1, Sect. 106, Newton Co. (2) three 30 ft. rein.-con. deck girder spans, 20 ft. roadway, concrete abutments and piers over Cedar Creek on road from Neosho to Joplin, State Project Route 1, Sect. 104, Newton Co. (3) one 55 ft. steel truss, one 35 ft. and one 45 ft. I-Beam spans, 20 ft. roadways, concrete abutments, on road from Malden to Risco, State Project Route 82, Sect. 3, New Madrid Co. (4) one 160 ft., one 80 ft. and one 60 ft. steel truss spans, concrete substructure, 20 ft. roadway, over north fork of White River on road from Gainesville to West Plaines, Federal Aid Project 111, Sect. C, Ozark Co. (5) ten 20 ft. I-Beam spans, 20 ft. roadway, cresoted wood pile bent substructure, over overflow of Crooked River on Sta. 364 plus 95 on road from Richmond to Carrollton, State Project 10, Sect. 13, Ray Co. (6) two 160 ft. and one 80 ft. steel truss spans, 20 ft. roadway and four 40 ft. rein.-con. deck girder spans, concrete substructure, over Big Piney River, on Sta. 5 plus 135 on road from Springfield to St. Louis, State Project Route 14, Sect. 45, Pulaski Co. (7) two 20 ft. rein.-con. slab spans, 20 ft. roadway, 2 rein.-con. abutments, 1 concrete pier, on Sta. 7 plus 29 on road from Springfield to St. Louis, State Project Route 14, Sect. 76, St. Louis Co., (8) one 14 ft. rein. con. slab, one 80 ft., one 60 ft. and two 50 ft. steel truss spans, 20 ft. roadways, concrete substructures, on road from St. Louis to Kansas City, State Project Route 2, Sect. 71, St. Charles Co. (9) three 60 ft. steel truss and two 20 ft. rein.-con. slab spans, 20 ft. roadway, concrete substructure on Sta. 440 plus 00 on road from Centerville, to Ellington, State Project Route 21, Sect. 25, Reynolds Co. (10) one 20 ft. rein.-con. slab span, 20 ft. roadway, etc. on Sta. 26 plus 30, on road from Memphis to Edina, State Project Route 15 Sect. 4, Scotland Co. (11) one 16 ft. rein.-con. slab span, 20 ft. roadway, etc. over branch of Brush Creek, on Sta. 119 plus 83, on road from Jefferson City to Eldon, State Project Route 15, Sect. 56, Miller Co. (12) two 60 ft. steel truss spans, 18 ft. roadway, concrete piers and abutments, over Wild Cat Creek, on Sta. 22 plus 01.3 on road from Princeton to Trenton, State Project Route 3 Sect. 6, Mercer Co. (13) one 80 ft., one 60 ft. and one 50 ft. steel truss, eight 20 ft. rein.-con. slab and one 30 ft. rein.-con. deck girder spans, 20 ft. roadway, on road from Chillicothe to Trenton, State Project Route 3, Sect. 16, Livingston Co. (14) one 30 ft. rein.-con. deck girder span, 20 ft. roadway, concrete abutments, on Sta. 273 plus 55, on road from Jefferson City to Eldon, State Project Route 15, Sect. 56, Miller Co. (15) one 40 ft. I-Beam span, 20 ft. roadway, rein.-con. abutments on Sta. 647 plus 80 on road from Charleston to New Madrid, State Project Route 55 A, Sect. 2, Mississippi Co. (16) one 50 ft. one 100 ft. and one 120 ft. steel truss spans, 20 ft. roadway, rein.-con. abutments, etc. on road from Kansas City to St. Louis, State Project Route 2, Sect. 7, Lafayette Co. (17) two 160 ft., one 120 ft. and one 80 ft. steel truss and five 20 ft. rein.-con. slab spans, 20 ft. roadway, etc. on road from Kansas City to Springfield, State Project Route 14, Sect. 38, Laclede Co. (18) one 20 ft. rein.-con. slab span, 20 ft. roadway, concrete abutments, on Sta. 111 plus 39 on road from Lone Jack to Warrensburg, State Project Route 12 Sect. 5, Johnson Co. (19) one 25 ft. rein.-con. deck girder span, 20 ft. roadway, rein.-con. abutments, over Skunk Creek, on Sta. 206 plus 60, on road from Warrensburg to Clinton, State Project Route 13, Sect. 26, Johnson Co. (20) one 30 ft. and one 40 ft. rein.-con. deck girder spans, 20 ft. roadways, 4 rein.-con. abutments, on road from Warrensburg to Clinton, State Project Route 13, Sect. 27, Johnson Co. (21) one 25 ft. rein.-con. deck girder and three 50 ft. steel truss spans, 20 ft. roadways, etc., on road from St. Louis to Kansas City State Project Route 2, Sect. 6, Jackson Co. (22) two 20 ft. rein.-con. slab, one 60 ft., one 100 ft. and two 50 ft. steel truss spans, 20 ft. roadways, concrete piers and abutments, on road from St. Louis to Kansas City, State Project 2, Sect. 4, Jackson Co. (23) one 80 ft. steel truss and two rein.-con. slab spans, 20 ft. roadway, concrete abutments and piers, over middle fork of Tebo Creek, on Sta. 31 plus 60 on road from Windsor to Clinton, State Project Route 24 Sect. 4, Henry Co. (24) one 20 ft. and two 60 ft. steel truss spans, 20 ft. roadways, rein.-con. abutments and piers, over Big Creek on Sta. 23 plus 80, on road from Bethany westward, State Project Route 4, Sect. 34, Harrison Co. (25) one 80 ft. steel truss and two 20 ft. rein.-con. slab spans, 20 ft. roadway, concrete piers and abutments, over dry fork of Merramec River, on Sta. 349 plus 59 on road from Salem to Licking, State Project Route 32, Sect. 4, Dent Co. (26) one 40 ft. rein.-con. deck girder and one 50 ft. steel truss spans, 20 ft. roadways, concrete abutments, over Spring Creek on road from St. Louis to Springfield, State Project Route 14, Sect. 66, Franklin Co. (27) one 30 ft. rein.-con. deck girder and two 20 ft. rein.-con. slab spans, 20 ft. roadway, concrete piers and abutments, over Linley Creek, on Sta. 827 plus 70 on road from Bolivar to Buffalo, State Project Route 15, Sect. 80, Dallas Co. (28) one 40 ft. rein.-con. deck girder and one 20 ft. rein.-con. slab spans, 20 ft. roadway, etc., on road from Jefferson City to Tuscumbia, State Project Route 15 Sect. 52, Cole Co. (29) one 30 ft. rein.-con. deck girder, one 50 ft. and one 60 ft. steel truss spans, 20 ft. roadways, concrete abutments, on road from Jackson to Perry Co. line, State Project Route 25 Sect. 19, Cape Girardeau Co., from J. P. Wolfenbarger, Neosho, (1) $6,283; Wimstead & Gonter, Siloam Springs, Ark. (1) $6,440; Allhands & Davis, 705-6 Frisco Bldg., Joplin, (1) $6,458 (2) $9,936 (27) $9,152; Independent Constr. Co., Pittsburg, Kan. (2) $9,068; Koss Constr. Co., 2818 5th Ave., Des Moines, Ia., (2) $9,890 (21) $21,992 (22) $36,511; A. Creek, Gideon, (3) $12,909; Novaculite Constr. Co., Marion, Ill., (3) $12,363 (15) $4,832; Pioneer Constr. Co., 101 New York Life Bldg., Kansas City, (4) $46,476 (17) $77,724; Parham Constr. Co., East St. Louis, Ill. (4) $61,026 (6) $62,384; Natl. Constr. Co., Inc., Kansas City (street address not available) (5) 90,318; Cook & O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, (5) $8,018; A. Hood, Independence, (5) $8,070; M. E. Gillioz, Monett, (6) $62,718; Kansas City Bridge Co., 510 Orear-Leslie Bldg., Kansas City, (6) $62,962; Moreno-Burkham Constr. Co., 1213 Syndicate Trust Bldg., St. Louis, (7) $8,162 (8) $45,757; Louis Rich Constr. Co., East St. Louis, Ill., (7) $6,684; S. M. Timberlake Co., 236 Amer. Central Life Bldg., Indianapolis, Ind., (7) $6,622 (8) $39,148; Alzina Constr. Co., Unity Bldg., Springfield, Ill. (8) $39,905 (22) $40,102; E. A. Luck, Black Rock, Ark., (9) $32,375; Coopers Constr. Serv. Co., Federal Reserve Bank Bldg., St. Louis (9) $23,406; Muskogee Contg. Co., Muskogee, Okla. (9) $25,169; W. H. and G. H. Turner, Memphis, (10) $5,842; F. F. O'Dell, Farmington, (10) $6,404; Fogleman & Thompson, Eugene, (11) $2,559 (14) $4,034; Massman-Scott Constr. Co., 3663 Madison Ave., Kansas City, (11) $2,662 (14) $4,163; Doehla-Kolkmeyer, Jefferson City, (11) $2,719 (28) $12,828; Pittsburg-Des Moines Steel Co., Tuttle and Southwest 10th Sts., Des Moines, Ia., (12) $12,972 (13) $57,296; Monarch Eng. Co., Falls City, Neb., (12) $13,822; Illinois Steel Bridge Co., 608 Laclede Gas Bldg., St. Louis, (13) $53,207 (25) $16,185; Campbell Bros., Kansas City (street address not available), (13) $55,539; J. W. Newton, Eldon, (14) $4,528; R. F. Williams, Wyatt, (15) $5,301; Keeley Bros. Constr. Co., 2100 State St., East St. Louis, Ill., (15) $4,829; Spitcaufsky Bros., 2452 Benton Blvd., Kansas City, (16) $44,239; F. E. Marsh & Co., Des Moines, Ia. (street address not available), (16) $47,199; J. O. Patterson, 310 Ridge Bldg., Kansas City (16) $48,674; Wausau Iron Wks., Wausau, Ia., (17) $78,390; General Constr. Co., Syndicate Trust Bldg., St. Louis, (17), $78,499 (25) $16,176; J. E. Ridge, Warrensburg, (18) $7,174; A. T. Cook, Ottawa, Kan., (18) $7,196 (19) $7,278 (20) $12,377; J. W. Wilson, Warrensburg, (18) $7,677; G. A. Woods Constr. Co., Smithville, (19) $8,184 (20) $16,123; C. T. Johnson, Warrensburg, (19) $8,207; Maxwell Constr. Co., Columbus, Kan., (20) $15,053; Harrison Eng. & Constr. Co., Wichita, Kan., (street address not available) (21) $22,075 (22) $37,215; J. J. Dunnegan, Shenandoah, Ia., (21) $24,855; Harrison Constr. Co., Des Moines, Ia. (street address not available), (23) $16,013; A. M. Highnote, Columbus, Kan., (23) $16,734; Carterville Constr. Co., Carterville, (23) $16,901; Rand Constr. Co., 1007 New York Life Bldg., Kansas City (24) $27,547; C. T. Fogle Constr. Co., Jefferson City, (25) $16,241; Frazier Davis Constr. Co., Arcade Bldg., St. Louis, (26) $14,802; Felix Kersting Co., Jefferson City, (26) $15,611 (28) $12,094; C. F. Johnson & Son, Buffalo, (27) $8,886; J. E. Hartley, Mt. Vernon, (27) $9,386; Carroll, Bedwell & Hartell, Cape Girardeau, (29) $14,536.

Colorado—State Hy. Dept., Denver, steel and timber bridges at Huffman Crossing of Sand Creek about 5 mi. east of Colorado Springs on State Highway 30, El Paso Co., from J. R. Donaghy, 416 North Nevada Ave., Colorado Springs, $23,747 Colorado Bridge & Constr. Co., Gas & Electric Bldg., Denver, $23,945; W. O. Morrison, 409 Cooper Bldg., Denver, $26,016. Engrs. est. $26,399.

Calif., Redwood City — San Mateo Co., constructing rein.-con. arch and slab culvert over San Mateo Creek, between B and Griffith Aves., 3,000 cu.yd. excav, 1,400 cu. yd. Class A rein.-con. for arch, 135 cu.yd. Class A rein.-con. for walls, 105 cu.yd. Class A concrete for slabs, etc., 650 sq.ft. cement surfacing, etc., from C. J. Lindgren, El Cerrito Ave., Burlingame, $41,568; Union Constr. Co., Balfour Bldg., San Francisco, $44,022; H. G. Vansano, 58 Sutter St., San Francisco, $44,640.

CONTRACTS AWARDED

Alabama—State Hy. Dept., Montgomery, 566 ft. concrete girder bridges with one 80 ft. steel span, on Opelika-Waverly Rd., Lee Co., to Stanley & Singer Constr. Co., Lafayette, $37,221; 1,017 ft. concrete bridges, slab girder type, on Montgomery-Birmingham Highway, from Jefferson Co. line to Chilton Co. line, Sects. A and B, Federal Aid Project 99, Shelby Co., to J. W. Gwin, Jefferson

Bridges (Continued)

Co. Bank Bldg., Birmingham, $80,447. Noted Dec. 14 and 21.

S. D., Forestburg — State Hy. Comn., Pierre, 408 ft. rein.-con. bridge over James River, here, incl. 515.3 cu.yd. concrete, 43,750 lb. reinforcing and 209,081 lb. structural steel, to Pioneer Bridge Co., Mitchell, $24,216.

Ia., Mt. Ayr—Ringgold Co., furnishing material and constructing 54 culverts and extensions, 1 I beam and 1 pony truss bridge, to C. J. Kramme & Co., Ft. Dodge, $41,973. Noted Nov. 30.

Wash., Spokane—Spokane Co., concrete bridge consisting of one 150 ft. and two 80 ft. spandrel arches, with 56 ft. concrete girder approaches at each end, 24 ft. clear roadway, over Spokane River on Trent Rd., to W. J. Doust, Lindelle Bldg., $60,370. Engrs. est. $70,000. Noted Nov. 30.

Dams

PROPOSED WORK

Ind., Ft. Wayne—Having plans prepared and takes bids in about 60 to 90 days, 550 ft. dam across Maumee River near Walton Ave. Bridge, rein.-con. permanent spillway, 2 steel movable rollers, each approximately 100 ft. long, 10 ft. diam., hoisting machinery and adjustable gates. Engineers desire to get in touch with manufacturers who can figure on steel rollers, also manufacturers who can build heavy hoisting machinery for same. F. Randall, city engr. C. Brossman, 1503 Merchants Bank Bldg., Indianapolis, consult. engr. A. W. Grosvenor, 710 Packard St., civil engr. This corrects report in Dec. 14 issue.

Wis., Iron River—See "Waterworks."

Kan., Jetmore—See "Streets and Roads."

Tex., Ballinger—See "Streets and Roads."

Que., Montreal—Back River Power Co., c/o J. R. Walker, 35 Common St., had plans prepared dam across Riviere des Prairies just below Visitation Island, to develop 50,000 hp. $2,000,000. T. Pringle & Son, 20 St. Nicholas St., engrs.

Railways

PROPOSED WORK

Florida—Florida Citrus Highlands Ry., Stovall-Nelson Bldg., Tampa, plans 4½ mi. tracks and spurs from Bareah to Frostproof, and station at Frostproof. $25,000. Engineers of Seaboard Airline Ry., Wilmington, N. C., will supervise construction.

Wisconsin—Madison Rys. Co., 2302 Fair Oakes Ave., Madison, plans railroad from Madison to Sturgeon Bay, through Sun Prairie, Oakfield, Fond du Lac Kiel and Manitowoc. $2,600,000. D. Montgomery, mgr.

Ontario—Toronto Transportation Comn., Ryrie Bldg., Toronto, plans to extend Parliament St. car tracks from Prospect to Bloor Sts., Toronto, 1,800 ft. double track, 100 lb. rails on 12 in. concrete with granite pavement between tracks. $150,000. H. H. Couzens, Ryrie Bldg., Toronto, mgr.

Excavation, Drainage, Irrigation

PROPOSED WORK

Tex., Ballinger—Colorado Irrigation Dist., Runnels Co., plans to vote on $1,000,000 bonds to irrigate 100,000 acres, work includes dam, etc. A. N. Norris, member of State Bd. Water Engrs., Austin, engr.

Nev., Lovelocks — Pershing Co. election Jan. 20 to vote on $40,000 bonds for drainage work in lower Humboldt Valley.

Ariz., Maricopa—Maricopa Irrigation Dist. rejected bids opened Nov. 27, furnishing material and labor, and construction of necessary machinery and installation of general irrigation system. Will revise plans and readvertise. Reed & Baker, 419 Fleming Bldg., Phoenix, engrs. Noted Nov. 16.

Ont., Barrie—Simcoe Co. and Provincial Government, Toronto, having plans prepared dredging Nottawasaga River, reclaiming 20,000 acres land. $200,000. G. A. McCubbin, 135 King St., Chatham, engr.

Ore., Mollala—Mollala Municipal Impvt. Dist. incl. city and 4,000 acres surrounding same, has been organized to drain and irrigate said tract. $100,000 to $125,000. L. A. Shaver, O. W. Robbins and S. A. Knapp, Mollala, dir. Engineer not selected.

BIDS DESIRED

N. Y., Brooklyn—Jan. 3 (change of date) by E. Riegelmann, boro pres., Boro Hall, dredging Fresh Creek from head of Fresh Creek Basin to Channel of Jamaica Bay. Noted Dec. 7.

Tex., Houston—Harris Co. D. D. No. 1, Alief, taking bids ditches, etc., here. $75,000. Howe & Wise, 1st Natl. Bank Bldg., co. engrs.

CONTRACTS AWARDED

Mont., Luther — Red Lodge — Rosebud Irrigation Dist., J. A. Fiveland, dir., 300,000 cu.yd. excav., 2,000 cu.yd. rein.-con., 15,000 lb. structural steel, 2,500 sq.yd. paving, 2,000 ft. corrugated metal pipe, 700 ft. vitr. pipe, 3,600 ft. flume, etc., to W. C. McCloud, Livingston $219,800.

Calif., Merced—Merced Irrigation Dist., drilling and lining 30 wells, 110 ft. each, to J. B. Rogers, 110 Sutter St., San Francisco, boring 16 in. wells $2.75 per lin.ft., 18 in. wells $3, 20 in. wells $3.25; casing 16 in. wells $2.82, 18 in. wells $4, 20 in. wells $4.41. Noted Nov. 30.

Streets and Roads

PROPOSED WORK

N. Y., Bath—Steuben Co. plans $200,000 bond issue for new highway.

N. Y., Elmira—Chemung Co. plans to construct highways. $26,250. Engineer not announced.

N. Y., Westfield—Chautauqua Co. plans paving 2 mi. Westfield-Barcelona Rd., 16 ft., concrete. $25,000. S. E. Fitch, co. engr.

Pa., Pittsburgh — Plans widening Cherry Alley from 6th to Liberty Aves., will include wrecking buildings on southern side of street. $1,000,000. F. W. Lyon, City County Bldg., engr.

Pa., Sewickley—Plans repaving 1 mi. Lincoln Highway, brick on old base, 30 ft. $50,000. J. C. Hiteshow, Municipal Bldg., engr.

Pa., Waynesburg — Greene Co. plans $200,000 bond issue for new roads.

Florida — State Hy. Dept., Tallahassee, takes bids about Jan. 15, surfacing 10 mi. road from Frostproof to Avon Park, Highlands Co., 2½ in. bituminous macadam on 8 in. crushed rock. J. S. Boggs, state highway engr.

Fla., De Land—Volusia Co. plans election to vote on $30,000 bonds paving 4 mi. road from Allanhurst to Brevard Co. and Canal Ave. near New Smyrna, 15 ft., 7 in. coquina or other rock, tarvia or asphalt and sand surface. R. J. Bisnop, chn.

Kentucky — State Hy. Dept., Frankfort, having plans prepared grading 9.717 mi. road from Rowan Co. line to Olive Hill, 24 and 28 ft., Federal Aid Project 68, Carter Co. J. S. Boggs, state highway engr.

O., Akron—Plans to issue $315,000 bonds resurfacing, repairing and improving various streets. Total amount of money to be spent for highway improvement in city of Akron in 1923 will amount to at least $1,500,000. E. A. Kemmler, Delaware Bldg., engr.

O., Bexley (Columbus P. O.)—Preparing plans grading, curbing, laying 8 in. water mains, making necessary sewer connections and paving 2,200 ft. Ardmore Rd. from Broad St. to north line of Ardmore addition, 24 ft., $45,000, 2,200 ft. Cassingham Rd. from Broad St. to north line of Ardmore addition, 24 ft., $45,000, 2,200 ft. Remington Rd. from Broad St. to north line of Ardmore addition, 24 ft., $45,000, 2,000 ft. Fair Ave. from Cassidy Ave. east, 36 ft., roadway with 18 ft. parkway between 2 sides, $60,000, all brick, concrete, asphalt or tarvia. Jennings-Lawrence Co., Hartman Bldg., Columbus, engrs.

O., Dayton—Montgomery Co. plans paving 1 mi. Gettysburg Ave. from Jalappa Rd. to Eaton Pike, 20 ft., 11,700 sq.yd. asphalt or concrete. $30,000. W. O. Pease, Dayton, co. surv.

Ind., Evansville — Vanderburgh Co. rejected bids grading and graveling 15,400 ft. E. I. Smith Rd., 16 ft. $26,947. Will readvertise. Noted Dec. 7.

Mich., Detroit — Plans prepared grading and paving 16 alleys, 20,480 sq.yd. one course 6 in. concrete, with 2 x 6 in. retaining plank. $51,200. J. W. Reid, city engr.

Mich., Jackson—Election in spring to vote on $200,000 bonds sheet asphalt pavements on 6 in. concrete, on 8 main streets. P. Arnold, city engr.

Ill., Elmhurst—Making plans and takes bids about Jan. 19, concrete sidewalks. $25,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ill., Posen (Harvey P. O.)—Making plans and takes bids about Feb. 6, concrete sidewalks. $80,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ill., Villa Park—Making plans and takes bids about Jan. 15 concrete paving various streets. $40,000. E. Hancock, 2047 Ogden Ave., Chicago, engr. Noted Mar. [illegible]

Wisconsin—Following is outline of proposed concrete road construction program (subject to bond issue) in Div. 2 during 1923, comprising following counties:

Fond du Lac Co., 5 mi. State Trunk Highway 56, 10.5 mi. State Trunk Highway 55, 5 mi. State Trunk Highway [illegible], 6.5 mi. State Trunk Highway 23, 5.5 mi. State Trunk Highway 91, 3.5 mi. State Trunk Highway 49. G. Treleven, Fond du Lac, comr.

Kenosha Co., 1.75 mi. State Trunk Highway 116, widening 2 mi. of 9 ft. pavement on State Trunk Highway 50. J. F. Herzog, Kenosha, comr.

Milwaukee Co., 10 mi. road, location not as yet determined. W. F. Cavanaugh, Milwaukee, comr.

Ozaukee Co. 3 mi. State Trunk Highway 17, 5 mi. State Trunk Highway 57. W. J. Ubbink, Port Washington, comr.

Racine Co., 1 mi. State Trunk Highway 36, 1.25 mi. State Trunk Highway 36, 4 mi. River Rd., 4.2 mi. County Trunk Highway C, 2 mi. Browns Lake Rd. W. A. Bechthold, Racine, comr.

Sheboygan Co., 0.25 mi. Main St., Village of Elkhart Lake, 0.25 mi. Main St., Village of Random Lake. G. W. Ubbelohoe, Sheboygan, comr.

Walworth Co., 5 mi. State Trunk Highway 20, 4.5 mi. State Trunk Highway 12, 9 mi. State Trunk Highway 12, 1.5 mi. County Trunk Highway H, 1.5 mi. County Trunk Highway C. H. J. Peters, Elkhorn, comr.

Washington Co., 2.5 mi. State Trunk Highway 29, 0.5 mi. State Trunk Highway 68, 1.75 mi. State Trunk Highway 68, West Bend east, 2.75 mi. State Trunk Highway 55, 1.6 mi. State Trunk Highway 15, 3 mi. Sheboygan Rd., 2 mi. Richfield Spur, 3.5 mi. Milwaukee-Germantown Rd., 2.5 mi. Jackson-Cedarburg Rd., 3 mi. Hartford-Thompson-Hartford Rd.

Waukesha Co., 5.5 mi. State Trunk Highway 67, 2.5 mi. State Trunk Highway 83, 6.5 mi. State Trunk Highway 74, 4.5 mi. Merton-North Lake Rd., 3.5 mi. Waukesha-Prospect Rd., 2 mi. State Trunk Highway 41, Wales relocation. C. J. Hahn, Waukesha, comr.

Wisconsin—Following are county appropriations for state and county aid road and bridge construction during 1923. Polk Co. $108,735, C. W. Nystrom, Balsam Lake, comr.; Florence Co. $36,534, O. F. Soderberg, Florence, comr.; Marinette Co. $167,849, A. Eklund, Pestigo, comr.; Shawano Co. $209,861, W. F. Meyer, Shawano, comr.; Ozaukee Co. $368,041, W. J. Ubbink, Port Washington, comr.; Chippewa Co. $113,136, P. O. Lokrantz, Chippewa Falls, comr.

Ia., Dyersville—Takes bids about Feb. 1 for 52 blocks brick paving. N. B. Barber, Waterloo, engr. Noted Dec. 21.

Minn., Slayton—Murray Co. having plans prepared grading 10 mi. State Rd. 6 from Curry to Cottonwood County line, $10,000; 13.5 mi. State Rd. 11, from Dovray to Walnut Grove, $18,000; 9 mi. State Rd. 4, from Avoca to Cottonwood County line, $10,000; 6 mi. State Rd. 10, from Fulda to Wirock. $7,500. J. A. Myron, Slayton, engr.

Minn., Thief River Falls—Pennington Co. plans grading 6 mi. State Rd. 5, from here east.

Kan., Emporia — Comrs. Lyon Co. soon take bids concrete paving 1.9 mi. Olpe Rd., 18 ft. $100,000. W. S. Ruggles, co. engr.

Kan., Girard—Comrs. Crawford Co. soon take concrete paving 2 mi. Walnut Englevale Rd., 18 ft., $70,000; 4.937 mi. Radley Ringo Rd., 18 ft., $125,000. C. M. Cooper, Girard, engr.

Kan., Girard—Crawford Co. rejected bids received Dec. 11, concrete paving 0.942 mi. Arcadia Branch to Commercial Highway, 18 ft. $32,182. C. M. Cooper, co. engr.

Kan., Jetmore—Making plans paving, sewers, bridge and dam. A. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., engrs.

Kan., Wichita — Comrs. Sedgwick Co. soon take bids paving 0.8 mi. Tyler Rd., 9 ft., concrete or brick. $25,000. M. Roseberry, co. engr.

South Dakota—State Hy. Comn., Pierre, takes bids in January, grading 5.66 mi. road in Todd Co. $40,203. F. D. Hudgins, state engr.

S. D., Sioux Falls—Plans paving 12,730 sq.yd. 6th St. from Weber to Van Eps Aves., $34,000; 4,745 sq.yd. Weber Ave. from 6th to 8th Sts., $13,040. S. B. Howe, city engr.

Streets and Roads (Continued)

North Dakota — State Highway Comn., Bismarck, plans grading and graveling 17.8 mi. in northeast section of state. $700,000. H. C. Frahm, Minot, div. engr.

Missouri—State Hy. Dept., Jefferson City, opened bids Dec. 2 improving (1) road from Centerville southward, State Project Route 21, Sect. 25, Reynolds Co. (2) road from Gainesville eastward, State and Federal Aid Project 111 C, Ozark Co. (3) road from Kansas City to St. Louis, State Project Route 20, Sect. 10, Lafayette Co. (4) road from Warrensburg to Clinton, State Project Route 13, Seot. 26, Johnson Co. (5) road from Festus to St. Genevieve Co. line, State Project Route 29, Sect. 2, Jefferson Co. (6) road from Opolis to Asbury, State Project Route 57, Sect. 2, Jasper Co. (7) road from Kansas City to St. Louis, State Project Route 2, Sect. 6, Jackson Co. (8) road from Kansas City to St. Louis, State Project Route 2, Sect. 5, Jackson Co. (9) road from Bethany, westward, State Project Route 4, Sect. 24, Harrison Co. (10) road from Ava southeastwardly, State Project Route 5, Sect. 94, Douglas Co. (11) road from Ava southeastwardly, State Project Route 5, Sect. 93, Douglas Co. (12) road from Memphis to Edina, State Project Route 15, Sect. 4, Scotland Co., from E. A. Luck, Black Rock, Ark., (1) $64,999 (10) $12,389 (11) $13,836; Coopers Constr. Service Co., Federal Reserve Bank Bldg., St. Louis, (1) $53,162; Muskogee Contg. Co., Muskogee, Okla. (1) $54,922; Pioneer Constr. Co., 101 New York Life Bldg., Kansas City, (2) $56,693; Parham Constr. Co., East St. Louis, Ill. (street address not available) (2) $74,115; Cook & O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City (3) $112,535 (7) $201,839 and $222,931 (8) $159,998; C. T. Johnson, Warrensburg (3) $112,816 (4) $35,974; J. O. Patterson & Co., 310 Ridge Bldg., Kansas City, (3) $116,700 (7) $224,273; G. A. Woods Constr. Co., Smithville, (4) $35,863; A. T. Cook, Ottawa, Kan. (4) $33,721; W. J. Knorpp and J. Richardson, De Soto, (5) $28,902; J. P. Sparks, Kirkwood, (5) $31,410; M. E. Gillioz, Monett, (5) $36,332; V. E. Koch, Box 604, Joplin, (6) $76,200; Carterville Constr. Co., Carterville, (6) $78,336; Du Bois & Co., 126 East 1st St., Wichita, Kan., (6) $80,385; Harrison Eng. & Constr. Co., Wichita, Kan. (street address not available) (8) $163,544; J. J. Dunnegan, Shenandoah, Ia., (8) $166,429; Rand Constr. Co., 1001 New York Life Bldg., Kansas City, (9) $142,392; Summerfield, Jones & Co., Springfield (street address not available), (10) $11,795 (11) $13,247; W. H. and G. H. Turner, Memphis, (12) $54,616; F. F. O'Dell, Farmington, (12) $54,148. Noted Nov. 23.

Tex., Ballinger—Runnels Co. plans to construct State Highway 7 A, from here to county line. $40,000. State Highway Comn., Austin, granted $20,000 aid not to exceed 50 per cent of cost of project. U. Stephens, co. engr.

Tex., Bay City — Matagorda Co. voted $110,000 bond issue Nov. 18 for highway improvement. J. C. Carrington, co. engr.

Tex., Center—Shebly Co. making plans grading and gravel surfacing 12.5 mi. State Highway 35 from Bobo to west line of Joaquin Rd. Dist. 5, 16 ft. $160,000. T. H. Dillon, co. engr.

Tex., Columbus — Fayette Co. election Jan. 27 to vote on $100,000 bonds for grading, raising, filling and gravel topping 15 mi. roads in Dist. 3, 18 ft. $100,000.

Tex., Conroe—Attorney Generals Dept., Austin, approved $40,000 bond issue for road and highway improvement in Montgomery Co. W. H. Lee, co judge.

Tex., Conroe—Montgomery Co. plans to construct State Highway 19. $150,000. State Highway Comn., Austin, granted $70,000 aid, not to exceed 50 per cent of cost. W. H. Lee, co. judge.

Tex., Dallas—See "Miscellaneous" under Park Improvements.

Tex., Highland Park—Jan. 16, to vote on $100,000 bonds for street paving and improvements. M. Costella, city secy.

Tex., Jefferson—State Hy. Comn., Austin, alloted $75,338 aid to Marion Co. for construction of 14.42 mi. State Highway 35, on condition that county surface State Highway 8 with bituminous topping, present plans calling for gravel road. T. B. Warden, co. engr.

Okla., Chandler—Had plans prepared for brick paving 13 blocks. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Nov. 16.

ROAD WORK—FLORIDA

Following are lowest three bids opened Nov. 14, by State Rd. Dept., Tallahassee, for constructing road between Pensacola and Roberts, Project No. 34, Escambia Co., (A) C. H. Turner Co., Pensacola; (B) S. S. Fulghum, Pensacola; (C) W. D. Winchell & Co., Columbus, Ohio. The unit bids were as follows:

	A	B	C
100 acres clearing and grubbing	$35.00	$55.83	$60.00
59,154 cu.yd. regular excavation	.37	.43	.52
105,600 sq.yd. plain cement concrete	2.08	2.25½	2.36
17,785 lb. reinforcing steel	.09	.046	.07
8,100 lin.ft. corrugated metal pipe, 15 in.	2.02	2.21	1.60
600 lin.ft. corrugated metal pipe, 24 in.	3.05	3.54	3.00
213.3 cu.yd. class "A" concrete	25.80	16.40	18.00
Extended totals	$250,808	$270,265	$287,136

ROAD WORK—COLORADO

Following are lowest three bids opened by State Highway Comn., Denver, for constructing Federal-Aid Project No. 116-A, El Paso Co., (A) Standard Eng. & Constr. Co., 518-19 E. & C. Bldg., (awarded contract); (B) J. F. Roberts Constr. Co., 206 Tramway Bldg.; (C) Colorado Bridge & Constr. Co., 501 Gas & Electric Bldg. The unit bids were as follows:

	A	B	C
1 acre clearing and grubbing	$100.00	$80.00	$50.00
98,000 cu.yd. common excavation	.18	.22	.25
16,400 cu.yd. rock excavation	.95	.80	1.25
12,300 cu.yd. borrow fill	.18	.22	.25
42,000 sta. yd. overhaul	.02	.02	.02
3,110 cu.yd. gravel shoulder	.80	2.00	3.75
345 cu.yd. sand cushion	.90	1.50	2.25
43,776 sq.yd. concrete pavement	2.15	2.10	2.25
837 cu.yd. concrete class "A"	15.50	16.50	21.00
91,710 lb. reinforcing steel	.05	.05	.07
5.8 M bd. ft. timber headers	60.00	60.00	70.00
200 sq.yd. rip rap	.80	2.00	1.25
7,352 lin.ft. timber guard fence	.48	.50	.75
650 lin.ft. 8 in. vitrified tile underdrain	.40	.80	2.20
Sub-totals	$155,147	$160,313	$163,742
Cottonwood Creek Bridge			
916 cu.yd. concrete class "A"	$17.50	$18.50	$25.00
3,500 lb. structural steel	.08	.06	.08
119,400 lb. reinforcing steel	.05	.05	.07
264 handrail spindles	1.50	1.00	2.00
Sub-totals	$22,676	$23,390	$26,330
10 per cent for engineering and contingencies	17,782	18,370	19,007
Extended grand totals	$195,605	$202,073	$209,079

ROAD WORK—OREGON

Bids were opened by State Highway Comn., Nov. 21, for constructing .94 mi. Oregon-City-Canemah Sect., Pacific Highway, Clackamas Co., (A) Rajotte, Winton, Inc., Realty Bldg., Spokane; (B) D. Samuels, Salem; (C) A. D. Kern, Portland. The unit bids were as follows:

Unit A	A	B	C
3.2 acres clearing and grubbing	$1,200.00 A & B	$75.00	$300.00
600 cu.yd. common excavation	1.00	.40	.80
600 cu.yd. intermediate excavation	1.00	.60	1.10
1,800 cu.yd. solid rock excavation	2.25	1.40	2.00
3,150 cu.yd. disposal of waste	.20	.25	.25
80 cu.yd. class "B" concrete	30.00	30.00	20.00
150 cu.yd. excavation for culverts	2.50	1.50	....
Extended totals	$8,655	$6,608	$7,728
Unit B			
4 acres clearing and grubbing (lump sum)		475.00	500.00
5,000 cu.yd. common excavation	.50	.50	.90
7,000 cu.yd. intermediate excavation	.70	.70	1.25
25,000 cu.yd. solid rock excavation	1.50	1.60	1.85
35,000 cu.yd. overhaul over 500 ft. } over 100 ft. }	.05	.05	.05
13,900 cu.yd. disposal of waste	.20	.20	.25
50 lin.ft. 18-in. reinforced-concrete pipe	4.00	3.00	3.00
130 lin.ft. 24-in. reinforced-concrete pipe	5.00	4.00	4.00
500 lin.ft. 6-in. drain tile	.75	.25	.40
100 cu.yd. rock or gravel backfill	1.50	3.00	3.00
1,000 lin.ft. wood guard fence	1.00	1.25	.90
650 cu.yd. class "B" concrete	25.00	25.00	20.00
1,250 cu.yd. rubble and cement masonry	10.00	15.00	12.00
1,200 lin.ft. parapet walls	3.50	3.00	3.50
2,000 cu.yd. excavation for culverts	2.00	1.50	2.00
Extended totals	$89,955	$96,350	$103,495
Extended grand totals	$98,610	$102,958	$111,223

Okla., Sayre—Plans paving 13 blocks in residence district, 18,000 sq.yd. concrete. $87,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Calif., Crescent City—Soon takes new bids grading and paving various streets, 23,900 cu.yd. grading excav., 316,300 sq.ft. grading surface, 316,300 sq.ft. asphaltic macadam pavement, 168,418 sq.ft. asphaltic macadam pavement to be rebuilt, etc. Former contract rescinded. C. C. Kennedy, Call Bldg., San Francisco, engr. Noted Sept. 28.

Calif., Fresno—Soon takes bids improving portions of Tuolumne, Divisadero, R and S Sts., etc., 198,940 sq.ft. grading, 186,427 sq.ft. asphaltic paving, 12,012 sq.ft. concrete gutter, 7,504 lin.ft. concrete curb, 13,725 sq.ft. concrete walks, etc. W. Stranahan, city engr.

Calif., San Diego — Had plans prepared paving with 1½ in. topeka asphalt on 2½ in. asphaltic concrete, Maple, Nutmeg and Olive Sts., 389 lin.ft. cement curbing, 1,032 sq.ft. cement sidewalks, 19,879 sq.yd. bituminous concrete; paving with 2 in. bituminous concrete on 4 in. cement concrete base, 1 in. binder, A St. from 4th St. to Kettner Blvd., and 2nd St. from A to R Sts., 551 lin.ft. cement curbing, 2,263 sq.ft. cement sidewalks, 13,297 sq.yd. paving. F. A. Rhodes, City Hall, engr.

Calif., San Mateo—Plans improving various streets, involving 25,000 sq.ft., 40,000 sq. ft., 120,000 sq.ft., 244,500 sq.ft. 1½ in. asphalt on 6, 5, 4½ and 4 in. concrete respectively, 6,970 cu.yd. excav., 1,000 cu.yd. fill, 16,000 lin.ft. standard concrete curb, 1,050 lin.ft. parkway concrete curb, 660 sq.ft. concrete gutter, 3,100 lin.ft. 6 in. sewers, 3,650 lin.ft. 4 in. sewer laterals, 2,130 lin.ft. 18 in. drain, 34,800 sq.ft. cement walks, removing 3,400 lin.ft. curbs, 770 sq.ft. driveway approaches, etc. G. S. Whitehead, San Mateo, engr.

Ontario—Dept. Pub. Highways, Parliament Bldg., Toronto, plans paving 11 mi. provincial highway between St. Thomas and Aylmer, asphalt on concrete. $400,000. G. Hogarth, ch. engr.

Ontario — Provincial Highway Dept., Parliament Bldgs., Toronto, plans to take over county road between Orangeville and Arthur and build 22 mi. gravel or stone macadam highway, bridges and culverts. $500,000. G. Hogarth, ch. engr.

Streets and Roads (Continued)

Ont., Oshawa — Plans 800 ft. asphalt pavement on Bruce St. from Ritson Rd. to Drew St., 24 ft. wide, with concrete curbs and gutters, $35,000; also 8,000 ft. of 4 ft. concrete walks on various streets, $8,300. F. E. Hare, city clk.

Ont., Ottawa — Bd. Control takes bids early in spring, tarvia macadam on Waverly Rd. from Robert to Bank Sts.; asphalt on Carling Ave. from Parkdale to Fairmont Aves., $50,000. A. F. Macallum, city engr.

Ont., Owen Sound—Plans 4 mi. asphalt pavement, average width 30 ft. $300,000. D. H. Fleming, city engr.

Ont., Sandwich—Takes bids in January for new pavements, opening streets, sewers and watermains. $106,500. E. R. North, town clk.

Ont., Stratford—Plans to expend $223,969 on asphalt and concrete pavements, and concrete sidewalks. A. B. Manson, city engr.

Ont., Toronto — Plans paving, curbing, guttering and laying storm sewers in Kingston Rd. from Dixon Ave. to Main St., 4,800 ft. long, 40 ft. wide. $330,089. R. C. Harris, city engr.

Ont., Toronto—Plans paving 600 ft. Dundas St. from Yonge to Victoria Sts., asphalt on concrete with storm sewers and provision for double car tracks, $25,512. R. C. Harris, city engr.

Ont., Toronto—Plans grading 3,000 ft. Glendonwynne Rd., 66 ft. wide, $16,335, also 2,000 ft. 4 ft. 6 in. concrete sidewalks, $3,275; extending and grading Pailton Crescent from Baliol St. to Davisville Ave., 600 ft. long, 66 ft. wide, $10,750; extending and grading Heather St., 1,200 ft. long, 66 ft. wide, and St. Clair Ave. E. across Rosedale Ravine to Inglewood Dr., 2,000 ft. long, 86 ft. wide, $50,000. R. C. Harris, city engr.

Ont., Toronto — Having plans prepared widening Parliament St., incl. asphalt pavements and concrete sidewalks. $155,000. R. C. Harris, city engr.

B. C., Vancouver—Voted $150,000 by law and soon takes bids for new roads. C. E. Tisdall, mayor.

BIDS DESIRED

N. Y., Brooklyn—Jan. 4, by Park Bd. at office Dept. Parks, Municipal Bldg., New York City, improving Bay Parkway from 59th to 78th Sts., here. F. D. Gallatin, pres.

N. J., Atlantic City—Jan. 11, by Bd. City Comrs., City Hall, improving portions of Fairmount Ave. and other avenues. J. W. Hackney, City Hall Annex, city engr.; adv. this issue.

Virginia — Jan. 11, by State Hy. Comn., Richmond, constructing 6.28 mi. Project F-186A, Route 12, Pittsylvania Co.; 8.44 mi. Project S-185, Route 7, alternate bids requested for soil roadway; 1.98 mi. Project S-256, Route 11, Tazewell Co.; bridges over Massaponax Creek, Project F-2053, Route 1; 0.84 mi. Project F-32, Route 6; 11.53 mi. Project S-208, Route 11; repairs to bridges, Project SR-298, Route 7, Warren Co. G. P. Coleman, Richmond, hignway comr.; adv. this issue.

Va., Richmond—Jan. 2, by Clerk Henrico Co., paving 6.6 mi. Nine Mile road from here to Seven Pines, 16 ft., 15,000 cu.yd. excav., 62,000 sq.yd. surface.

Florida—Jan. 10, by State Hy. Dept., Tallahassee, grading, constructing timber bridge and placing rock base on 8.75 mi. Rd. 8 from Sta. 243, south of Lake Stearns to line between Townships 35 and 36, Project 562, Highlands Co.; placing 77,000 cu. yd. dredged embankment on 2.65 mi. Rd. 125 from Sta. 308 to Sta. 448, Project 534, Brevard Co. W. F. Cocke, state highway engr.

Louisiana—Jan. 11, by State Hy. Comn., Reymond Bldg., Baton Rouge, grading and gravel surfacing 5 mi. Federal Aid Project 43, Sect. A, Vinton-Orange Highway, Calcasieu Parish.

Ohio—Jan. 5, by L. C. Herrick, dir. highways, Columbus, paving 1.39 mi. Sect. M, Cleveland-Massillon Rd. I. C. H. 17, 17 ft., rein.-con. and brick $73,082, bituminous concrete and brick $73,436, brick $76,962; 1.7 mi. Sect. L Cleveland Massilon Rd., I. C. H. 17, rein.-con $72,672, bituminous concrete $74,290, brick $78,175; 3.44 mi. Sect. K, Cleveland-Massilon Rd. I. C. H. 17, rein.-con. and brick $158,239, bituminous concrete and brick $159,171, brick $167,992; 2.7 mi. Sect. J. Cleveland-Massillon Rd., I. C. H. 17, rein.-con. $116,085, bituminous concrete, $116,934, brick, $124,668; 1.49 mi. Sect. I Cleveland-Massillon Rd., I. C. H. 17, rein.-con. and brick $76,902, bituminous concrete and brick $77,352, brick, $81,073.

Ind., Albion—Jan. 6, by Auditor Noble Co., grade and gravel 15,125 ft. Clarence Leiter Rd., 16 ft., $26,050; 27,258 ft. F. L. Grady Rd., 16 ft., $25,652; concrete and gravel 8,310 ft. William Appleman Rd., 16 ft., 5,421 sq.yd. concrete on concrete, $27,389. W. T. Knox, Albion, engr. Noted Dec. 21.

Ind., Columbia City—Jan. 4, by Auditor Whitely Co., grading and graveling 45,158 ft. Aaron Mishler Rd., 16 ft., $49,868; 18,577 ft. Austin Hibely Rd., 16 ft., $29,304; 10,585 ft. County Rd. 3, Sect. 2, 18 ft., $25,245; paving 7,992 ft. County Rd. 3, 30 ft., crushed stone, $26,769. C. M. Auspaugh, Columbia City, engr. Noted Dec. 21.

Ind., Elizabethtown—Jan. 5, by Auditor Bartholomew Co., grading and graveling 29,154 ft. Sawyer Rd., 16 ft. $50,000. H. C. Thomas, Elizabethtown, engr.

Ind., Lafayette—Jan. 6, by Auditor Tippecanoe Co., grading and graveling 19,201 ft. John Gushwa Rd., 16 ft. $25,741. E. C. Minton, Lafayette, engr.

Ind., Marion—Jan. 4, by Auditor Grant Co., paving 2,125 ft. Dempsey Seybold Rd., 30 ft. crushed stone and asphalt, $26,035. G. Swisher, Marion Engr. Noted Dec. 21.

Ind., Vincennes—Jan. 4, by Auditor Knox Co., grading and graveling 7,920 ft. John R. McClure Rd., 30 ft., $30,543; 12,885 ft. Royse Davis Rd., 16 ft., $25,348; 11,300 ft. Obermeyer Rd., 16 ft., $27,712. G. A. Haskin, Vincennes, engr. Noted Dec. 21.

Ind., Washington — Jan. 5, by Auditor Daviess Co., grading and graveling 17,530 ft. Andrew T. Myers Rd., 16 ft. $26,231. W. L. McCormick, Washington, engr. Noted Dec. 21.

Michigan—Jan. 16, by State Hy. Dept., Lansing, grading and surfacing 7.255 mi. Federal Aid Project 64, Crawford and Otsego Counties incl. 31,821 cu.yd. excav., 76,612 sq. yd. gravel or stone-gravel.

Ia., Elkader—Jan. 10, for 21,650 sq.yd. vitr. brick, asphalt or concrete pavement, 11,000 lin.ft. curb and gutter, 6,450 cu.yd. grading. $65,000. M. Tschirgi & Son, 712 Amer. Trust Bldg., Cedar Rapids, engrs. Noted Sept. 7.

South Dakota — Jan. 4, by State Hy. Comn., reinforcing at office of Auditor Yankton Co., Yankton, grading 13.199 mi. Project 65, incl. 125,980 cu.yd. excav., 272 cu.yd. concrete, 24,800 lb. reinforcing steel, also graveling 19.95 mi. Project 77, incl. 5,000 cu.yd. excav., 30,000 cu.yd. gravel, both projects in Yankton Co.; also taking bids at office Auditor Clay Co., Vermilion, grading 5.98 mi. Project 97, incl. 37,233 cu.yd. excav., 124 cu.yd. concrete, 9,949 lb. reinforcing steel, Clay Co.

Ark., Ft. Smith — Jan. 25, paving 22 blocks in Street Impvt. Dist. 16, vitr. fiber block and asphalt filler or bitulithic. W. L. Winters, Ft. Smith, engr.

Calif., Modesto—Jan. 9, by Supervs. Stanislaus Co., paving 7 mi. West Side Highway from West Co. line, and 3.5 mi. Escalon-Oakdale Rd. between Burnett Station and San Joaquin Co. line, 16 ft. wide, 5 in. portland cement concrete in center, 7 in. concrete on edges, or 1½ in. topeka on 2½ in. black base, or 1½ in. warrenite on 3½ in black base. J. H. Hoskins, co. surv.

Calif., San Diego—Jan. 8, by A. H. Wright, city clk., improving Ivy St. F. A. Rhodes, city engr. Noted Nov. 23.

Calif., San Francisco—Jan. 10, by Bd. Pub. Wks., improving 8th St. between Carolina and 16th Sts., incl. crossings of Hooper, Irwin and Wisconsin Sts., 1,077 cu.yd. excav., 1,091 lin.ft. concrete curb, 14,778 sq.ft. artificial stone walks, 338 lin. ft. 12 in. pipe sewers, 355 lin.ft. 10 in. pipe culvert, etc; Coleridge St. between Eugenia and Lizzie Sts., incl. crossings of Eugenia and Lizzie Sts., 320 cu.yd. excav., 355 lin.ft. concrete curb, 786 sq.ft. artificial stone walks, 8,709 sq.ft. concrete pavement, etc., for City and San Francisco Co. M. M. O'Shaughnessy, city engr.

Quebec—Jan. 30, by J. L. Boulanger, deputy minister of highways, Quebec, 4.54 mi. Quebec-St. Simeon, in Giffard and St. Joachim, tar macadam. M. Nectkar, ch. engr.

BIDS RECEIVED

West Virginia—State Hy. Dept., Charleston, grading 7 mi. Charleston-Kearneysville Rd., Project 3026, Jefferson Co., 35,000 lin. ft. clearing, 38,200 cu.yd. unclassified excav., 1,500 sta.yd. overhaul, 320 cu.yd. concrete, 1,800 lb. reinforcing, 1,490 lin.ft. 15-24 in. corrugated metal pipe, 8,600 cu.yd. stone subbase course, 8,900 cu.yd. broken stone base course, 62,200 sq.yd. waterbound macadam surface course, from Moore & Lesley, Staunton, Va., $139,443, M. Cox, Martinsburg, $150,769, Edwards-D[illegible] Co., Greenburg, Pa., $142,317. 6 mi. [illegible] Springs-Summers Co. line Rd., Proj. 3052, Raleigh Co., 27,300 lin.ft. clearing [illegible] cu.yd. unclassified and 500 cu.yd. [illegible] excav., 20,000 sta.yd. overhaul, 1,[illegible] cu.yd. concrete, 29,000 lb. reinforcing, 1,75[illegible] cu.yd. cement rubble masonry, 1,400 lin.ft. [illegible] in. vitr. clay pipe, 10,000 cu.yd. [illegible] of rock for special rock fill, etc., from [illegible] K. Newell Co., Maysville, Ky., $82,697, [illegible] Bros., St. Albans, $86,300, Sutton Constr. Co., Ashland, Ky., $87,311. All bids rejected. Noted Nov. 30.

North Carolina—State Hy. Dept., Raleigh, clearing and grading 14.1 mi. State Project 201, Carteret Co., from Duplin Constr. Co., Warsaw, $49,273; Eagle Eng. Co., New Bern, $55,865; O. A. Mann & Co., La Grange, Ga., $72,779. Noted Nov. 30.

Kentucky—State Hy. Dept., Tallahassee, grading (1) 8.8385 mi. Louisville-Paducah Rd. from Marion to Livingston Co. line, Federal Aid Project 91, State Project 8, Sect. A, Crittenden Co. (2) 17.045 mi. Louisville-Paducah Rd., Federal Aid Project 92, State Project 8, Sect. B, Livingston Co. (3) 9.639 mi. Frenchburg-West Liberty Highway, Federal Aid Project 83, Menifee Co. (4) 5,018 mi. Stanton-Winchester Rd., Federal Aid Project 87, Sect. A, Powell Co., paving with water bound macadam (5) 9.55 mi. Vanceburg-Maysville Rd. from Tollesboro to Valley, State Project 20, Sect. A, Lewis Co., paving with rein.-con., (6) 8.501 mi. Jackson Highway from Jefferson Co. line to Bloomfield, Federal Aid Project 86, Sect. A, Bullitt, Spencer and Nelson Counties, (a) concrete masonry and vitr. pipe (b) concrete masonry and concrete pipe (c) cement rubble masonry and vitr. pipe (d) cement rubble masonry and concrete pipe (e) concrete masonry and c.i. pipe (f) cement rubble masonry and c.i. pipe (g) Class A concrete (h) Class B concrete (i) wooden post guard rail and vitr. pipe (j) wooden post guard rail and concrete pipe (k) wooden post guard rail and c.i. pipe (l) concrete post guard rail and vitr. pipe (m) concrete post guard rail and concrete pipe (n) concrete post guard rail and c.i. pipe, from Brantley & Cosle, Knoxville, Tenn., (street address not available). (1a) $86,757 (1b) $87,462 (1c) $86,494 (1d) $87,198; Corunn Bros., Madisonville, (1a) $91,201 (1b) $90,013 (1c) $89,398 (1d) $88,210; Ellis & Smeathers, Owensboro, (2a) $129,041 (2b) $130,084 (2c) $120,600 (2d) $121,643 (3a) $100,005 (3b) $98,256 (3c) $84,009 (3d) $82,260 (3e) $98,750 (3f) $82,753 (4c) $61,754 (4d) $59,870 (4f) $60,478; Costello Bros., Henson Bldg., Knoxville, Tenn., (2a) $134,493 (2b) $136,473 (2c) $125,861 (2d) $127,841; Z. A. Walters, Salyersville, (3a) $91,531 (3b) $92,552 (3c) $82,494 (3e) $93,590; Codell-Byans, Winchester, (4a) $66,398 (4b) $65,094 (4c) $61,188 (4d) $59,884 (4e) $67,701 (4f) $62,492; Vermillion Constr. Co., Barboursville, (4a) $66,173 (4b) $65,502 (4e) $67,207; J. W. Harris, Covington, (5g) $96,268 (5h) $95,828; Crippen Constr. Co., Mercantile Bldg., Knoxville, Tenn., (5g) $108,664 (5h) $108,096; Mills & Connolly, (5g) $127,384 (5h) $127,316; J. H. Cahill, 1540 9th St., Louisville, (6i) $521,495 (6j) $499,519 (6k) $501,911 (6l) $526,816 (6m) $504,841 (6n) $507,233. Noted Dec. 14.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids Dec. 22, grading, bridging and paving roads in following counties:

Licking-Knox Co., Sect. "K" Columbus-Millersburg Rd., 1.42 mi. rein.-con. from Walsh & McDaniel Co., Columbus, $47,391; Newark Paving & Const. Co., Newark, $47,422; H. Strodbeck, Ashland, $48,047, (Street addresses not available.)

Medina Co., Sect. "Medina West," Ashland-Medina Rd., .83 mi., H. Strodbeck, Ashland, rein.-con., $33,912; brick, $40,521.

Lorain Co., Sect. "N," "O," "P" Oberlin-Norwalk Rd., 5.14 mi. brick, Ohio Contg. Co., Elyria, $245,623, Hill & Hill, Elyria, $240,937, Highway Const. Co., Elyria, $232,108 bituminous concrete, (a-2a) Franklin Asphalt Paving Co., 209 South High St., Columbus, $166,751, Ohio Contracting Co., Elyria, $186,270, General Asphalt Paving Co., (no address), Cleveland, $169,040; bituminous concrete, (a-2b) Franklin Asphalt Paving Co., Columbus, $178,986, McArthur & Co., Kenton, $205,846, Cleveland Trinidad Paving Co., The Arcade, Cleveland, $205,855, bitulithic, Highway Constr. Co., Elyria, $227,207; Hinkle & Sullivan, Cincinnati, (street address not available), $252,195. Noted Dec. 14.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids Dec. 19, grading, bridging and paving roads in following counties:

Ashland Co., Sect. "B-2," Ashland-Norwalk Rd., 1.093 mi., rein.-con., from Allen County Paving Co. Lima (street address

Streets and Roads (Continued)

not available), **$32,037, H. Strodbeck, Ashland, $32,315. E. A. Freshwater & Sons,** Painesville, **$32,819**; brick, H. Strodbeck, Ashland, **$37,549**, E. A. Freshwater & Sons, Painesville, **$38,873**, Allen County Paving Co., **Lima, (street addresses not available.)** $39,998.

Lake **Co., Sect. "B," Cleveland-Buffalo** Rd., 1.089 **mi.**, brick, G. Keener, Jr., Madison, $53,969, Gould & Mayback, Cleveland, $58,147, **E. A. Freshwater & Sons**, Painesville, (street addresses not available), $57,-042.

Lake **Co., Sect. "A" Medina-Norwalk** Rd., 3.42 mi., **asphalt macadam** oil, Losey Road Constr. **Co., Kenton, $49,245.** H. J. Hart, Elyria, **$54,397**; tar macadam, Losey Rd. Const. Co., Kenton, $49,840, Barnes & Tabbert, Rocky Ridge, $54,011 rein.-con., Losey Rd. **Constr. Co., Kenton, $66,691**, Barnes & **Talbert, Rocky Ridge** (street addresses not available), $65,173.

Lorain Co., Sect. "E" Cleveland-Sandusky Rd., 2.**11** mi., brick, Ohio Contracting Co., Elyria, $207,954, E. A. Freshwater & Sons, Painesville, **$211**,929, McArthur & Co., Kenton, **$212,224**; bituminous concrete oil, Highway Const. Co., Elyria, $165,129, Franklin Asphalt Paving Co., 209 South High **St.,** Columbus, $170,946, McArthur & Co., **Kenton, $180,681**; bituminous concrete, lake, **McArthur** & Co., Kenton, $180,681, Franklin Asphalt Paving Co., Columbus, $181,544, Cleveland Trinidad Paving Co., The Arcade, Cleveland, **$190,878**; bitulithic, **Hinkle & Sullivan, Sullivan, $222,911.** Noted **Dec. 7.**

Tex., Coleman — Coleman Co. grading, gravel surfacing, etc., (1) 8 mi. Coleman-Comanche Rd., 16 ft., 526 cu.yd. concrete, 23,435 cu.yd. borrow and 19,431 cu.yd. roadway excav., 15,295 cu.yd. gravel surfacing, 31,904 lb. reinforcing, (2) 6 mi. Santa Anna-Comanche Rd., 16 ft., 175 cu.yd. concrete, 21,623 cu.yd. roadway and 5,295 cu yd. borrow excav., 6,133 cu.yd. gravel surfacing, (3) 9 mi. Santa Anna-Buffalo Rd., 16 ft., 422 cu.yd. concrete, 49,000 cu.yd. earth excav., 10,480 cu.yd. gravel surfacing, 34,209 lb. reinforcing, (4) 12 mi. Santa Anna-Trickham Rd., 16 ft., 1,200 cu.yd. concrete, 74,500 cu.yd. earth excav., 15,775 cu.yd. **gravel surfacing**, 122,000 lb. reinforcing, **(5) 11 mi.** Santa Anna-Red Bank Rd., 16 ft., 749 cu.yd. concrete, 12,821 **cu.yd.** gravel, 47,294 **lb. reinforcing, from Womack** Constr. Co., Sherman, (1) $52,986 (2) $23,-120 (3) $42,990 (4) $92,877 (5) $32,627; McClung Constr. Co., Cleburne, (1) $53,213 (3) $45,308 (4) $94,586; Smith Bros., Crockett, (1) $53,757 (2) $23,075 (5) $33,-616; Scarborough & Davis, Gaston Bldg., Dallas, (3) $44,671 (4) $93,968; McCoy & Richards, Arlington, (5) $33,926. Engrs. ests. (1) $57,500 (2) $25,500 (3) $47,500 (4) $100,000 (5) $37,500.

Tex., Jefferson—Marion Co. grading, claying, gravel surfacing and bridging (1) 8.8 mi. State Highway 8, from here to Cass Co. line, 16 ft., (2) 3.56 mi. State Highway 8, from here to Marion Co. line, 16 ft., from Henderson & Co., Omaha, (1) $53,752, (2) $34,115; Womack Constr. Co., Sherman, (1) $56,524 (2) $36,490; Cocke & Turner, Marshall, (1) $57,666 (2) $39,176. Engrs. est. (1) $100,980 (2) $66,945. Noted Nov. 23.

Tex., Kerrville—Kerr Co. grading, gravel surfacing, etc., 4.45 mi. State Highway 41, 16 ft., 639 cu.yd. concrete, 15,425 cu.yd. roadway and 11,883 cu.yd. borrow excav., 9,458 cu.yd. gravel surfacing, 73,940 lb. reinforcing, from G. Alvis, Winnsboro, $30,-953; McCall-Moore Eng. Co., Amicable Bldg., Waco, $32,823; R. G. Buckner & Son, Cleburne, $32,502. Engrs. est. $35,000.

Tex., Waco — McLennan Co. grading, gravel surfacing, sledged stone base with bituminous topping 3.7 mi. State Highway 7, McGregor Rd., 16 ft., from Wear & Thomas, Rogers, $29,947; D. H. Buchanan, City Natl. Bank Bldg., Temple, $31,736; McCoy & Richards, Arlington, $31,902. Engrs. est. $32,075. Noted Dec. 7.

Oklahoma—State Hy. Comn., Oklahoma City, hardsurfacing 9.684 mi. Federal Aid Project 74, Murray Co., from Western Constr. Co., Ardmore, $80,992, T. C. Ottinger, Hinton, $124,468, Allen & Harrison, 315 Empire Bldg., Oklahoma City, $110,-985; 12.278 mi. Federal Aid Project 82, Latimer Co., from V. C. Cossata, Oklahoma City (street address not available); 1.986 mi. Federal Aid Project 90, Carter Co., from Baum Constr. Co., Durant, $34,993, V. C. Cossata, Oklahoma City (street address not available), $63,345, Rheinhart & Donovan, 803 Tradesmen Natl. Bldg., Oklahoma City, $60,979.

California—State Hy. Dept., Sacramento, grading and asphalt macadam paving (1) 8.2 mi. road between Morrisons Crossing and Marysville, Yuba Co. (2) 8.2 mi. between Hollister and Pacheco Pass Rd., San Benito and Santa Clara Counties, (3) 14.2 mi. road between westerly boundary and Califa, Madera Co., grading and concrete paving (4) 1.8 mi. between Hercules and Rodeo, Contra Costa Co., grading (5) 7.4 mi. between Hueneme Rd. and Rindge Ranch, Ventura Co., from Blumenkranz & Vernon, Farmers & Merchants Bank Bldg., Stockton, (1) $141,275 (3) $238,172; W. E. Hall, 500 Market St., Riverside, (1) $190,-575 (2) $164,636 (3) $224,494; Granite Constr. Co., Watsonville, (2) $131,732; J. Phillips, 637 Santa Rey Ave., Oakland, (2) $210,412; R. T. Shea, 169 West 7th St., Riverside, (3) $193,648; L. Tagnon, 1735 Napa St., Vallejo, (4) $33,519; Lord & Bishop, Cloverdale, (4) $40,851; T. M. Burns, 2207 N St., Sacramento, (4) $41,-620; Hauser Constr. Co., 1109 Hobart Bldg., San Francisco, (5) $598,085; W. B. Arndt, Chronicle Bldg., San Francisco, (5) $599,-644; Utah Constr. Co., 824 Phelan Bldg., San Francisco, (5) $627,285. Noted Dec. 7.

Calif., Daly City—Grading 37,000 cu.yd. in Vista Grand Park, from C. J. Lindgren, El Cerrito Ave., Burlingame, $1.25 per cu.yd.

Calif., Los Angeles—Improving Melrose Ave. between Seward and Gower Sts., (1) grading (2) 184,455 ft. concrete pavement (3) 57,200 ft. grading, oiling and rolling (4) 5,418 ft. curb (5) 8,752 ft. sidewalks, from W. Liddington, 420 East 60th St., (1) $7,309 (2) $0.23 (3) $0.059 (4) $0.52 (5) $0.195; Fairchild-Gilmore-Wilton Co., Los Angeles Ry. Bldg., (1) $9,300 (2) $0.25 (3) $0.08 (4) $0.60 (5) $0.21; W. D. McCray, Amer. Bank Bldg., (1) $6,500 (2) $0.24 (3) $0.07 (4) $0.54 (5) $0.20.

CONTRACTS AWARDED

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving roadway of Bay St., granite block on 6 in. concrete, to M. I. Sachs, 246 South 9th St., Brooklyn, $34,128. Noted Dec. 14.

West Virginia—State Hy. Dept., Charleston, grading 5 mi. Union-Rock Camp Rd., Project 3045 Monroe Co., 26,250 lin.ft. clearing, 32,400 cu.yd. unclassified and 8,000 cu.yd. borrow excav., 839 cu.yd. concrete, 25,200 lb reinforcing, 1,410 lin.ft. 18 in. vitr. clay pipe, to J. Carola, Ronceverte, $62,972; 6 mi. Gilboa-Drennen Rd., Project 3047, Nicholas Co., 31,680 lin.ft. clearing, 73,700 cu.yd. unclassified and 3,450 cu.yd borrow excav., 618 cu.yd. concrete, 13,350 lb. reinforcing, 450 cu.yd. cement rubble masonry, 1,920 lin.ft. 18 in. vitr. clay pipe, to Tincher & Landacre, Richwood, $75,734; 6 mi. Sunset-Frost Rd., Project 3182 A, Pocahontas Co., 31,450 lin.ft. clearing, 61,400 cu.yd. unclassified and 1,100 cu.yd. borrow excav., 647 cu.yd. concrete, 9,265 lb. reinforcing, 2,030 lin.ft. 18 in. vitr. clay pipe, to B. C. Cornett, Independence, Va., $62,367; 5½ mi. Marrowbone-Crum Rd., Project 3188, Wayne Co., 27,300 lin.ft. clearing, 91,000 cu.yd. unclassified excav., 20,000 sta.yd. overhaul, 1,060 cu.yd. concrete, 28,000 lb. reinforcing, 1,750 cu.yd. cement rubble masonry, 1,400 lin.ft. 18 in. vitr. clay pipe, 10,000 cu.yd. borrow of rock for special rock fill, to C. E. Price, Huntington, $113,288; 8.3 mi. Gassaway-Frametown Rd., Project 3157, Braxton Co., 43,800 lin.ft. clearing, 125,000 cu.yd. unclassified and 43,721 cu. yd. borrow excav., 18,038 sta.yd. overhaul, 1,845 cu.yd. concrete, 138,638 lb. reinforcing, 2,994 cu.yd. cement and 2,363 cu.yd. dry rubble masonry, to Sutton Constr. Co., Ashland, Ky., $210,478; 8.2 mi. West Union-Ritchie Co line Rd., Project 3160, Doddridge Co., 42,967 lin.ft. clearing, 90,000 cu.yd. unclassified and 15,570 cu.yd. borrow excav., 13,146 sta.yd. overhaul, 731 cu.yd. concrete, 9,001 lb. reinforcing, 3,016 lin.ft. 18-36 in. rein.-con. pipe, etc., to Rogers & Shumway, Worthington, $109,615; Valley Head-Webster Co. line Rd., Project 3033, Randolph Co., 62,840 lin. ft. clearing, 160,-000 cu.yd. unclassified and 6,000 cu.yd. borrow excav., 5,000 sta.yd. overhaul, 1,340 cu.yd. concrete, 30,000 lb. reinforcing, 2,000 cu.yd. cement and 2,700 cu.yd. dry rubble masonry, 4,500 lin ft. 15-24 in. corrugated metal pipe, etc., to Belasco Constr. Co., Webster Springs, $187,244; 7 mi. Upper Tract-Grant Co. line Rd., Project 3014, Pendleton Co., 31,020 lin.ft. clearing, 50,000 cu.yd. unclassified and 3,900 cu.yd. borrow excav., 3,300 sta.yd. overhaul, 723 cu.yd. concrete, 9,000 lb. reinforcing, 1,820 lin.ft. 15-24 in. corrugated metal pipe, etc., to J. J. Battershell & Son, Virgilina, Va., $64,525; Northwestern Turnpike, Project 122 A, Mineral Co., 42,670 lin.ft. clearing, 55,000 cu.yd. unclassified excav., 19,000 sta. yd. overhaul, 1,050 cu.yd. concrete, 10,600 lb. reinforcing, 3,350 lin.ft. 15-24 in. corrugated metal pipe, etc., to J. J. Battershell & Son, Virgilina, Va., $79,032; grading and gravel surfacing 3 mi. St. Marys-Belmont Rd., Project 3078 A, Pleasants Co., 12,474 lin.ft. clearing, 36,000 cu.yd. unclassified and 5,425 cu.yd. borrow excav., 1,000 sta. yd. overhaul, 590 cu.yd. concrete, 410 cu. yd. cement rubble masonry, 706 lin.ft. 15-30 in. rein.-con. pipe, 7,400 cu.yd. gravel surfacing, etc., to Rogers & Shumway, Worthington, $54,707; 2.12 mi. New Martinsville-North Rd., Project 3082, Wetzel Co., 11,240 lin.ft. clearing, 9,350 cu.yd. unclassified excav., 129 cu.yd. concrete, 2,250 lb. reinforcing, 274 lin.ft. 15-18 in. rein.-con. pipe, 6,700 cu.yd. gravel surface, etc., to Ritchie & Ritchie, Ravenswood, $19,546; grading and paving with rock asphalt 7.5 mi. War-Newhall Rd., Project 3226, McDowell Co., to W. J. Weakland Co., Charleston, $290,421. Noted Nov. 30.

Fla., Chipley — For 20,000 sq.yd. one course concrete sidewalks, to J. F. Morgan Paving Co., Woodward Bldg., Birmingham, $1.33 per sq.yd.

Fla., Miami—Dade Co. paving with macadam Miami-Gardens Rd., to H. F. Duval, Miami, $11,891; Lemon City Rd., to H. L. Clark, Miami, $4,640; Ave. L and 42nd St. Rds., to S. Roundtree, Miami, $33,-634; 83,500 sq.yd. oiling, to L. H. Lehman, Miami, $0.105 per sq.yd.

Alabama—State Hy. Dept., Montgomery, grading, surfacing and constructing creosoted timber bridges on 18.67 mi. highway from Montgomery Co. line to Union Springs, Federal Aid Projects 1 and 68, Bullock Co., to D. R. Cook & Co., Selma, $326,228; grading and gravel surfacing 13.897 mi. Opelika-Waverly Rd., Lee Co., to R. D. Chambers & Co., West Point, Ga., $172,049. Noted Dec. 21.

Alabama—State Hy. Dept., Montgomery, grading and paving with warrenite bitulithic on stone macadam 11.175 mi. Montgomery-Birmingham Highway from Calera to Chilton Co. line, Federal Aid Project 99, Sect. B, and 11.408 mi. Montgomery-Birmingham Highway, from Calera to Jefferson Co. line, Federal Aid Project 99, Sect. A, to W. T. Taylor Constr. Co., Wilsonville, $412,857 and $362,760 respectively. Noted Dec. 14.

Miss., McComb City—Pike Co., curbing, guttering, grading and building sidewalks, to Lawrence, Nixon & Phillips; Jackson, $100,000.

Ind., Laporte—Laporte Co., gravel surfacing 28,000 ft. Bear Rd., 16 ft., to G. M. Gross Constr. Co., Laporte, $43,900, engrs. est. $57,188; 9,000 ft. Bell Rd., 16 ft., to Taylor & Alkire, Laporte, $25,449, engrs. est. $26,000; grading and graveling 14,300 ft. Sellers Rd., 16 ft., to F. C. Teach, Rensselaer, $25,800, engrs. est. $32,489. Noted Sept. 28.

Ind., Terre Haute — Vigo Co. to Carpenter Constr. Co., Terre Haute (street address not available), graveling 8.5 mi. John N. White Rd., 30 ft., $84,002, engrs. est. $110,983; 13,400 ft. J. A. Crabb Rd., 16 ft., $25,978, engrs. est. $27,800; 11,220 ft. Fromme Rd., 30 ft., concrete, $80,762, engrs. est. $112,769; to J. M. Robertson, Terre Haute (street address not available), 2.25 mi. George Woodsmall Rd., 16 ft., $25,834, engrs. est. $25,512. Noted Dec. 7.

Ind., Warsaw—Paving 12,324 ft. East Market St., 45 ft., 61,633 ft. asphalt on concrete, to Indiana Constr. Co., Warsaw, $93,951. Engrs. est. $97,500.

Ia., Mt. Ayr—Ringgold Co. grading Federal Aid Project 123, 37,900 cu.yd. excav. in connection with overhead crossing over Chicago Great Western tracks, also Project 141, 6 mi. road from Union Co. Line south toward here, 69,046 cu.yd. excav., to C. C. Barnes Co., 323 5th St., Des Moines, $29,-099. Noted Nov. 30.

Ia., Mt. Ayr—Ringgold Co. grading 5.9 mi. primary road west and northwest of Kellerton, to B. N. Dilts & Son, Mason City, 111,868 cu.yd. excav. $0.265 per cu. yd., etc., total $29,645 Noted Dec. 7.

S. D., Canton—E. A. Jones, aud. Lincoln Co., gravel surfacing 17 mi. State Project 8, to Western Bridge & Constr. Co., 748 Peters Trust Bldg., Omaha, Neb. Noted Nov. 23.

Tex., Hondo — Medina Co. grading and gravel surfacing 23.53 mi. highway, 18 ft., to Kuykendall & Shelton, Temple, $149,388. Noted Dec. 7.

Oklahoma — State Hy. Dept., Oklahoma City, grading and concrete paving 3.492 mi. Federal Aid Project 86, Tulsa Co., to Standard Paving Co., 1742 East 6th St., Tulsa, earth excav. at $0.25, loose rock $0.60, overhaul $0.05, borrow $0.27, concrete $18.50, concrete paving $2.35, total $127,-150. Noted Nov. 23.

Okla., Oklahoma City—Paving from Main to Linwood Sts., 1½ in. sheet asphalt. 1 in.

Streets and Roads (Continued)
binder, on 6 in. concrete, to Western Paving Co., Tradesman Natl. Bank Bldg., $28,513.

Arizona—State Hy. Comn., Phoenix, 2 in. asphaltic concrete surfacing 5 mi. road in Pinal Co. from junction of Mesa-Superior Highway with Florence-Superior Highway. westward toward Mesa, 18 ft., to Pacific Constr. Co., Home Builders Bldg., Phoenix, $61,776, with additional material at $8.30 per cu.yd. and $0.30 per ton per mi. haulage.

Oregon—State Hy. Comn., Salem, cement concrete paving 5.67 mi. Holmes Gap-Rickreall Sect. state highway, Polk Co., 16 ft., to Oregon Contract Co., Blake-McFall Bldg., Portland, $135,000; 9.8 mi. Monmouth to Polk Co. line section. 16 ft., to Cummings & Lapoint, 922 Kelly St., Portland, $249,000.

Calif., Los Angeles—Improving 16th St. between Crenshaw Blvd. and Arlington Ave., to G. R. Curtis, 2440 East 26th St., $114,417. Noted Nov. 23.

Calif., Los Angeles — Paving Lexington Ave. between Western Ave. and Gordon St., 123,513 sq.ft. warrenite bitulithic paving. 1,420 sq.ft. grading, oiling and rolling, 2,723 ft. curb, 4,429 sq.ft. walks, 6,842 sq. ft. gutter, etc., to G. H. Oswald, 366 East 5th St., $44,000.

Calif., San Diego—Improving Ft. Stockton Dr. et al., to Fairchilds-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles, $39,071. Noted Nov. 2.

Industrial Works

PROPOSED WORK

Mass., Pittsfield — Berkshire Products Corp. plans electric manufacturing plant. $70,000 to $100,000. J. M. Vance, 24 North St., archt.

Mass., Springfield—Springfield Dairy System, 70 Ventura St., plans bottling plant, rein.-con., plain foundation. C. J. Grant, clk.

N. Y., Brooklyn—Brooklyn Edison Co., 360 Pearl St., soon takes bids new power plant, initial capacity, 2 units, 50,000 k.w. each, ultimate total capacity 400,000 k.w., Marshall St. $10,000,000. T. E. Murray, Inc., 55 Duane St., New York, archts. G. L. Knight, 360 Pearl St., engr. This corrects report in Dec. 21 issue.

N. Y., Dunkirk—Amer. Locomotive Co., 30 Church St., New York City, plans brick, addition to plant, here. $50,000. Architect not announced.

N. Y., Troy—Fuller & Warren Co., foot of Monroe St., will rebuild portion of works, on River St., which was recently destroyed by Fire. $55,000. Architect not announced.

N. J., Elizabeth—Amer. Type Fdry. Co., Communipaw Ave., Jersey City, plans administration building, 165 ft. long, and assembling plant, 600 ft. long, 1 and 2 story, West Grand St., here. $750,000. Day & Zimmerman, 611 Chestnut St., Phila., engr.

Pa., Tullytown—Megargee Paper Mills, 16 South 5th St., Phila., does not plan to build plant here. This corrects report in Nov. 30 issue.

Pa., Williamsport—Glosser Motor Car Co., 248 William St., plans 3 story and basement, 43 x 66 ft. rein.-con., brick and steel garage, William and West Church Sts. $50,000.

W. Va., Buckhannon—Belgrade Glass Co. plans 1 story, 95 x 315 ft., corrugated iron or brick plant. Architect not selected.

W. Va., Kenova — Morgan Bros. plan hardwood lumber mill. $60,000. Architect not announced.

W. Va., Logan — Kentucky and West Virginia Power Co., 30 Church St., New York City, having plans prepared by F. R. Weller, engr., Mills Bldg., Wash., D. C., 1 story and basement, 50 x 120 ft., boiler house addition, rein.-con., brick and steel. $800,000.

Ky., Paducah—Paducah Ice Co., having plans prepared by Pillsbury-Becker Eng. Co., archts., 119 South 11th St., St. Lauis, Mo., 2 story, 75 x 220 ft., ice plant, South 3rd St. $700,000. Noted Nov. 30.

Ind., Evansville—Evansville Packing Co., Morgan Ave., having plans prepared by H. E. Boyle & Co., archts., Furniture Bldg., 3 story and basement, 31 x 42 ft. packing plant, rein.-con. and brick, concrete pile foundation. $45,000.

Ind., Ft. Wayne—Ft. Wayne Box Co., Calhoun and Superior Sts., plans factory, Superior St. $100,000. Architect not announced.

Ind., Indianapolis—Amer. Can Co., 120 Bway., New York City, plans 4 story and basement, 34 x 230 ft. factory, rein.-con., concrete pile foundation, South East St. $300,000. Private plans.

Ind., Lawrenceburg — Johnson & Klare Furniture Co. plans 3 story and basement, 80 x 300 ft. factory, stucco and frame. $58,000. Private plans.

Ind., Marion—Marion Machine and Fdry. Co. plans 2 story and basement, 45 x 100 ft. machine and foundry addition, brick and steel, 3rd St. $100,000. H. Elder, Marion, archt.

Mich., Albion—Service Caster & Truck Co., c/o H. H. Sheldon, 316 East Porter St., soon lets contract 1 story, 50 x 200 ft. brick and steel factory $40,000. Private plans.

Mich., Albion—See "Buildings."

Mich., Grand Rapids — C. J. Litscher Electric Co., 41 Market Ave., plans to rebuild 3 story and basement, 60 x 130 ft., rein.-con. and brick factory, plain foundation, Market St., recently destroyed by fire. $150,000. Owen, Ames & Kimball, Michigan Trust Bldg., may build on cost plus basis.

Ill., Chicago—Electrical Dealers Supply Co., 162 West Randolph St., having plans prepared by S. N. Crowen, archt., 400 North Michigan Ave., 3 story, 100 x 250 ft. factory, rein.-con., brick and steel, Diversey Ave. near Oakley Ave. $150,000.

Ill., Chicago—Griswold & Walker, 1520 South Halsted St., having plans prepared by O. Van Gunten, archt., 26 East Huron St., 6 story, 100 x 126 ft. warehouse, rein.-con., brick and steel, 1525-35 Newberry Ave. $250,000.

Ill., Peoria — Meyer Furnace Co., 1300 South Washington St., plans to rebuild its factory recently 2destroyed by fire. $100,000.

Wis., Cudahy—Milwaukee Vinegar Co., 79 Buffalo St., Milwaukee, having plans prepared by E. R. Leibert, archt., 432 Bway., Milwaukee, 3 story, 100 x 110 ft., yeast factory, brick and steel, here.

Wis., Iron River—See "Waterworks."

Wis., Madison — Capitol City Garage, South Pinckney St., having plans prepared by F. L. Kronenberg, archt., Carroll Bldg., 2 story, 66 x 165 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, Washington St. $60,000.

Wis., Madison — L. F. Schoelkopf, 210 East Washington Ave., plans 1 story, 66 x 150 ft., garage and automobile supply station, brick, rein.-con. and steel, plain foundation, East Main St. $50,000. Architect not selected.

Wis., Madison—Wisconsin State Hospital Comn., c/o W. F. Lorenz, Mendotta St., having plans prepared by A. Peabody, archt., Capitol Bldg., 1 story, 45 x 124 ft., brick and rein.-con. garage. $40,000.

Wis., Milwaukee — R. L. Clark, 2218 Meinecke Ave., having plans prepared by C. H. Thoringer, archt., 3328 State St., 2 story and basement, 100 x 140 ft., brick and concrete garage, plain foundation, 20th St. $65,000.

Wis., Stetsonville—Ripon Produce Co., c/o A. E. Wells, secy., Ripon, plans 1 story, 50 x 95 ft., brick, rein.-con. and steel dairy, plain foundation, here. $40,000. Architect not selected.

Wis., Stevens Point—Consolidated Water Power & Paper Co., Wisconsin Rapids, having plans prepared by L. A. De Guere, engr., Wisconsin Rapids, 2 story, paper mill and hydro electric generating plant, brick, rein.-con. and steel, plain foundation. $300,000.

Wis., Stratford — Stratford Light & Power Co. plans hydro electric generating plant with steam auxiliary and distribution system, brick, rein.-con. and steel, plain foundation. $65,000. Architect not selected.

Wis., Waunakee—Waunakee Canning Co., c/o A. P. Kenney, Waunakee State Bank, plans 2 story, 60 x 95 ft., brick, rein.-con. and steel factory, plain foundation. $100,000. Architect not selected.

Wis., Waupaca—Lindsay Light & Power Co. had plans prepared hydro electric generating and power plant, brick and steel, plain foundation. $50,000. Private plans.

Minn., St. Paul—L. W. Jordan Co., 118 West 7th St., plans 2 story and basement, 105 x 190 ft. farage and sales building, rein.-con. and brick, 118 West 7th St. $65,000. Architect not announced.

Okla., Canton—See "Waterworks."

Okla., Weatherford—Having plans prepared power plant, waterworks and electric light extensions. $114,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Wash., Walla Walla—Whitman College plans central heating plant, on Campus. $80,000.

Ore., Astoria—Hammond Lumber Co., Astoria, will build sawmill, planing mill, sash, door and box factory, to replace plant recently destroyed by fire. $700,000. Work will probably be done by day labor.

Ore., Portland—See "Miscellaneous."

Calif., Petaluma—Petaluma Ice & Cold Storage Co., (branch of Natl. Ice & Coal Storage Co., Postal Telegraph Bldg., San Francisco), had plans prepared alterations, additions and installation of equipment in cold storage plant, rein.-con., here. Cost incl. equipment $100,000. Private plans.

Calif., Stockton—H. Cowell Estate, c/o W. H. George, secy., 2 Market St., San Francisco, having plans prepared by H. H Meyers, archt., Kohl Bldg., San Francisco, 1 or 2 story, 80 x 100 x 150 ft., rein.-con. garage, Hunter and Channel Sts., here. $50,000.

Que., Terrebonne—Limoge & Co., plans 40 x 80 ft. rein.-con. and cement factory, $45,000. Work will probably be done by day labor.

Ont., Port Arthur—Pub. Utilities Comn. requested Hydro Electric Comn. of Ontaria, University Ave., Toronto, to install additional unit in Cameron Falls power plant on Nipigon River. F. A. Gaby, University Ave., Toronto, ch. engr.

Ont., Toronto — Kellogg Toasted Corn Flakes Co., 40 Strachan Ave., purchased site on Victoria Park Ave. and plans to build concrete, brick and steel factory next year. $150,000.

BIDS DESIRED

Pa., Erie — M. Griswold, c/o Griswold Mfg. Co., Erie, taking bids 2 story and basement, 100 x 150 ft. brick garage, 20th and State Sts. $40,000. Private plans. Northwestern Motor Co., Erie, lessee.

S. C., Great Falls — Jan. 15, by R. S. Mebane, pres. Republic Cotton Mills, 1 story, 400 x 4,000 ft., rein.-con. mill. $500,000. J. E. Sirrine, South Main St., Greenville, archt.

Ind., Evansville—Evansville Packing Co., Morgan Ave., taking bids 3 story, 31 x 42 ft. packing plant, rein.-con. and brick, concrete pile foundation. $45,000. H. E. Boyle & Co., Furniture Bldg., archts.

Ill., Chicago—Nelson Bros., c/o O. Van Gunten, archt., 26 East Huron St, receiving bids 3 story, 50 x 125 ft., rein.-con., brick and steel auto sales and repair shop, 6310-14 Bway. $100,000.

Tex., Waco—Jan. 10, by M. W. Scott & Co., archts., 412½ Franklin St., 4 story, 54 x 104 ft., loft and warehouse, rein.-con. and brick, plain foundation, for Weatherred Transfer & Storage Co., 623 Jackson St. $75,000.

Calif., Oakland—California Packing Corp., 101 California St., San Francisco, receiving bids, factory and warehouse, each 1 and 2 story, rein.-con. and brick, 1st and Filbert Sts., here. P. Bush, 101 California St., San Francisco, engrs.

Calif., San Francisco—A. S. Bugbee, archt., 26 Montgomery St., receiving bids 2 story and basement, rein.-con., garage and service station, capacity 300 cars, 2 street frontages 150 ft. and 130 ft., Stevenson St. between Ecker and Jessie Sts., for Stevenson Garage, Inc., c/o architect. To exceed $40,000. Noted Dec. 14.

CONTRACTS AWARDED

Mass., Holyoke—D. O'Connells Sons, 480 Hampden St., will build 2 story, 110 x 120 ft. garage, brick, plain foundation, Dwight St., by day labor. $50,000.

Pa., Monessen—Monessen Fdry. & Machine Co., 1 story, 32 x 100 ft. plant, to Pittsburgh Bridge & Iron Wks., Rochester.

Pa., Phila.—Breyer Ice Cream Co., 8th and Cumberland Sts., 2 story, factory, 43rd and Woodland Sts., to W. F. Kollee & Co., 2601 Oxford Ave., $45,000.

Pa., Pittsburgh — Superior Auto Accessories Co., 1342 Forbes St., 1 story and basement, 100 x 145 ft. and 78 x 120 ft. garage, Baum Blvd. and Woodworth Ave., to Conley & DeMey, 127 North Hiland Ave. Archts. est. $50,000. Noted Dec. 14.

Va., Alta Vista—Alta Vista Cotton Mil Co. 3 additions to plant, brick and timber to Palmer-Spivey Co., Elizabeth Ave., Charlotte, N. C., $100,000.

La., Baton Rouge — Bd. Regents of Louisiana State University, 1 story, engineering shop and power plant, 325 ft. long with four 100 ft. wings, concrete and brick, to Estes, Williams & Ragsdale, Scimitar Bldg., Memphis, Tenn., $147,158.

Ind., Indianapolis—Amer. Can Co., 120 Bway., New York City, 4 story and basement, 34 x 230 ft. factory, rein.-con., brick and terra cotta tile, to Ferro-Concrete Constr. Co., 3rd and Elm Sts., Cincinnati, O. Archts. est. $300,000.

Industrial Works (Continued)

Ind., Labanon—Cline & Hicks will build 40 x 40 ft. and 60 x 100 ft. machine and service stations, both 1 story, by day labor. $400,000. Private plans.

Mich., Detroit—Michigan Stamping Co., 11631 Mack Ave., 1 story, 140 x 347 ft. rein.-con., brick and steel factory, Mack Ave., to A. A. Albrecht Co., 1130 Penobscot Bldg.

Ill., Chicago—A. S. Alschuler, archt., 28 East Jackson Blvd., 3 story, 125 x 125 ft. printing plant, rein.-con., brick and steel, Congress and Laflin Sts., to J. W. Snyder, 116 South Michigan Ave. Archts. est. $250,000. Owner's name withheld. Noted Oct. 26.

Ill., Chicago—Yellow Cab Mfg. Co., 57 East 21st St., 1 story, 198 x 368 ft. assembling factory, rein.-con., brick and steel, 5801 Dickens Ave., to Buckley & Anderson, 2040 West Harrison St. Archts. est. $350,000.

Wis., Janesville—J. A. Strimple, 219 East Milwaukee St., 2 story, 113 x 190 ft., garage and pump shop, brick, rein.-con. and steel, plain foundation, Milwaukee St., to T. S. Willis, 328 Hayes Blk. Archts. est. $45,000.

Wis., Madison—University of Wisconsin, 4 story, 62 x 68 ft. service station, incl. garage, electric substation, woodworking shop, etc., brick, rein.-con. and steel, plain foundation, to J. H. Findorff, 601 West Wilson St., $78,987. Archts. est. $85,000.

Wis., Madison — Valvoline Oil Co., 815 East Main St., 2 filling stations and warehouse, brick and rein.-con., plain foundation, to A. D. and J. V. Frederickson, 702 East Main St. Archts. est. $40,000. Noted Nov. 30.

Wis., Merrill—Merrill Handle Co. 1 story, 100 x 108 ft., factory and warehouse incl. cupola, brick and rein.-con., plain foundation, to E. Schield, Merrill. Archts est. $40,000.

Wis., Milwaukee—Milwaukee Gas Specialty Co., 2017 Clybourn St., 1 story and basement, 45 x 115 ft., addition to factory, brick and concrete, plain foundation, to H. Danischefsky, 1484 Humboldt Ave. $45,000. Noted Nov. 30.

Calif., San Jose—De-Hi Food Products Co. will build dehydrating plant, on 5 acre site, Union Ave., here, by day labor. A. P. Marston, of California Prune and Apricot Growers Co., San Antonio and Market Sts., pres. Architect not selected.

Ont., Ford—Ford Motor Co. of Canada, first unit of rein.-con., brick and steel plant here, general contract to Wells & Gray, Confederation Life Bldg., Toronto; steel to Canadian Bridge Co., Walkerville. Total est. $1,000,000. Noted Nov. 30.

Buildings

PROPOSED WORK

N. H., Keene—Theater—D. Latchis, Brattleboro, Vt., plans 2 story, brick, here. $150,000.

Mass., Holyoke — Clubhouse — Aerie of Eagles, c/o D. Mullen, 142 Elm St., plans 3 story. $300,000. Architect not selected.

Mass., Holyoke—Y.M.C.A., 367 High St., plans 4 or 5 story, brick, plain foundation, Appleton St. $200,000-$300,000.

Mass., Northampton — Gymnasium — Smith College having sketches made by J. W. Ames and E. S. Dodge, archts., 15 Exchange St., Boston, 2 story. $300,000.

Mass., Northampton—Music Hall—Smith College having plans prepared by Delano & Aldrich, archts., 126 East 38th St., New York City, music hall. $400,000.

Mass., Springfield—Apartment—N. Nirenstein, 387 Main St., plans 4 story, Maple St. $300,000.

Mass., Springfield—Office—L. W. Besse, 21 Besse Pl., having plans prepared by Brown & Von Beren, archts., Church St., New Haven, Conn., 6 story, 70 x 112 ft., brick, plain foundation. $250,000.

Mass., Springfield—Station—Boston & Albany R.R., South Station, Boston, plans railroad station, Liberty St., here. $4,000,000.

R. I., Providence—Office—Providence Gas Co., Turks Head Bldg., plans large office building, Weybosset and Orange Sts. Architect not selected.

Conn., Bridgeport—Church—St. Stephens Roman Catholic Church, 330 Spruce St., plans 1 story and basement, stone or brick, Fairfield Ave. and Bird St. $200,000. S. F. Chernitzky, pastor. Architect not selected.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, having plans prepared by C. B. Snyder, archt. and engr., Flatbush Ave. extension and Concord St., P. S. 203, brick, steel and stone, plain foundation Ave. M. and East 51st St., here. $600,000.

N. Y., Glenmorris (Jamaica P. O.) — School—Bd. Educ., 500 Park Ave., New York City, having plans prepared by C. B. J. Snyder, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 121, brick, steel and stone, plain foundation, Shuwanee Ave., here. $500,000.

N. Y., New York — High School — Bd. Educ., 500 Park Ave., soon receives bids George Washington High School, 4 story, 246 x 376 ft., brick, steel and stone, 535-589 Audubon Ave., $2,240,000. C. B. J. Snyder, Flatbush Ave. Extension and Concord St., Brooklyn, archt. and engr.

N. J., Newark—Temple—Salaam Temple A.A.O.N.M.S., 1020 Broad St., rejected bids brick and stone, plain foundation, Broad St. $1,000,000. Will readvertise. F. Grad, 245 Springfield Ave., archt. Noted Dec. 22.

Pa., Harrisburg—Bank—Keystone Bank of Harrisburg, 3rd and Calder Sts., plans 3 story and basement, 110 x 120 ft., brick, steel and stone, 3rd St. $200,000.

Pa., Jersey Shore—High School—Bd. Educ. plans 2 story, brick. $150,000. Architect not announced.

Pa., Kingston—High School—Bd. Educ. plans new brick high school, Wyoming Ave. $200,000. Architect not selected.

Pa., Phila.—Apartment—Stetler & Deysher, archts., 1484 North 52nd St., soon take bids 3 story and basement, 92 x 117 ft. brick, steel and stone, plain foundation, 48th and Walnut Sts. $200,000. Owner's name withheld.

Pa., Phila. — Chapel — Phila. Divinity School, 42nd and Locust Sts., soon takes bids 1 story and basement, rein.-con., brick, steel and stone, plain foundation, 42nd and Locust Sts. $250,000. M. B. Medary, Otis Bldg., archt.

Pa., Phila.—Synagogue—H. H. Kline, archt., Bulletin Bldg., soon takes bids 3 story and basement, 80x95 ft. brick, steel and stone, plain foundation, Hutchinson and Warrnock Sts. $150,000. Owner's name withheld.

Pa., Pittsburgh—High School—Bd. Educ. having plans prepared by W. G. Eckles, archt., New Castle, brick school with 24 class rooms, gymnasium and auditorium, 10th and Pennsylvania Aves. $325,000.

Md., Baltimore—Club—City Club having plans prepared by C. N. and N. Friz, archts., Lexington Bldg., 6 story, ornamental terra cotta and fireproof construction, Saratoga and St. Paul Sts. $500,000. H. F. Doelman, 507 North Charles St., consult. structural engr..

Md., Baltimore — Lodge — Knights of Pythias, 129 North Gay St., having plans prepared by C. N. and N. Friz, archts., Lexington Bldg., 4 story, brick and stone, Charleston and Preston Sts. $600,000. J. M. Hendricks, secy.

W. Va., Morgantown—Hotel—Morgantown Hotel Co., plans hotel, High and Chestnut Sts. $500,000. J. H. Poling, pres. Architect not selected.

N. C., Burlington—School—Jan. 9, to vote on $150,000 bonds for schools.

N. C., Raleigh—Hotel—G. L. Preacher & Co., archts., Raleigh, and Healy Bldg., Atlanta, Ga., preparing plans 8 story and basement, stone, brick and terra cotta, West Martin St. $250,000. Owner's name withheld.

Fla., Frostproof — Station—See "Railways.

Miss., Jackson—Office—Lamar Life Insurance Co. plans 15 story, North Congress St. $750,000. Architect not selected.

Miss., Vicksburg — Schools — Plans 2 schools, brick, plain and concrete pile foundations, Cherry St. $425,000 bonds sold. Architect not selected.

Ky., Frankfort—High School—Plan to vote on $150,000 bonds in January, for high school. A. L. Gordon, member city council.

Ky., Louisville—Home—B. P. O. E. had plans prepared by Joseph & Joseph, archts., Francis Bldg., 8 story and basement, 3rd and Chestnut Sts. $1,000,000.

Ky. , Louisville—Station and Office—Louisville Ry. Co., Traction Bldg., plans 2 or 3 story, 200 x 500 ft. J. P. Barnes, pres.

O., Cleveland—Dormitory—Y.W.C.A., c/o A. Ewart, secy., 3105 Franklin Ave., plans 3 story, brick, steel and concrete, Franklin Ave. $200,000. Hubbell & Benes, 4500 Euclid Ave., archts.

O., Cleveland—High School—Bd. Educ. of Mayfield School Dist., c/o G. Gilmore, clk., Chagrin Falls, plans 3 story, brick, steel and concrete, near here. $225,000. Fulton, Taylor & Cahill, 8120 Euclid Ave., Cleveland, archts.

O., Cleveland—Hotel—Ledge Lawn Manor Co., c/o T. Perrin, vice-pres., Cleveland Discount Bldg., plans 2 story, brick and timber hotel, riding academy and golf course, Richfield and Peninsula Rds. $300,000. Architect not selected.

O., Dayton — Office — United Brethren Church, rejected bids opened Dec. 1, 14 story, 60 x 128 ft., and 7 story addition to adjoining structure, rein.-con., tile and brick, 4th and Main Sts. $850,000. Will readvertise. Noted Nov. 30.

O., East Cleveland (Cleveland P. O.)—School—Bd. Educ. plans 3 story, 40 room, brick, steel and concrete, Euclid and Grasmere Aves. $800,000. Architect not selected.

O., Greenville—High School—Bd. Educ. having plans prepared by W. B. Ittner, archt., 911 Locust St., St. Louis, Mo., 3 story, about 150 x 175 ft., rein.-con. and brick, plain foundation. $500,000.

O., Lakewood (Cleveland P. O.)—Apartment—I. Lerman and F. Libman, 3219 East 117th St., Cleveland, having plans prepared by Branerman & Havermaet, archts., 801 Ulmer Bldg., Cleveland, 3 story and basement, 102 x 160 ft., brick and timber, plain foundation, Clifton Blvd., near Cove Ave. $200,000.

Ind., Gary—Store and Office—Minas Furniture Co., 158 State St., Hammond, having plans prepared by W. E. Berry, archt., 212 East Superior St., Chicago, 3 story and basement, 50 x 150 ft., brick, Bway. $160,000.

Ind., Greensburg — Dormitory — I.O.O.F. Lodge of Indiana, Odd Fellows Bldg., Indianapolis, plans 3 story and basement, brick, here. $150,000. C. Brossman, Merchants Bank Bldg., Indianapolis, archt.

Ind., Hammond—Hotel—Hammond Hotel & Improvement Corp., c/o Crane & Franzheim, archts., 127 North Dearborn St., Chicago, having plans prepared 4 story, rein.-con. and brick. $500,000. Noted Oct. 12.

Ind., Huntington—Hotel—J. F. Bippus, 841 North Jefferson St., plans 8 story and basement, 133 x 146 ft., brick and steel. $500,000. Private plans.

Ind., Indianapolis — Apartment — Chadwick Realty Co., 420 Merchants Bank Bldg., plans 3 story and basement, 70 x 205 ft., brick and stone, 1105 North Pennsylvania St. $200,000. Architect not selected.

Ind., Indianapolis—Community—Christamore Settlement Assn., 901 King Ave., plans 2 story and basement, West Michigan St. $150,000. W. E. Russ, Meridian Life Bldg., archt.

Ind., Marion — High School—Bd. Educ. having revised plans prepared by H. G. Bowstead, archt., 2 story and basement, 140 x 220 ft., brick, 36th St. $300,000. Noted July 27.

Ind., Terre Haute—High School—Bd. Educ. had revised plans prepared by Johnson, Miller & Miller, archts., 30 North 5th St., 2 story and basement, 220 x 400 ft., rein.-con. and brick, concrete pile foundation, 25th St. $700,000. Warren & Lewis, Realty Bldg., Louisville, Ky., engrs. Noted Oct. 19.

Mich., Albion — Dormitory, Gymnasium, etc. — Albion College, having preliminary plans prepared by H. K. Ferguson, archt., 6523 Euclid Ave., Cleveland, O., 3 story and basement, rein.-con. dormitory, plain foundation, $150,000; 1 and 2 story and basement, gymnasium and central heating plant, rein.-con. and brick, plain foundation, $250,000.

Mich., Albion—Hospital—J. W. Sheldon Memorial Assn., 316 East Porter St., having plans prepared by A. Wood, archt., 3513 Woodward Ave., Detroit 4 story and basement, 90 x 100 ft. rein.-con., plain foundation, South Superior St. $150,000.

Mich., Detroit—Apartment—P. R. Rossello, archt., 406 Congress Bldg., preparing plans 3 story and basement, 110 x 140 ft. brick and steel, plain foundation, Cass Ave. $225,000. Owner's name withheld.

Mich., Detroit—Apartment—J. I. Weinberg, archt., 401 Congress Bldg., preparing plans 4 story and basement, 40 ft. high, 42 x 170 ft., rein.-con., brick and steel, plain foundation, Peterboro St. $200,000. Owner's name withheld.

Mich., Detroit—Bank and Office—First State Bank & Security Trust Co., Griswold St., plans 4 story and basement, 74 x 130 ft. rein.-con., brick and steel, Griswold and Lafayette Sts. $500,000. Architect not selected.

Mich., Detroit — Church — West Grand Blvd., Methodist Episcopal Church, West Grand Blvd. and 12th St., having plans prepared by W. E. N. Hunter, archt., 1436 Washington Blvd., 2 story and basement, brick, steel and stone, plain foundation, West Grand Blvd. and 12th St. $200,000.

Buildings (Continued)

Mich., Detroit—Community—West Grand Blvd. Methodist Episcopal Church, West Grand Blvd. and 12th St., having plans prepared by W. E. N. Hunter, archt., 1436 Washington Blvd., 5 story, 80 x 100 ft. concrete, brick and steel, plain foundation, 12th St. $150,000.

Mich., Detroit—School—Bd. Educ. having plans prepared by Malcomson, Higginbotham & Palmer, archts., 405 Moffat Bldg., 2 story and basement, 110x145 ft. rein.-con., brick and steel, plain foundation, Kirby Ave. $150,000.

Mich., East Lansing—College—Michigan Agricultural College, had sketches made by Pond & Pond, archts, 64 East Van Buren Ave., Chicago, and takes bids early in spring, 3 story and basement, 115 x 125 ft. rein.-con. and brick, plain foundation, Grand River Ave. $400,000.

Mich., East Lansing—Horticultural—E. Bowd, archt., 127 West Allegan St., Lansing, preparing plans and takes bids in spring, 3 story and basement, 40x185 ft. rein.-con. and stone, plain foundation, here, for Michigan Agricultural College. $400,000.

Mich., Jackson—Prison—Michigan State Prison having preliminary plans prepared by Smith, Hinchman & Grylls, archts., 809 Marquette Bldg., Detroit, complete new prison, may be built in units at North Farm. $5,000,000.

Mich., Lansing—Hotel—Lansing Hotel Corp., Lansing, having plans prepared by W. S. Holmes Co., archts., Tussing Bldg., 11 story and 2 basements, 110 x 132 ft. rein.-con. and brick, Michigan Ave. $1,000,000.

Mich., Lansing—Temple—E. A. Bowd, archt., 127 West Allegan St., takes bids early in spring, 5 story and basement, 70 x 140 ft. rein.-con. and brick, for Masonic Assn., c/o E. Gibbs, American State Savings Bank. $400,000.

Ill., Chicago—Apartment—A. Lindstrom, c/o C. W. Westerlind, archt., 179 West Washington St., plans 3 story and basement, rein.-con., brick and steel, 4520 Drexel Blvd. $500,000.

Ill., Chicago—Apartment—J. Rosenberg c/o Rissman & Hirschfeld, archts., 139 North Clark St., having plans prepared three 3 story and basement, 125 x 169 ft., rein.-con., brick and steel, Everrett and 55th Sts. $1,500,000.

Ill., Chicago—Apartment—Yates Building Corp. c/o Leichenko & Esser, archts., 38 South Dearborn St., soon lets contract 4 story, 200 x 250 ft., rein.-con., brick and steel, Yates St., between 71st and 72nd Sts. $600,000.

Ill., Chicago—Church—St. Gregory Roman Catholic Congregation, 1634 Gregory St., having plans prepared by Comes, Perry & McMullen, archts., Renshaw Bldg., Pittsburgh, Pa., 1 story and basement, 60 x 150 ft., brick and stone. $150,000.

Ill., Chicago—Office—C. A. Eckstrom, archt., 5 North La Salle St., preparing plans 4 story, 62 x 197 ft., rein.-con., brick and steel addition to Garland Bldg., Wabash Ave. and Washington St. $500,000. Owner's name withheld.

Ill., Chicago—Hotel—Fullerton Plaza Hotel Co., 508 Fullerton Parkway, having plans prepared by Olsen & Urbain, archts., 155 North Clark St., 5 story, 96 x 179 ft., rein.-con., brick and steel addition. $350,000.

Ill., Chicago—Hotel—Lincoln Square Hotel Co., c/o Olsen & Urbain, archts., 155 North Clark St., having plans prepared 4 story, 130 x 175 ft., rein.-con., brick and steel, 525-29 Arlington Pl. $500,000.

Ill., Chicago—Store and Office—I. M. Mills, c/o Ludgin & Leviton, archts., 53 West Jackson Blvd., plans 2 story and basement, 100 x 120 ft., rein.-con., brick and steel, 6922-28 South Haisted St. $175,000.

Wis., Appleton — Temple — Appleton Masonic Temple Assn., c/o G. Buchanan, pres., 817 College Ave., having plans prepared by Leenhouts & Guthrie, archts., 424 Jefferson St., Milwaukee, 2 story and basement, brick or stone. $150,000.

Wis., Madison—Hotel—Piper Bros. Co., 31 North Pinckney St., having plans prepared by Baech & Lippert, archts., Gay Bldg., 10 story, 101 x 164 ft., brick rein.-con. and steel, plain foundation, Mifflin St. $850,000.

Wis., Madison—Store—Kessenichs Co., c/o F. Kessinick, mgr., 26 North Carroll St., plans 2 or 4 story, 60 x 155 ft., brick, rein.-con. and steel, plain foundation. $150,000. Architect not selected.

Wis., Madison—Store—Apartment—R. A. Phillips, archt., 315 Beaver Bldg., preparing plans 4 story, 75 x 190 ft., brick, rein.-con. and steel, plain foundation. $150,000. Owners name withheld.

Wis., Milwaukee — Apartment — H. C. Schwartz, 482 Van Buren St., having plans prepared by H. G. Lotter, archt., 427 Milwaukee St., 3 story and basement, 46 x 110 ft., brick, plain concrete foundation, Cass St. $150,000.

Wis., Milwaukee—Church—St. Catherines Congregation, plans, c/o R. L. Kuhn, chn. building com., 548 12th St., 1 story and basement, brick and tile, plain foundation, Center St. $150,000.

Wis., Milwaukee—Club House, etc.—Blue Mound Country Club, c/o G. F. Gregg, secy., 437 East Water St., plans brick and tile, or ordinary construction club house, incl. golf links, Kilbourn and Loomis Rds. $250,000. Architect not selected.

Wis., Milwaukee—Club House and Commercial—Milwaukee Eagles, Aerie No. 137, Plankinton Arcade, plans brick and concrete, plain foundation, to replace one recently destroyed by fire. $150,000-$200,000. Architect not selected.

Wis., Mineral Point — High School — Bd. Educ. having plans prepared by E. Tough, archt., Conklin Bldg., Madison, 2 story, 80 x 110 ft., brick, rein.-con. and steel, plain foundation. $150,000.

Wis., Racine—Store—Lodge—Columbus Bldg. Assn., 1600 Racine St., having plans prepared by Racine Constr. Co., archts., 468 College Ave., 3 story, 60 x 114 ft., brick, rein.-con. and steel, plain foundation. $150,000.

Wis., Rice Lake—High School—Bd. Educ. having plans prepared by E. J. Hancock, archt., Eau Claire, 2 story, 75 x 195 ft., high and vocational school, brick, rein.-con. and steel, plain foundation. $150,000.

Wis., Verona—Asylum—Dane Co., Court House, Madison, plans 4 story, 100 x 140 ft., asylum, incl. cold storage plant, brick, rein.-con. and steel, plain foundation. $150,000. M. Sommers, chn. Architect not selected.

Kan., Kansas City—Office and Store—H. and F. Jennings, 754 Minnesota Ave., plans 2 story and basement, rein.-con. and brick. $150,000. Architect not selected.

Kan., Manhattan — Church — Methodist Church Congregation takes bids about Jan. 15, 2 story and basement, 60 x 120 ft., brick and stone. $200,000. T. W. Williamson & Co., 312 Central Natl. Bank Bldg., Topeka, archts.

Kan., Pittsburgh — Temple — Shrine Mosque having plans prepared by J. W. Williams & Co., archts., 312 Central Natl. Bank Bldg., Topeka, 4 story and basement, 140 x 140 ft., rein.-con. and brick. $300,000.

Kan., Topeka—Office—Kansas Life Insurance Co., 701 Jackson St., takes bids about Jan. 15, 4 story and basement, 50 x 120 ft., rein.-con. and brick. $150,000. T. W. Williamson & Co., 312 Central Bank Bldg., archts.

Neb., Falls City—Courthouse—Richardson Co. having plans prepared by W. F. Gernandt, archt., 634 Keeline Bldg., Omaha, 3 story. $200,000.

Mo., St. Louis—School—Bd. Educ., 911 Locust St., having preliminary plans prepared by A. Milligan, archt. and engr., 911 Locust St., 3 story, 12 room, ultimately 24 room school for colored, rein.-con. and brick, plain foundation, 23rd and Walnut Sts. $200,000.

Tex., Dallas — Club — Dallas Lodge 44, I. O. O. F., 1821 Young St., having preliminary plans prepared and takes bids early in 1923, club at Cabell and Pearl Sts. $150,000. S. S. Cochran, chn.

Tex., Dallas—College—St. Marys College, Garrett and Ross Aves., making plans college. $200,000. Architect not announced.

Tex., Dallas—Hotel—H. S. Green, archt., Alamo Bank Bldg., San Antonio, takes bids early in 1923, 14 story and basement, 75 x 200 ft., steel, brick and tile, plain foundation, for C. L. Sanger, 2429 South Blvd. and associates. $400,000.

Tex., Dallas — Market — City having sketches made by C. D. Hill & Co., archts. and engrs., Sumpter Bldg., 2 story and basement, 200 x 200 ft. Election in April to vote on $500,000 bonds.

Tex., Ft. Worth—Club—Ft. Worth Club, 106 West 6th St., plans club, about 12 story, at Throckmorten and 7th Sts. $1,500,000. Engineer not selected.

Tex., Houston — Library — City Comn. takes bids early in 1923 for library. $200,000. W. A. Dowdy, City Hall, archt. and engr.

Tex., Lubbock—Church—First Baptist Church had preliminary plans prepared church. $150,000. Address Chairman building com. Architect not selected.

Tex., Port Arthur — Grade School — Bd. Educ. having plans prepared by W. B. Ittner, archt., 911 Locust St., St. Louis, Mo., 2 story, 80 x 232 ft., rein.-con. and brick, plain foundation, to contain gymnasium, auditorium, manual training shops, etc., De Queen Blvd. $150,000.

Tex., Port Arthur — High School — Bd. Educ. having preliminary plans prepared by W. B. Ittner, archt., 911 Locust St., St. Louis, and takes bids about Jan. 15, two 2 story, 145 x 160 ft. wings, brick, steel and tile, concrete foundations, one for Manual Training School other to Commercial High School, $200,000 each, also 1 story 30 x 65 ft. boiler house, concrete stacks, etc., $100,000.

Okla., Okmulgee—Community—Election soon to vote on $175,000 bonds 2 story and basement, 120 x 140 ft., rein.-con., brick and terra cotta, North Alabama Ave. Architect not selected.

Okla., Tulsa—Bank and Office—Central Natl. Bank, 2nd and Boston Sts., having plans prepared by H. H. Mahler Co., archts., 231 Lynch Bldg., 15 story and basement, 50 x 140 ft., rein.-con., brick and terra cotta, 2nd and Boston Sts. $1,000,000.

Wash., Centralia—Hotel—Company being formed to build hotel. $200,000. J. Agnew Chn. Address Secretary of Commercial Club.

Calif., Alameda—Temple—Masonic Temple Assn., c/o C. Werner, archt., Santa Fe Bldg., San Francisco, had plans prepared 2 story, rein.-con., Alameda and Park Sts. $150,000.

Calif., Bakersfield—Hotel and Store—T. J. Coleman, mgr. St. Francis Hotel, San Francisco, interested in company being organized to construct 6 story, 19th and I Sts. $500,000. Architect not selected.

Calif., Berkeley — Office — Physicians Bldg., Inc., c/o McWethy & Greenleaf, archts., 505 17th St., Oakland, take bids in January, 4 story, concrete, Channing Way. $150,000.

Calif., Oakland—Administration—Alameda Co. having plans prepared by H. H. Meyers, archt., Kohl Bldg., San Francisco, 2 story, rein.-con. and terra cotta, 14th Ave. and East 27th St. To exceed $150,000.

Calif., Sacramento—Schools—City had plans prepared by E. A. Mathews and H. Simpson, archts., Call Bldg., San Francisco, and takes bids in January, eight 1 and 2 story, brick, steel, concrete and terra cotta buildings, 34th, 35th, U and V Sts. $540,000.

Calif., Oakland — Store — Whitthorne & Swan, 1015 Washington St., had plans prepared by W. Knowles, archt., Hearst Bldg., San Francisco, and Central Bank Bldg., Oakland, 1 and 3 story and basement, rein.-con., Washington and 10th Sts.

Calif., San Francisco—Theatre—A. S. and J. L. Levin, c/o Reid Bros., archts., 105 Montgomery St., having plans prepared theatre, 2,000 seating capacity, Geary St. and 18th Ave. $250,000.

Calif., Santa Barbara—Hotel—Recreation Center had sketches made by J. Morgan, archt., Merchants Exch. Bldg., San Francisco, 3 story, brick, Anacapa and Carrilo Sts. $150,000.

Que., Hull—Schools—Catholic School Bd. takes bids in spring, new schools. $300,000. Architect not selected.

Que., Montreal—University—McGill University, Sherbrooke St. W., plan 3 story 92x242 ft. addition, University St. $328,000. A. Currie, principal.

Ont., London—City Hall—A. M. Piper, building inspector, City Hall, preparing plans and takes bids about March 1, for new city hall, nornamental brick and stone. $300,000.

Ont., Meaford—School—Bd. Educ. plans 2 story and basement, 45 ft. high, 8 room, concrete, brick and steel addition. $150,000. Architect not selected.

Ont., Pembroke—School—Bd. Educ. having plans prepared by W. C. Keighley, archt., 156 Pembroke St., E., 2 story and basement, 8 room, concrete, brick, steel and stone. $150,000.

Ont., Sandwich—School—Bd. Educ. takes bids in January new school. $266,000. E. R. North, town clk.

Ont., Toronto—School—Separate School Bd., 477 Jarvis St., had plans prepared by J. P. Hynes, archt., 73 King St. W., 2 story and basement, 44 ft. high, 12 rooms, concrete, brick and steel, Dawson St. $200,000.

Ont., Toronto—Schools—Bd. Educ., 155 College St., plans new schools and additions to old ones, mostty 2 slory and basement, concrete, brick and steel, in various sections of city. $1,000,000. W. W. Pearse, 155 College St., archt.

Ont., Toronto—School—Separate School Bd., 477 Jarvis St., having plans prepared by J. M. Cowan, archt., 107 Vincent St., 2 story and basement, 8 room, concrete, brick, stone and tile addition. $150,000.

Ont., Toronto—School—York Twp. School Bd., Sect. 30, having plans prepared by Gordon & Helliwell, archts., Confederation Life Bldg., 2 story and basement, 8 room, concrete, brick and steel. $150,000.

ROAD WORK—ORANGE, TEX.

Bids were opened Nov. 13, by Orange Co., for constructing 11 road projects, (A) **F. P.** McElwrath, Corsicana, (awarded contract); (B) C. K. Horton, Houston; (C) Houston Constr. Co., Houston. The unit bids were as follows:

	A	B	C
2 acres clearing (light)	$50.00	$50.00	$40.00
2 acres clearing (heavy)	100.00	100.00	100.00
21.91 mi. road grader work	225.00	50.00	200.00
29,915 cu.yd. roadway excavation	32	40	.30
9,000 cu.yd. roadway excavation	.35	.40	.30
10,100 cu.yd. borrow excavation	.35	.35	.30
80 cu.yd. borrow excavation	.35	.35	1.00
1,000 cu.yd. borrow excavation	32	.35	.25
1,600 cu.yd. borrow excavation	40	.35	.30
28.546 mi. shaping roadbed	75.00	50.00	75.00
160,863 sq.yd. earth shoulders	03	01	03
21,120 sq.yd. concrete pavement	2.50	2.70	2.82
32,728 sq.yd. concrete pavement	2.50	2.60	2.82
53,848 sq.yd. reinforcing mesh	.20	12	.14
2,224 lin.ft. oak headers 3 in. x 8 in.	25	.20	.40
352 lin.ft. oak headers 3 in. x 8 in.	.25	30	.40
168 lin.ft. vitrified drain tile 12 in.	2.00	1.50	1.50
48 lin.ft. vitrified drain tile, 12 in.	2.50	1.50	1.50
144 lin.ft. vitrified drain tile, 15 in.	2.50	2.00	3.00
144 lin.ft. vitrified drain tile, 18 in.	3.00	3.00	3.00
288 lin.ft. vitrified drain tile, 24 in.	3.50	4.00	5.06
24 lin.ft. vitrified drain tile, 24 in.	4.00	4.00	5.00
96 lin.ft. vitrified drain tile, 36 in.	7.50	5.75	6.00
953.14 cu.yd. concrete class A	22.00	25.00	23.00
47.50 cu.yd. concrete class B	22.00	30.00	23.00
44.71 cu.yd. concrete class B	28.00	20.00	22.00
49.64 cu.yd. concrete class B	22.00	25.00	22.00
755 cu.yd. structural excavation	2.00	1.50	2.00
59 cu.yd. structural excavation	2.00	2.00	2.00
58,405 lb. reinforcing steel	0.055	0.05	0.07
Cleaning, painting, repairing 312 ft. steel bridge (lump sum)	3,000.00	4,500.00	3,500.00
Cleaning, painting, repairing 360 ft. steel bridge (lump sum)	1,750.00	3,000.00	1,500.00
Extended totals	*$271,558	$396,448	$436,699

*Bid did not include furnishing material for gravel and shell roads.

Buildings (Continued)

BIDS DESIRED

N. Y., Brooklyn — Apartment — J. A. Mears Inc., 342 Madison Ave., New York City, will build 6 story, 102 x 125 ft., brick, steel and stone, plain foundation, 8th Ave. and Court St., by separate contracts. $160,000. Slee & Bryson, 154 Montague St., archts. and engrs.

N. Y., New York—Loft—Gilbur Corp., Inc., 205 West 37th St., will build 17 story, 98 x 244 ft., 37th St and 7th Ave., by separate contracts. $1,500,000. A. Quinn, pres. Contract for steel, let to Levering & Garrigues Co., 552 West 23rd St. Buchman & Kahn, 56 West 45th St., archts. and engrs.

Md., Baltimore—Church—Jan. 3, by J. C. Heller, 507 Linwood Ave., chn. of building Com., Church of Our Savior, 2 story, brick and stone, 33rd and Taylor Sts. J. A. Dempwolf, Centre Sq., York, Pa., archt.

Md., Baltimore — Engine Houses and Truck Houses—Jan. 3, by City, engine house No. 59, Maryland and Indiana Aves., Westport, C. F. Strohmeyer, archt.; No. 57, Harford Rd. and Fleetwood St., Hamilton, W. H. Emory, Jr., Munsey Bldg., archt.; No. 58, Pennington Ave. and Filbert St., F. H. Thomas, 135 West Kenwood St., archt.; No. 47, Washington Blvd. and 8th St., R. W. Greer, 18 West Saratoga St., archt.; No. 25, R. L. Harris, 13 West Saratoga St., archt.; Engine house No. 55 and truck house 23, 28th St. between Oak and Maryland Aves., W. F. Stone, Jr., Maryland Casualty Tower, archt.; engine house No. 56 and truck house No. 24, Bush and Carroll Sts., W. F. Stone, Jr., Maryland Casualty Tower, archt.; all foregoing brick and rein.-con. Bids will be taken on each individually; also lump sum for five engine houses, and lump sum on two groups of engine and truck houses.

Md., Baltimore—High School—Jan. 10, by Mayor and City Council, 3 story, concrete, steel and brick, Hawthorne Rd. and Clarendon Ave. $1,250,000. Parker, Thomas & Rice, Union Trust Bldg., archts. H. Adams, Calvert Bldg., and H. Massart, 324 North Charles St., engrs.

Tex., Houston—Bank—First Natl. Bank, 201 Main St., receiving bids 12 story and basement, 90 x 100 ft., Franklin Ave. $750,000. Sagnuinett, Staats & Gotlieb, Carter Bldg., archts. and engrs.

Calif., Hollywood—Hospital—R. H. Orr, archt., Van Nuys Bldg., Los Angeles, receiving bids 5 story, 40 x 199 ft., with 40 x 60 ft. wing, rein.-con., Vermont Ave., for Hollywood Hospital Assn. $300,000.

Calif., San Francisco—Market and Apartment—W. C. Falch, archt., Hearst Bldg., receiving bids 6 story, rein.-con., Market St. near Gough St., for J. B. Gaffney and R. A. Luce, 1031 Market St. $200,000. A. A. Coddington, Phelan Bldg., mechanical engr. P. Zucco, 166 Geary St., structural engr.

BIDS RECEIVED

N. Y., Binghamton — School — Bd. Educ. opened bids general contract 2 story and basement, 157 x 178 ft., brick, 1st Ward, from D. Kirkpatrick and F. Stento, Binghamton $329,700, Shane Constr. Co., Herald Bldg., Syracuse, $371,382, Felton Constr. Co., Buffalo, $364,369; heating and ventilating, from Johnson Heating Co., New York City, $48,300, Power Efficiency Corp., White Bldg., Buffalo, $55,490; E. G. Woolfolk & Co., Newark, N. J., $49,687. Noted Nov. 23.

CONTRACTS AWARDED

Mass., Springfield—Apartment—W. Zimmerman, 19 Glendell Terrace, will build 4 story, 116 x 180 ft., brick, plain foundation, Bowdin Terrace, by day labor. $175,000. J. W. Foster, 46 Narragansett St., archt.

N. Y., Brooklyn—Apartment—L. Halperin Improvement Co., c/o Cohn Bros., archts. and engrs; 361 Stone Ave., will build 4 story, 100 x 100 ft., brick, steel and stone, plain foundation, Buffalo Ave. and Lincoln Pl., by day labor.

N. Y., Brooklyn—Apartment—S. H. Cutting, c/o Shampon & Shampon, archts. and engrs., 188 Montague St., will build 4 story, 100 x 120 ft., brick, steel and stone, plain foundation, Schenectady Ave., by day labor. $200,000.

N. Y., Brooklyn—Apartment—Grolier Bldg. Corp., c/o C. Schafer, Jr., archt. and engr., 394 East 150th St., New York City, will build 6 story, 100 x 140 ft., brick, steel and stone, plain foundation, Grand Concourse and 173rd St., by day labor. $175,000.

N. Y., Brooklyn—Apartment—Sayetta Realty Corp., c/o McCarthy & Kelly, archts. and engrs., 159 Remsen St., will build 6 story, brick, steel and stone, plain foundation, Ocean Ave., by day labor. $225,000.

N. Y., Brooklyn—Apartment—C. and K. Constr. Co., c/o Shampan & Shampan, archts. and engrs., 50 Court St., 6 story, 135 x 210 ft., brick, steel and stone, plain foundation, Ocean Ave. near Church Ave., by day labor. $750,000.

N. Y., New York—Apartment—Five Hundred Eighty Park Ave. Corp., c/o J. E. R. Carpenter, archt. and engr., 598 Madison Ave., 14 story, 75 x 200 ft., brick, steel and stone, plain foundation, 63rd St. and Park Ave., to Dwight P. Robinson & Co., Inc., 125 East 46th St. Archts. est. $3,000,000.

N. Y., New York—Apartment—Hillpin Building Corp., 3420 3rd Ave., 5 story, 15 x 78 ft., brick, steel and stone, plain foundation, Decatur Ave., by day labor. $175,000. J. M. Felson, 1133 Bway., archt. and engr.

N. Y., New York—Apartment—F. McNulty, c/o C. Schafer, Jr., archt. and engr., 394 150th St., will build 5 story, 100 x 100 ft., brick, steel and stone, plain foundation, West 206th St., by day labor. $150,000.

N. Y., New York—Apartment—L. Wolf, c/o Margon & Glaser, archts. and engrs., 2806 3rd Ave., will build 5 story, 80 x 100 ft., brick, steel and stone, plain foundation, University Ave., by day labor. $200,000.

N. Y., New York—Apartment—H. Glick, c/o D. S. Lang, archt. and engr., 110 West 34th St., will build 5 story, 100 x 100 ft., brick, steel and stone, plain foundation, 188th St. and Audubon Ave., by day labor. $250,000.

N. Y., New York — Apartment Morris Ave. Building Corp., c/o Margon & Glaser, archts. and engrs., 2806 3rd Ave., will build brick, steel and stone, plain foundation, Morris Ave., by day labor. $200,000.

N. Y., New York—Hotel I. Feldman, c/o C. B. Meyers, archt. and engr., 31 Union Sq., will build 15 story, 40 x 220 ft., brick, steel and stone, plain foundation, 100th St. and Bway., by day labor.

Pa., Grove City—Hotel—Owsley Co., archts., 1301 Mahoning Bank Bldg., Youngstown, O., 5 story, 89 ft. front, concrete, brick and steel, to Parish Bros., 217 Wick Ave., Youngstown, O., for Grove City Hotel Co., Grove City. Archts. est. $200,000. Noted Nov. 30.

Md., Baltimore — Office — Federal Land Bank, 1 story and mezzanine, stone, St. Paul and 24th Sts., to M. A. Long Co., Guilford Ave. and Fayette St. Archts. est. $150,000.

D. C., Wash.—High Schools—Dist. Comn., 509 Dist. Bldg., for MacFarland and Langley Junior High Schools, to M. Serretto, Main Treas. Bldg., $592,000. Noted Dec. 21.

N. C., Greensboro—School—Bd. Educ., general contract for school, Cedar St., to Palmer-Spivey Constr. Co., Campbell Bldg., Augusta, Ga., $129,450.

Miss., Jackson — Auditorium — General contract for 2 story, 160 x 160 ft., brick and steel, rein.-con. foundation, to I. C. Garber, Jackson, $120,000. Archts. est. $158,000.

O., McComb—Grade and High School—Bd. Educ. 2 story and basement, 114 x 182 ft., brick, rein.-con. and steel, from J. I. Barnes, South Bend, Ind., $222,254; Wood Constr. Co., 427 Holland Bldg., Lima, $226,619; O. M. Green, 325½ North Elizabeth St., Lima, $229,842. Noted Nov. 30.

Ind., Laporte—High School—Bd. Educ., 2 story and basement, 165 x 198 ft., rein.-con. and brick, concrete pile foundation, to Lanson & Danielson Constr. Co., Laporte. Archts. est. $400,000. Noted Oct. 19.

Ind., South Bend—Apartment—T. P. Moredock, 315 West Colfax St., 3 story and basement, 87 x 97 ft., Colfax St., to R. Goilitt & Sons, 30 North La Salle St., Chicago. Archts. est. $200,000.

Mich., Lansing—Hospital—St. Lawrence Hospital Assn., 101 Willow St., 4 story and basement, 131 x 183 ft. rein.-con. and brick, to Reniger Constr. Co., 336½ East Michigan Ave., $400,000.

Wis., Milwaukee—Apartment—J. Hunholz, 2310 Vliet St., 6 story and basement, 53 x 104 ft., brick and rein.-con., plain concrete foundation, on Biddle St., to Cutter Constr. Co., 886 46th St. Archts. est. $150,000. Noted Dec. 14.

Wis., Racine—Hotel—New Racine Hotel Co., c/o C. Fowler, secy., Badger Bldg., 8 story, 104 x 240 ft., brick and tile, plain concrete foundation, to Starrett Bros., 8 South Dearborn St., Chicago. Archts. est. $2,400,000. Noted Dec. 21.

Ia., Dubuque—Apartment-Hotel—Cooper Estate will build 4 story and basement, 114 x 129 ft., rein.-con., brick, tile and stone, 2nd and Locust Sts., by day labor. $150,000 J. F. Leitha, Dubuque, archt.

Tex., Amarillo — Hospital — Potter Co., general contract hospital, tubercular cottage and nurses home, to V. E. Ware, El Paso, $145,000. Archts. est. $250,000. Noted Nov. 30.

Tex., Memphis—Courthouse—Hall Co., general contract 2 story, 72 x 106 ft., rein.- and brick, to Walker Constr. Co., Houston Bldg., San Antonio, $121,520. Noted Nov. 23.

Colo., Denver — Administration — Bd. Educ. general contract 2½ story and basement, 115 x 140 ft., 14th and Laramer Sts., to F. J. Kirchoff Constr. Co., 718 Lawrence Bldg., $143,520. Archts. est. $169,000.

Calif., Arrowhead—Hotel and Store—Swasey & McAfee, archts., Hibernian Bldg., Los Angeles, 3 story and basement, to Atwood Constr. Co., San Bernardino, $240,000. Owner's name withheld.

Calif., Los Angeles—Apartment—Lange & Bergstrom, Washington Bldg., will build 8 story, Park View St., by day labor. $650,000. Walker & Eisen, Pacific Finance Bldg., archts.

Calif., Los Angeles—Cathedral and Parish House—St. Pauls Cathedral, constructing brick and steel, Figueroa St. near Orange

Buildings (Continued)

St., to P. Hall, 934 **South Raymond Ave., Pasadena, $295,000.**

Calif., Los Angeles—Theatre—H. & H. Circuit, Title Insurance Bldg., rein.-con. theatre, Pico and Norton Sts., to Burck Constr. Co., 325 South Hill St., $300,000.

Calif., Oakland—School and Convent—G. McCrea, archt., 369 Pine St., San Francisco, constructing 1st unit of church buildings, 3 story and basement, rein.-con., to W. G. McGinty & Sons, Federal Realty Bldg., $52,138, for Church of Lady of Lourdes. Bids for other units will be asked later.

Ont., Waterloo—School—Bd. Educ., 2 story and basement, 8 room, concrete, brick and steel, general contract to Ellert Bros., Park Ave., $101,000; heating, plumbing, etc., to W. Knell & Co., 45 King St. W. Total est. $150,000.

Federal Government Work

PROPOSED WORK

N. Y., Ft. Tilden—Plotting and Switchboard Room—U. S. Engineer, Army Bldg., 39 Whitehall St., New York, plans plotting and switchboard room, here.

Ala., Florence—Displacement tanks, etc.—U. S. Engineer, Florence, plans to purchase displacement tanks, countersights, castings and other parts for regulating gates of Wilson Dam.

O., Cincinnati—Towboats—U. S. Engineer, 405 Custom House, plans to purchase oil-engine, electric driven towboats.

Mich., Battle Creek—Hospital—U. S. War Veterans' Bureau, 1044 Arlington Bldg., Wash., D. C., having plans prepared Neuro-Psychiatric Hospital at Camp Custer, here. C. R. Forbes, dir. Noted Aug. 31.

Calif., San Diego—Garage, Sewer, etc.—Spec. 4741—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids for garage, sewer, pavement and fence, here. Noted Nov. 16.

BIDS DESIRED

Mass., Boston—Remodeling—Jan. 18, by Treas. Dept., Wash., D. C., remodeling Post Office Screen in U. S. Post Office and Sub-Treasury, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Pa., Phila.—Dredging—Jan. 17 at office U. S. Engineer, 815 Witherspoon Bldg., dredging in Delaware River between here and Trenton, N. J.

Pa., Phila.—Scows—Jan. 15 at office U. S. Engineer, 815 Witherspoon Bldg., 4 steel dump scows.

Del., Wilmington — Scows — Jan. 15 at office U. S. Engineer, for 2 wooden dump scows; adv. this issue.

Virginia—Dredging—Jan. 15 at office U. S. Engineer, Custom House, Norfolk, dredging 50,000 cu.yd. Appomattox River. J. C. Oakes, ch. engr. Virginia Dist.

W. Va., Huntington—Lock Operating Machinery, etc.—Jan. 23 at office U. S. Engineer, lock operating machinery, etc., for Dam 30, Ohio River; adv. this issue. Noted Nov. 23.

Mo., St. Louis—Levee Work—Jan. 24, at office Secretary Mississippi River Comn., 1311 International Life Bldg., levee work in Sny Island Levee D.D., Illinois., adv. this issue.

Ore., Astoria—Piers—Spec. 4615—Jan. 17 by Bureau Yards & Docks, Navy Dept., Wash., D. C., for piers, here.

Calif., Crescent City—Furnishing Stone, etc.—Feb. 15 at office, U. S. Engineer, 401 Custom House, San Francisco, furnishing and delivering approximately 80,000 ton stone for repairing and extending present breakwater approximately 400 to 600 lin.ft. Noted Nov. 16.

Alaska—Bridges—Jan. 22, by C. E. Dole, genl. purch. agt., Alaskan Eng. Comn., 422 Bell St. Terminal, Seattle, Wash., for 1 steel viaduct, two 40 ft. girder spans, two 74 ft. spans, one 80 ft. span and two steel towers, over Eagle Creek; one 124 ft. steel span over Noyes Slough; steel span over Mountain Creek. U. S. Engineer Office, New Post Office Bldg., Portland, Ore., engrs.

BIDS RECEIVED

Mich., Detroit—Dredging—U. S. Engineer, 337 Federal Bldg., dredging and rock removal in Livingstone Channel, Detroit River, (1) 323,000 cu.yd. earth excav. with possible over depth of 16,000 cu.yd. (2) 175,000 cu.yd. rock with possible over-depth 86,000 cu.yd., from M. Sullivan Dredging Co., 853 Iroquois Ave., (1) $0.50 (2) $3.50; Dunbar & Sullivan Dredging Co., 2212 Dime Bank Bldg., (1) $0.50 (2) $3.50; Great Lakes Dredge & Dock Co., Williamson Bldg., Cleveland, O., (1) $0.45 (2) $3.70. Noted Nov. 16.

Calif., Livermore — Buildings, Electrical Work, etc.—C. R. Forbes, dir. U. S. Veterans' Bureau, Arlington Bldg., Wash., D. C., opened bids for 29 rein.-con. buildings for U. S. Veterans' Hospital, here, from J. Walsh, 85 2nd St., San Francisco, (1) $1,559,800 (2) $19,800 (3) $75,740 (4) $75,740 (5) $69,880 (6) $41,000 (7) $73,600 (8) $95,500 (9) $21,400 (10) $12,080 (11) $12,850 (12) $9,800 (13) $14,540 (14) $12,280 (400 days); unit prices (1) excavation 1.60 (2) concrete $15 (3) rein.-con. $22 (4) reinforcing steel $61 (5) structural steel $109 (6) brick $40 (7) gravel road $1.25, B. Trost, 26th and Howard Sts., San Francisco, (1) $1,568,000 (2) $18,200 (3) $67,000 (5) $56,950 (6) $45,650 (7) $72,900 (8) $94,400 (9) $17,900 (10) $11,900 (12) $11,500 (13) $14,700 (14) $12,400 telegraphic modifications (1) add $202,723 (2) $3,298 Building 1, (3) $19,875 Building 6 (4) $18,885 Building 8 (5) $6,320 Building 12 (6) $10,619 Building 14 (7) $14,891 Building 15 (8) $374 Building 16 (9) $1,043 Building 18 (10) $1,991 Building 19 (12) $1,935 Building 21 (13) $3,150 Building 23 to 25 and 27 to 30 (14) $3,750 Building 31 to 32, (450 days), unit prices (1) $1.50 (2) $12 (3) $30 (4) $70 (5) $140 (6) $45 (7) $0.60 (8) $0.22, Lange & Bergstrom, 722 Sharon Bldg., San Francisco, (1) $1,881,495 (2) $20,000 (3) $84,000 (5) $67,600 (6) $50,700 (7) $76,700 (8) $113,000 (9) $21,700 (10) $12,600 (11) $12,400 (12) $12,400 (13) $17,400 (14) $15,100, unit prices (1) add $2.25 deduct $1 (2) add $20 deduct $12 (3) add $29 deduct $23 (4) add $70 (5) add $130 deduct $100 (6) add $55 deduct $45 (7) add $2.30 deduct $1.20 (8) add $0.30 (400 days); plumbing, heating, ventilating, outside piping, and garage in above hospital, from Latourrette-Fical Co., 2761 Sacramento Blvd., Sacramento, (1) $327,200 (2) $1,900 (3) $8,400 (4) $8,100 (5) $6,700 (6) $5,700 (7) $10,800 (8) $22,000 (9) $2,900 (10) $200 (11) $2,100 (12) $2,200 (13) $1,300 (14) $1,300 (300 days), J. Smyth Plumbing and Heating Co., Spokane, Wash., (street address not available) (1) $358,000 (2) $2,808 (3) $10,027 (4) $10,027 (5) $8,904 (6) $6,165 (7) $16,498 (8) $31,703 (9) $2,688 (10) $3,095 (11) $2,212 (12) $1,131 (13) $1,925 (14) $1,240 (365 days), S. W. Rittenhouse, 1327 Taylor St., Wash., D. C., (1) $394,719 (2) $1,768 (3) $9,240 (4) $9,240, (5) $8,000 (6) $5,663 (7) $12,759 (8) $30,444 (9) $2,243 (10) $4,071 (11) $1,337 (12) $1,075 (13) $1,311 (14) $1,136 (308 days); electric work, from F. E. Newberry Electric Co., 359 Sutter St., San Francisco, (1) $181,137 (2) $1,671 (3) $5,237 (4) $5,237 (5) $5,226 (6) $3,243 (7) $3,392 (8) $6,032 (9) $684 (10) $554 (11) $531 (12) $1,009 (13) $1,951 (14) $2,048 (475 days) Butte Electric and Mfg. Co., 534 Folsom St., San Francisco, (1) $183,400 (2) $1,636 (6 days) (3) $6,191 (4) $6,138 (5) $4,960 (6) $3,529 (7) $4,064 (8) $4,684 (9) $2,373 (10) $6,026 (11) $766 (12) $1,344 (13) $1,721 (14) $2,074 telegraphic modication add $3,000 to item (1) (300 days); refrigerating equipment in above from Cyclops Iron Wks., 837 Folsom St., San Francisco, $18,516, Automatic Refrigerating Co., 536 Munsey Bldg., Wash., D. C., $32,460 modification $20,985, Vulcan Iron Wks., 1849 Kearney St., San Francisco, $21,992; kitchen equipment, from L. Ellerbrock, Inc., 20 South Frederick St., Baltimore, Md., $36,800 (180 days); Mangrum & Otter, Inc., 827 Mission St., San Francisco, $39,048 (120 days), Nathan-Dohrmann Co., Geary and Stockton Sts., San Francisco, $40,720, (90 days); laundry equipment from Troy Laundry Mchy., Ltd., 133 Center St., New York City, $23,381 (45 days), Amer. Laundry Mchy. Co., Norwood Sta. Cincinnati, O., $23,771, (90 days) Steck Mfg. and Gear Co., 2130 Folsom St., San Francisco, $30.000. Noted Nov. 23.

CONTRACTS AWARDED

Pa., Pittsburgh—Steel Hull—U. S. Engineer, Pittsburgh, for 1 steel dipper dredge hull, to Penn Bridge Co., Beaver Falls, $23,145. Noted Dec. 21.

Va., Cape Henry—Power Houses—U. S. Engineer, Norfolk, for 2 power houses incl. wells, tanks, etc. at Ft. Story, here to H. M. Lucas, Maple Ave., Portsmouth, $28,907. Noted Nov. 9.

W. Va., Huntington—Dwellings—U. S. Engineer, Huntington, for 5 lockkeepers' dwellings at Dam 30, Ohio River, near Greenup, Ky., to H. Campbell & Sons, Huntington, $40,566. Noted Nov. 16.

Tenn., Memphis — Boilers — Mississippi River Comn., 1st and 2nd Dists., Custom House, 2 Clyde Type boilers for hydraulic grader, to Greeman Mfg. Co., Racine, Wis., $10,150. Noted Nov. 2.

Tenn., Memphis—Machinery—Mississippi River Comn., 1st and 2nd Dists., Custom House, for turbine pumps, feed water heater, boiler-feed pumps and electric light plant, to T. M. Whitted, Realty Bldg., Charlotte, N. C. $12,257. Noted Nov. 2.

Wis., Milwaukee—Dredge Hull, etc.—U. S. Engineer, for 1 dipper dredge hull and house, to Green Bay Dry Dock Co., Green Bay, $58,900. Noted Nov. 2.

Ia., Knoxville—Hospital—Director U. S. Veterans Bureau, at office Quartermaster General, 2306 Munitions Bldg., Wash., D. C., for Neuro-Psychiatric Hospital, here, complete incl. water, lighting and heating systems, etc., to Warner Constr. Co., 730 Waveland Ave., Chicago, $889,974. Noted Dec. 21.

FEDERAL POWER COMMISSION

Applications for Licenses and Permits

Applications

357—Emery Consolidated Mining Co., Deer Lodge, Mont.—Wants license for transmission line from Deer Lodge to Emery.

358—Imboden Hydro-Electric & Manufacturing Co., Imboden, Ark.—Wants license for diversion dam, canal, and power house in Spring River, near here.

359—Kaweah Molybdenum Mines Co., Crocker Bldg., San Francisco, Calif.—Wants preliminary permit for dam, pipe line and power house in Kaweah River, Tulare Co.

360—Pigeon River Lumber Co., Wisconsin Rapids, Wis.—Wants preliminary permit for 5 power houses in lower 12 mi. Pigeon River, Cook Co., Minn.

Miscellaneous

PROPOSED WORK

Road Oiling and Distributing Machine—Belmont, N. Y.—Allegany Co. plans purchasing road oiling and distributing machine. $6,000.

Freight Dock—Erie, Pa.—State, Erie Co. and City plan new freight dock at foot of Peach St. $250,000. Address W. Morrison, member Penna. Peninsula Co., Erie.

Memorial Tower — Wilkes-Barre, Pa. — Comrs. Luzerne Co. having plans prepared memorial tower with clock. $100,000. T. Atherton, Wilkes-Barre, archt.

Power Plant Equipment—Memphis, Tenn.—Takes bids about Jan 20, furnishing and installing power plant equipment for new Parkway Pumping Station, incl. miscellaneous piping, feed water heater, feed pumps, boiler breeching, boiler settings, air flow meters, forced draft fans, central oiling system, and miscellaneous gauges and instruments. $140,000. Fuller & McClintock, 879 North Parkway, engrs.

Golf Course, etc.—Cleveland, O.—See "Buildings."

Road Machinery—Wisconsin—Following are county appropriations for road machinery during 1923. Ozaukee Co. $20,000 incl. drag line outfit, W. J. Ubbink, Port Washington, comr.; Chippewa Co. $7,000, incl. small patrol graders, P. O. Lokrantz, Chippewa Falls, comr. Polk Co. 1 large road grader, 12 patrol graders and rock crusher, C. W. Nystrom, Balsam Lake, comr.; Marinette Co. 12 patrol graders and 2 light motor trucks for road work, A. Eklund, Pestigo, comr.; Shawano Co. number of patrol graders, W. F. Meyer, Shawano, comr.

Park Improvements—Dallas, Tex.—Plans election in April to vote on $500,000 bond issue for park improvements, incl. roads, walks, etc. G. D. Fairtrace, city engr.

Traffic Signal System, etc.—Dallas, Tex.—City Comn. takes bids latter part of January, electric traffic signal system, towers, etc. $20,000-$30,000. H. Garrett, supt. Fire and Police Alarms.

Electric Light Extensions—Clinton, Okla.—See "Waterworks."

Electric Light Extensions—Weatherford, Okla.—See "Industrial Works."

Mains, Gas Holder, etc.—Portland, Ore.—Portland Gas and Coke Co., Gasco Bldg., plans to extend mains and erect gas holders, $600,000; extend and renew gas plants, $300,000; erect buildings and purchase miscellaneous equipment, $100,000. H. Pabst, genl. mgr.

Water Power Development — Pushthrough, N. F. — H. J. Crowe, Canadian Pacific Ry. Bldg., Toronto, Ont., had surveys made by H. L. Cooper & Co., engrs., 101 Park Ave., New York City, and Kerry & Chase, Ltd., engrs., 550 Confederation Life Bldg., Toronto, Ont., developing 100,000 hp. on Bay D'Est River and Bay D'Espoir on south coast. $8,000,000 to $10,000,000.

BRIDGE—SPOKANE, WASH.

Bids were opened by Bd. Pub. Wks., Dec. 8, for constructing West Spokane St. Bridge, Proposition 1, furnishing and erectin complete, (A) Jahn & Bressi, New York Bldg., Seattle; (B) J. A. McEachern Co., Colman Bldg., Seattle; (C) Scrobel Steel Constr. Co.; (D) Penn Bridge Co.; Proposition 2, furnishing only, delivered at bridge site, superstructure and machinery, (1) City Plan, (2) Strauss Plan, Bethlehem Shipbuilding Co., (1) $276,871, (awarded contract), (2) $260,863; Union Constr. & Dry Dock Co., (1) $292,670, (2) $282,860; Felix Bridge Co., (1) $306 723, (2) $289,695; Proposition 3, furnishing and installing electrical equipment, (1) City Plan, (2) Strauss Plan, Westinghouse Electric & Mfg. Co., Alaska Bldg., Seattle, (1) $23,215 (awarded contract) (2) $29,030; Butte Electric & Mfg. Co., (1) $24,422 (2) $29,000; Jahn & Bressi, (1) $28,240 (2) $29,000; Proposition 4, erection of superstructure and machinery only, (A) Gerrick & Gerrick (awarded contract for City Plan); (B) E. E. Davis & Co.; (C) Jahn & Bressi. The unit bids on Propositions Nos. 1 and 4 are as follows:

	City Plan						
	Proposition No. 1				Proposition No. 4		
	A	B	C	D	A	B	C
3,850,000 lb. furnishing and erecting bridge steel	$0.08	$0.08¼	$0.0894	$0.0993	$0.0135	$0.016	$0.017
320,000 lb. furnishing and erecting machinery steel	.22¼	.26	.24	.25	.0175	.02225	.022
890 cu.yd. concrete counterweight	12.00	13.00	16.00	18.00	15.00	50.00	12.00
200 cu.yd. cinder counterweight	11.50	15.00	18.00	24.00	14.00	50.00	11.50
22,000 lb. steel counterweight	.06	.06	.06	.0485	.06	.06	.06
650 sq.yd. road floor, bascule leaves	18.00	18.00	17.00	18.30	14.00	13.50	18.00
544 ft. street car track, bascule leaves	2.75	4.00	5.50	4.10	4.50	3.75	2.75
256 sq.yd. sidewalk, bascule leaves	2.00	3.00	3.50	1.50	3.50	2.25	2.00
230 sq.yd. road on fixed part	17.50	16.00	16.50	17.30	14.00	13.00	17.50
550 sq.yd. road on approach spans	17.50	16.00	17.00	17.30	14.00	13.00	17.50
658 ft. street car tracks, spans and approaches	1.75	3.00	2.50	4.00	4.00	3.25	2.75
236 sq.yd. sidewalks, spans and approaches	4.50	4.00	4.80	3.00	3.50	3.50	4.50
86 sq.yd. machinery platform	4.80	5.00	4.80	6.00	3.75	4.50	4.80
Electrical equipment (lump sum)	25,000.00	25,000.00	37,800.00	25,700.00			
2 operators' houses	2,000.00	1,000.00	3,750.00	2,300.00	1,800.00	850.00	2,000.00
2 gas engines and clutches	3,000.00	3,000.00	3,500.00	3,450.00	300.00	300.00	500.00
2 machinery houses	500.00	500.00	2,300.00	2,100.00	1,200.00	300.00	1,500.00
Extended totals	$460,700	$482,926	$528,018	$555,562	$106,151	$110,224	$123,366
Strauss Plan							
3,516,000 lb. furnishing and erecting structural steel	$0.08	$0.0810	$0.0887	$0.919	$0.0135	$0.016	$0.017
315,000 lb. furnishing and erecting machinery steel	.22¼	.26	.242	.25	.0175	.0275	.022
1010 cu.yd. concrete counterweight	15.00	16.00	16.00	20.00	15.00	14.00	14.50
32,000 lb. steel counterweight	.06	.06	.06	.0485	.06	.06¼	.06
674 sq.yd. road floor, bascule leaves	18.00	18.00	17.00	18.30	14.00	13.50	18.00
564 ft. street car track bascule leaves	2.75	4.00	5.50	4.10	4.50	3.75	2.75
265 sq.yd. sidewalk bascule leaves	2.00	3.00	3.50	1.50	3.50	2.25	2.00
206 sq.yd. road, bascule leaves	17.50	16.00	16.50	17.30	14.00	13.00	17.50
550 sq.yd. road on approach	17.50	16.00	17.00	17.30	14.00	13.00	17.50
638 ft. street car track on approach	2.75	3.00	5.50	4.00	4.00	3.25	2.75
246 sq.yd. sidewalk on approach	4.50	4.00	4.80	3.00	3.50	3.50	4.50
98 sq.yd. machinery platform	4.80	5.00	4.80	6.35	3.75	4.50	4.80
Electrical equipment (lump sum)	30,650.00	32,000.00	40,000.00	31,400.00	......	......	......
2 operators' houses	2,000.00	1,000.00	3,750.00	2,300.00	1,800.00	600.00	2,000.00
2 machinery houses	1,500.00	500.00	2,300.00	2,100.00	1,200.00	500.00	1,300.00
Extended totals	$444,923	$458,300	$501,573	$532,367	$105,400	$110,338	$122,977

Miscellaneous (Continued)

Grain Elevator—Ft. William, Ont.—Bole Grain Co. Ltd., plans concrete grain elevator. $500,000.

Subway—Hamilton, Ont.—Plans subway, 66 ft. wide, under Grand Trunk Ry. tracks, Wentworth St., concrete, steel and stone. $100,000. E. R. Gray, city engr.

Transmission Lines—Niagara Falls, Ont.—Stamford Twp. plans to extend hydro electric lines through township. $38,000.

Asphalt Plant—Owen Sound, Ont.—Plans to purchase and install municipal asphalt plant. $50,000. D. H. Fleming, City Hall, engr.

BIDS DESIRED

Iron Trailer Trucks—Binghamton, N. Y.—Bd. Contract and Supply taking bids 2 iron trailer trucks for use by Bureau of Garbage and Ashes.

Motor Gasoline—New York, N. Y.—Jan. 3, by H. Bruckner, pres. Bronx Boro, Tremont and 3rd Aves., furnishing and delivering 6,000 gal. motor gasoline. $1,200. Former bids rejected. Noted Dec. 21.

Crusher—Trenton, N. J.—Bd. Freeholders Mercer Co. taking bids new crusher for county workhouse at Glen More. $30,000 to $40,000. H. F. Harris, Court House, engr.

Asphalt, Crushed Stone, Sand, etc. — Phila., Pa.—Dec. 30, by F. H. Caven, dir. pub. wks., City Hall, furnishing 14,400 cu. yd. sand, $25,000; 20,000 ton crushed stone, $40,000, 2,200 ton asphalt cement, $15,000; 80,000 gal. 19@23 degree fuel oil, $12,000; 225,000 gal. 30@36 degree fuel oil, $50,000. T. F. Armstrong, 316 City Hall, purch. agt.

Gravel—Louisiana—Jan. 9, by State Hy. Comn., Reymond Bldg., Baton Rouge, furnishing 13,452 cu.yd. washed gravel for surfacing Sect. C Federal Aid Project 116, Minden-Arcadia Highway, Webster Parish.

Wharf—Detroit, Mich.—Jan. 8, by Pub. Lighting Comn., East Atwater St., 1,049 ft. rein.-con. wharf, 36 ft. wide, on 50-80 ft. wood piles, intake flume 80 x 94 ft. resting on 50 and 60 ft. piles. Smith, Hinchman & Grylls, 800 Marquette Bldg., engrs.

Portland Cement—Wisconsin—Jan. 3, at office State Hy. Comn., Madison, 1,538,000 bbl. Portland cement for delivery during 1923. A. R. Hirst, state highway engr.

Gravel Pit Machinery—Sheboygan, Wis.—Sheboygan Co. taking bids gravel pit machinery, conveyors, etc. G. W. Ubbelohde, Court House, chn.

Rock Crusher and Grader—Minneapolis, Minn.—Jan. 8, by Auditor Hennepin Co., rock crusher, and 1 grader with scarifier attached. E. E. Terrell, co. surv.

Tractor and Snow Plow—Grand Forks, N. D.—Taking bids one 10 ton caterpillar tractor and one snow plow.

Steam Roller — Denison, Tex. — Taking bids 10 ton steam roller. $10,000. J. Field, Denison, engr.

Road Levee and Bridge—Redwood City, Calif.—Jan. 2, by Supervs. San Mateo Co., constructing road levee and bridge over Bean Hollow, 13,000 cu.yd. earth embankment, 175 cu.yd. concrete in bridge, 150 cu.yd. concrete, slope pavement on embankment, 32,400 ft. sheet piling, etc. $25,000. G. Kneese, co. surv. Noted Dec. 7.

Quarrying and Stone Crushing Equipment—Montreal, Que.—O. Martineau & Filo Ltd., 371 Marie Anne Ave. E., taking bids for quarrying and stone crushing equipment.

BIDS RECEIVED

Facade and Retaining Walls—New Orleans, La.—Bd. Port Comrs., 201 New Court Bldg., opened bids Dec. 14, facade at foot of Canal St., also retaining walls, filling and paving between Iberville and Poydras Sts., from Heary-Oakes Co., Inc., Perrin Bldg., $65,000 (200 days); G. F. Favrot, Canal Commercial Bank Bldg., $66,312 (238 days); T. H. Brockman, 1525 Berna St., $68,400 (270 days).

Traveling Crane—San Francisco, Calif.—City and San Francisco Co. installing electric travel crane in Moccasin Creek Power Plant of Hetch Hetchy Project, from Pawling & Harnischfegar Co., 32 Beale St., $30,475; Cyclop Iron Wks., 837 Folsom St., $32,170 alternate $27,670; Pratt & Whitney, 16 Fremont St., $33,050; Whiting Corp., Call Bldg., $24,675. Noted Nov. 16.

CONTRACTS AWARDED

Portland Cement—New York, N. Y.—H. Bruckner, pres. Bronx Boro, Tremont and 3rd Aves., furnishing and delivering 2,500 bags portland cement, to E. E. Buehler, 103 Park Ave., $1,825. Noted Dec. 21.

Subway — Brooklyn, N. Y. — Transit Comn., 49 Lafayette St., New York, two-track subsurface railroad extending under Bushwick Ave. from Meserole to Boerum Sts. to F. L. Cranford, Inc., 149 Remsen St., $750,983; also subsurface railroad extending along and under 4th Ave. from 87th to 95th Sts. to T. A. Gillespie Co., 7 Dey St., New York, $1,485,151. Noted Dec. 14.

Shaft—Brooklyn, N. Y.—Bd. Estimate & Apportionment, City Hall, New York, Shore Rd. shaft, here, for freight and passenger railroad tunnel in Boros of Brooklyn and Richmond, under New York Bay, to McGovern & Co., 50 East 42nd St., New York, $494,000. Noted Nov. 30.

Steel—Flushing, N. Y.—Transit Comn., 49 Lafayette St., New York, furnishing and erecting steel for elevated portion of Rapid Transit R.R., Flushing Route, extending over and along Roosevelt Ave., private property and intersecting streets from Alburtis to Riverside Aves., here, to Phoenix Bridge Co., 132 Nassau St., New York, $615,880. Noted Dec. 21.

Levee—New Orleans, La.—Orleans Levee Bd., New Court House Bldg., new levee on left bank of Mississippi River, to H. Reynolds, Maison Blanche Bldg., $26,801.

Foundation—Beloit, Wis.—Beloit Water, Gas & Electric Co., 429 East Grand Ave., plain concrete foundation for 3 story (ultimately 7 story), 80 x 134 ft., brick and rein.-con., to J. Schneiberg, 945 Bluff St.

Headers and Dykes—Alamosa, Colo.—State Hy. Dept. and Comrs. Alamosa Co. will build headers and dykes in Rio Grande del Norte River near here, by force account. Cost $21,037. L. D. Blauvelt, state highway engr. Noted Dec. 14.

Electroliers—Berkeley, Calif.—Installing 151 electroliers in University Ave. and other streets, to Osborne Electric Co., Turlock, $36,503. Noted Dec. 14.

Ferry Slips—Pittsburg, Calif.—Pittsburg-Sacramento Ferry Co., O. G. Klatt, secy., c/o Golden Gate Ferry Co., foot Hyde St., having plans prepared and soon takes bids 2 ferry slips. $65,000. Dredging, fill and roadway, let to Lanteri Shipyards, Pittsburg, $20,000.

Grandstand — Tanforan, Calif. — Pacific Coast Jockey Club, 1st Natl. Bank Bldg., San Francisco, constructing steel frame and wood grandstand, 5,000 seats, here, to Clinton Constr. Co., 923 Folsom St., San Francisco. $124,212. Noted Dec. 21.

Gas Mains—Montreal, Que.—Montreal Light, Heat & Power Co., Craig St. W., will build gas mains as follows: 9,700 ft. 20 in. c.i. pipe, from Sta. A Elm Ave. to Hochelaga and Pie IX Aves., $48,136; 2,640 ft. 12 in. c.i. pipe in Davidson St., from Rouen to St. Catherine Sts., $9,347; 540 ft. 8 in. c.i. pipe in Davidson St. from St. Catherine to Notre Dame Sts., $1,550; 3,720 ft. 12 in. c.i. pipe in Bennett St. from Girard to St. Catherine Sts., $24,969; 74 ft. 4 in. c.i. pipe in St. Joseph Blvd., $168. Work will be done by day labor. E. S. Stanton, supt. gas distribution. Noted Nov. 23.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Jan. 23.

Intercepting Sewer

Toledo, Ohio.

Sealed proposals will be received by the Director of Public Service, Toledo, Ohio, until twelve o'clock noon, eastern standard time, on the 23rd day of January, 1923, and then publicly opened and read for the construction of Contract No. 5 of the Intercepting Sewer System, consisting of

18,955 feet of 87 in. Circular Sewer
2,255 feet of 84 in. Circular Sewer
2,640 feet of 78 in. Circular Sewer

all of which will be built in tunnel, together with manholes and appurtenances.

Bidders are invited to submit prices on monolithic concrete, vitrified segment block and brick.

Plans, specifications, contract and bond forms can be secured at the office of the Director of Public Service upon deposit of twenty dollars ($20.00) **for each set,** which will be refunded provided they are returned in good order on or before February 20, 1923.

Information regarding the work can be obtained through the following offices of our consulting engineers, Fuller & McClintock: 170 Broadway, New York, 319 Summit-Cherry Building, Toledo, 421 Produce Exchange Building, Kansas City Mo., 879 N. Parkway, Memphis, Tenn., and 1001 Chestnut Street, Philadelphia, Pa.

Each proposal must be accompanied by a bond executed by the bidder and a surety company satisfactory to the Director of Public Service in the sum of Ten Per Cent (10%) of the amount of the bid, or in lieu of a bond the bidder may deposit with the Director of Public Service, a certified check on a solvent bank, payable to the order of the Director of Public Service, in amount equal to such bond, said bond or certified check being required as a guarantee that if the bid be accepted, a contract will be entered into and its performance properly secured.

The contract bond will be Fifty Per Cent (50%) of the amount of the contract. Labor and material bids must be separately stated with the price therefor.

The Director of Public Service reserves the right to reject any or all bids or to accept any bid which he may deem advantageous to the City of Toledo.

W. T. JACKSON,
Director of Public Service.
GORGE E. LASKA,
Secretary.

Bids: Jan. 8.

Pumping Station Equipment

White Hall, Ill.

Sealed bids will be received by the Hillview Drainage and Levee District at White Hall, Ill., up to the hour of 1 o'clock p.m. of January 8, 1923, for certain drainage pumping station equipment, the same to be furnished f.o.b. cars, Hillview, Ill., and to consist of one 15 in. vertical submerged centrifugal pump, one 30 in. horizontal centrifugal pump, one 150 hp. motor, one 50 hp. vertical motor, two switchboards, oil switches, starting apparatus, etc.

Detailed information may be obtained from the engineers by depositing check for $15.00, which will be returned providing said plans, etc., are returned in good condition before date of opening bids.

CALDWELL ENGINEERING CO.,
Engineers,
Jacksonville, Ill.

OFFICIAL PROPOSALS

Bids: Jan. 16.

Sewers

Richmond, Va.

Sealed proposals will be received at this office until 12 oclock noon, Tuesday, January 16, 1923, for the building of Reinforced Concrete, Precast Concrete, Segment Block, Brick and Vitrified Pipe sewers, at various places within the limits of the City of Richmond.

The approximate cost of the work is $700,000.00. Of this amount $250,000.00 will be for various contracts for materials, to be furnished by the City, at the site of the work, and $450,000.00 for various contracts for construction.

A deposit of $10.00 per set is required for plans and specifications before they are delivered to bidder, which amount is returnable after bidder's proposal is received.

Forms of proposals can be obtained on application.

A certified check for amount stated on proposals must accompany each bid as a guaranty of execution of contract. Director of Public Works reserves the right to reject any and all bids.

ALLEN J. SAVILLE,
Director of Public Works.

Bids: Jan. 11:

Road Improvement

Atlantic City, N. J.

Sealed bids for the improvement of portions of Fairmount and other Avenues in Atlantic City, N. J., will be received by the Board of Commissioners at a meeting to be held in the City Hall at 3 p.m., Thursday, January 11, 1923.

The work includes approximately 63,200 sq.yd. sheet asphalt pavement; 7,200 sq.yd. vitrified fire clay block pavement and 1,150 sq.yd. granite block pavement, all upon concrete foundations; 12,860 lin.ft. granite curbing; 1,056 lin.ft. bluestone curbing; and incidental work (for City Engineer's estimate by which the bids will be tested see "Notice to Contractors").

The board reserves the right to reduce the work to be done by striking out any streets or sections thereof, but not below $200,000, if the bid amounts to this much.

Certified check is required in the sum of $5,000.

The board reserves the right to reject any or all bids as provided in the "Notice to Contractors."

Blank forms of proposal and printed envelopes, as well as Notice to Contractors, specifications and forms of contract and bond will be furnished upon application to the City Engineer, Room 6, City Hall Annex, Atlantic City, N. J.

LOUIS A. STEINBRICKER, Director,
Dep't Street and Public Improvements.
J. W. HACKNEY, City Engineer.

Bids: Jan. 15.

Mechanical Equipment for Sewage Screening Plant

St. Petersburg, Fla.

Sealed proposals for mechanical equipment for sewage screening plant will be received at the office of the Director of Finance of the City of St. Petersburg, Florida, until 7:30 p.m., January 15, 1923. Specifications on file with the director of finance. Certified check for $500 to accompany bid.

H. T. DAVIS,
Director of Finance.

OFFICIAL PROPOSALS

Bids: Jan. 23.

Paving

Laredo, Texas.

Sealed proposals will be received by the City Council of Laredo, Texas, at the office of the Mayor, City Hall, until 4:45 p.m., January the 23rd, 1923, for approximately one hundred and twenty thousand (120,000) sq. yds. of paving.

Bids will be received on the following types of paving:

Bitulithic, Limestone Rock Asphalt, Sheet Asphalt, Vitrified Brick and Two Course Concrete.

Plans and specifications may be seen at the office of S. F. Crecelius, Paving Engineer, Puig Building, Laredo, Texas, after January the 1st, 1923.

Bids will be publicly opened and read at 5 p.m., January the 23rd, and the award, if any, will be made after considering bids in connection with the relative values of the different types of paving.

Payment for the city's share of the work will be made monthly in cash for eighty-five (85%) per cent of the work done. Payment for the amount assessed against abutting property will be one-sixth (1/6) cash on completion and balance in five (5) annual payments on improvement certificates bearing interest at seven per cent (7%) per annum.

L. VILLEGAS, Mayor.

Bids: Jan. 2.

Sewer

Wilkes-Barre, Pa.

Sealed proposals will be received by Fred H. Gates, City Clerk, Wilkes-Barre, Pennsylvania, for constructing a four and six-foot circular brick or segmental block sewer, about seventeen hundred feet in length. Bids close Tuesday, January 2nd, 1923, at 12 o'clock noon, and will be opened by City Council on the same day at three o'clock P.M. Plans and specifications may be had from B. K. Finch, City Engineer, upon making a deposit of $10.00, said deposit to be refunded upon receipt of bid or upon return of specifications to City Engineer on or before January 15th, 1923. Each bid must be accompanied by a certified bank check of bidder in the sum of $1,000.00 made payable to the City of Wilkes-Barre. Successful bidder must furnish to said city a surety company bond in the full amount of contract. Proposals to be endorsed "Proposals for Sewer" and addressed to Fred H. Gates, City Clerk, City Hall, Wilkes-Barre, Pennsylvania. The City Council reserves the right to reject any or all bids received.

Bids: Jan. 8.

Team Grading Work

White Hall, Ill.

Sealed bids will be received by the Hillview Drainage and Levee District up to 1 o'clock p.m. on Monday, the 8th day of January, 1923, at White Hall, Illinois, for the raising of the levee. The work is divided into 8 sections with a total yardage of 21,000 cu.yd. Each section is approximately one mile in length. This work is suitable as team work only. Detailed information may be obtained from the engineers by depositing check for $15.00, which will be returned providing said plans, etc., are returned in good condition before date of opening bids.

CALDWELL ENGINEERING CO.,
Engineers,
Jacksonville, Ill.

Volume 89 New York, December 28, 1922 Number 26

Engineering News-Record

A CONSOLIDATION OF ENGINEERING NEWS AND ENGINEERING RECORD,
WITH WHICH IS INCORPORATED THE CONTRACTOR

E. J. MEHREN, *Editor*

Foundation and Framing Design of Colfax Power Station 1102
By M. E. THOMAS.
STRUCTURE CHARACTERIZED by simplicity. Concrete mat foundation on gravel. Column loads distributed by reinforced-concrete walls. Special retaining wall and sea wall held by ties.
Engineering News-Record, December 28, 1922. 7½ cols. Ill.

Belated Settlement of an Old Aqueduct 1105
By FREDERIC I. WINSLOW.
Engineering News-Record, December 28, 1922. ½ col.

Maintenance Engineering in Large Industrial Plants 1106
By SAMUEL E. BIRD.
Engineering News-Record, December 28, 1922. 4¾ cols.

Column Strength of Single Angles 1108
Engineering News-Record, December 28, 1922. 1½ cols. Ill.

Miami Conservancy Work Completed 1109
Engineering News-Record, December 28, 1922. 1½ cols. Ill.

Heavy Trestlework Required on New Logging Railroad 1110
Engineering News-Record, December 28, 1922. 3¼ cols. Ill.

Operation of a Drainage Pumping Plant 1111
Engineering News-Record, December 28, 1922. ½ col.

How to Inspect Asphalt Paving Mixtures at the Plant 1112
By W. J. EMMONS.
Engineering News-Record, December 28, 1922. 8½ cols.

New Outfall Sewer at Los Angeles 1116
Engineering News-Record, December 28, 1922. ¾ col.

Operator's Viewpoint of Canal and Structure Design 1116
By GEORGE EBNER.
Engineering News-Record, December 28, 1922. 2¼ cols. Ill.

The Proper Term for Water-Works Bonds 1117
By CHARLES W. SHERMAN.
Engineering News-Record, December 28, 1922. ½ col.

Hydrology of the 1922 Flood in the Illinois River 1118
By H. E. GROSBACH.
Engineering News-Record, December 28, 1922. 2¼ cols. Ill.

Small Tunnels Lined With Precast Concrete Ribs 1119
Engineering News-Record, December 28, 1922. 1½ cols. Ill.

Dust Removal by Vacuum Sweeping in Grain Elevator 1120
Engineering News-Record, December 28, 1922. 2 cols. Ill.

Unique Sewage-Works and Pump-Equipment Bid Plan 1121
By GLEN D. HOLMES.
Engineering News-Record, December 28, 1922. 6½ cols. Ill.

Use of Copper Sulphate and Effect on Filter Runs 1124
By J. E. GARRATT.
Engineering News-Record, December 28, 1922. 2¼ cols.

Fire-Fighting Ability of Chicago Summarized 1125
Engineering News-Record, December 28, 1922. 1 col.

From Job and Office 1126
Third Curve Replaces Two Curves Joined by Tangent—Four Solutions.
Steel Hook Handles Concrete Pipe.
Trench Backfill Covered with Concrete Slabs.
Inexpensive Method of Mounting Maps.
By EMILE LOW.
Fast Time Recorded in Casting Concrete Segmental Sewer Blocks.
Piles Are Set in Concrete to Avoid Inconvenient Driving.
By GEORGE W. MCALPIN.
Dipping Trough for Iron Pipe Made From 12-in. Casing.
Acetylene Torch Melts Pipe Joint Filler.
Graphs Allow Rapid Yardage Calculation.
By R. C. HARDMAN.
Contractor and Footing Course.
By FRANK E. SANBORN.

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The First Issue of the New Year

IN its first issue of each new year *Engineering News-Record* has followed the policy of indicating the trend of progress in those fields of civil engineering and construction in which outstanding developments have occurred. It has also suggested, where possible, the course of future activities. The Jan. 4 issue is planned in accordance with this policy.

ONE of its features will be a group of articles on the **Labor Situation,** covering labor shortage, seasonal employment, apprenticeship, and immigration.

A wide range of interest will be covered by other articles. The **Mississippi River Floods** will receive extensive treatment and an article on **Irrigation** will discuss the Government's responsibility for developing the remaining arid lands in the West.

Traffic Control in cities will be among the chief topics of interest, and there will be a review of the year's developments in **Concrete Design.**

Hydro-Electric Practice on the Pacific coast will be reflected in a comprehensive review of the year's developments.

There will be a survey of progress during 1922 in **Construction,** supplemented by an article which will cover improvements made in **Construction Equipment and Materials.**

IT is impossible to give here an adequate summary of the issue. For the busy engineer, contractor, and manufacturer it will present concisely a survey of major developments in the fields of civil engineering and construction.

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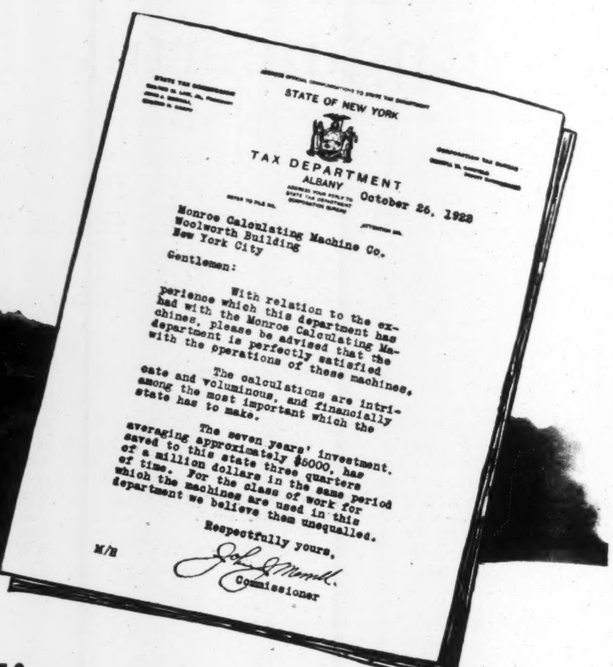

STATE OF NEW YORK

TAX DEPARTMENT
ALBANY

October 26, 1922

Monroe Calculating Machine Co.
Woolworth Building
New York City

Gentlemen:

With relation to the experience which this department has had with the Monroe Calculating Machines, please be advised that the department is perfectly satisfied with the operations of these machines.

The calculations are intricate and voluminous, and financially among the most important which the state has to make.

The seven years' investment, averaging approximately $5000, has saved to this state three quarters of a million dollars in the same period of time. For the class of work for which the machines are used in this department we believe them unequalled.

Respectfully yours,

M/B

John J. Merrill
Commissioner

How $5000.00 Saved Three-Quarters of a Million

IN the above letter, the Tax Commissioner of the State of New York tells how an investment of $5000.00 in Monroe Calculating Machines resulted in a saving of three-quarters of a million dollars.

And not alone New York State. Within the past month the Illinois State Highway Department made an additional installation of nine Monroes—itself a splendid tribute to Monroe service.

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E.N.-R. 12-28-22

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Calculating Machine Company

General Offices:
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Plant:
ORANGE, N. J

SPEED!

Our contract No. 1168 with the United Gas Improvement Company of Philadelphia involved placing

RAYMOND CONCRETE PILES

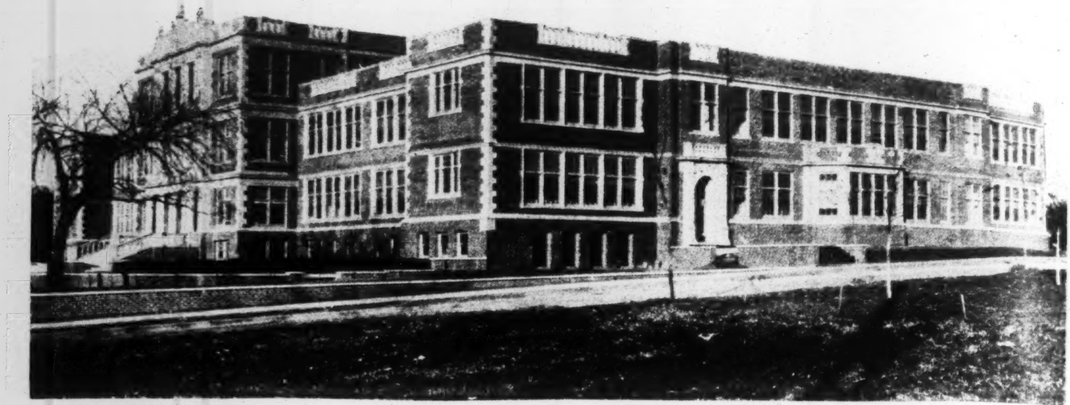
beneath a gas holder foundation at Syracuse, N. Y., for the Syracuse Lighting Company. Some of our days records were as follows:

Date	Number of Piles	Footage
October 30th	105	1569
31st	72	1354
November 1st	85	1468
2nd	79	1265
3rd	100	1404
4th	56	688
6th	90	1233
7th	189	2550

These figures cover a 10-hour day. Superintendent, Warren Ellis. Foreman, Michael Nolan. We are proud of these men, of their work, and of the Raymond Method of Concrete Pile installation.

RAYMOND CONCRETE PILE CO.
New York: 140 Cedar Street Chicago: 111 West Monroe Street
Montreal, Canada
Branch Offices in Principal Cities
"A Form for Every Pile A Pile for Every Purpose"

"Another Record Broken"



Builders of the Prescott School, Lincoln Nebraska, made many savings and secured a stronger, more durable wall through the use of Carney.

Architects: Fiske & Meginnis, Lincoln, Neb.

Contractors: Olson Const. Co., Lincoln, Neb.

Lower Bids With More Profit

WRITING Carney in your plans is writing profit on your books. Thousands of contractors know that Carney enables them to make lower bids and to give their clients a better job with more profit to themselves.

To those who have never used Carney, this may seem impossible. The following economies show why you can make lower bids.

The first cost of Carney is less. You have no lime to buy, for Carney does not require lime in mixing. There is no slacking of lime. The simple formula, "One part Carney — three parts sand — no lime," prevents mistakes and makes mixing easy.

Mixing Carney requires less labor and is quicker. There is no waste for left-over mortar can be used the next day by re-tempering with water. Carney lays approximately 1000 bricks to the barrel. Men work faster on the wall because Carney is more plastic and smoother working.

On top of these advantages Carney builds a stronger wall. The mortar becomes harder than the brick or tile it joins. Thus it is that Carney enables you to submit lower bids, get more contracts, and build a better wall—all with more profit.

It Will Pay You to Investigate

It will pay you to investigate a cement with the advantages given above. Let us send you the Carney Catalog for your files.

Carney Cement Company
Cement Makers Since 1883
Mankato, Minn.

District Sales Offices:
Leader-News Bldg., Cleveland; Chamber of Commerce Bldg., Chicago; Omaha National Bank Bldg., Omaha; Syndicate Trust Bldg., St. Louis; Book Bldg., Detroit; Builders' Exchange, Minneapolis

Specifications: 1 part Carney, 3 parts sand; no lime

CARNEY'S CEMENT
The Bond That Guarantees The Wall

CARNEY'S CEMENT
For Brick and Tile Mortar

Why Cement Sacks Are Filled Upside Down

The curious method of filling portland cement sacks—filling them upside down after they have been tied—is a striking example of progress made in industrial processes.

Until twenty years ago, cement sacks were filled practically as all other sacks always had been. You had a huge bin of this finer-than-flour material. A workman at the door of the bin hung a sack up, with its mouth open, on a wooden frame and filled it with an ordinary shovel. Then he set it on a scale, and with a hand scoop adjusted the weight of the contents to the exact 94 pounds required, after which he tied the sack by hand and tossed it on a truck to be hauled into a freight car.

That was the way as little as twenty years ago, and no one had thought much of doing it differently.

But now what happens?

The cement is taken from the bin by an automatic conveyor—a moving belt or bucket chain—and elevated and dumped into the hopper of a filling machine. This is a small bin with an elaborate mechanism including a fan inside; and at the bottom of it is a 1-inch spout through which the cement flows like water. The filler sits at the spout. Sacks have been brought to him already tied at the top but with an opening guarded by a valve at the bottom. The filler slips the opening over the spout and turns on the cement. When the sack is filled to exactly 94 pounds it tips a scale, automatically turns off the cement, and with a little push from the filler falls on another moving belt that carries it out and drops it at the freight car door.

By the old method, a team of four men could fill and load 1,600 sacks a day. By the new method, a similar team can fill and load 8,000.

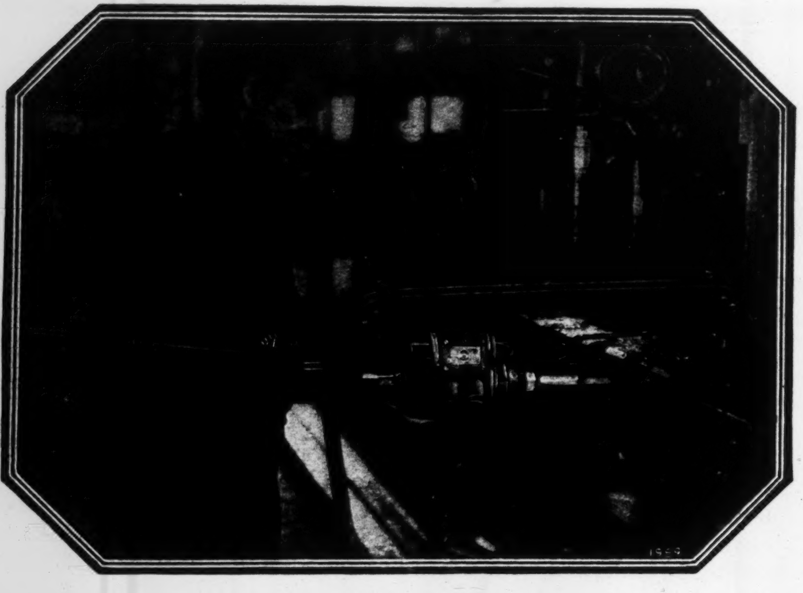
The filling machine is costly, and royalties must be paid on the valve sack process, but the new arrangement has meant a considerable labor saving. It has meant especially that the manufacturers have been able to get their product out more promptly to users during the rush period of summer and fall. For in that period labor of the kind required for sacking and loading is generally hard to get.

Even with the improvements, a medium sized plant—one producing a million barrels of cement a year and employing not more than 300 people altogether—must normally employ 60 people in its sacking and loading department.

PORTLAND CEMENT ASSOCIATION

A National Organization
to Improve and Extend the Uses of Concrete

Atlanta
Boston
Chicago
Dallas
Denver
Des Moines
Detroit
Helena
Indianapolis
Kansas City
Los Angeles
Milwaukee
Minneapolis
New York
Parkersburg
Philadelphia
Pittsburgh
Portland, Oreg.
Salt Lake City
San Francisco
Seattle
St. Louis
Vancouver, B. C.
Washington, D. C.



13,000 Holes Drilled—4 per Minute!

HERE'S a Little Giant Air Drill with a record of 13,000 holes 7/16", 11/32" and 13/32" in diameter, drilled through ¼-inch close-grained, tough, heat-treated metal, *averaging 4 holes per minute!* This average includes two changes of drill sizes.

Ask Harry Merritt, the skilled operator at this drill, why he uses a Little Giant. "Its stay-ability, fast-cutting speed and giant drilling power help make a bigger bonus" will be his reply.

Although this Little Giant has been in continuous service at the plant of the General Motors Company, Pontiac, Michigan, for over a year, no repairs have been necessary.

Such speed and endurance records demonstrate the fact that Little Giants *can and will lower drilling costs in your plant.* Secure a trial Little Giant from the nearest Branch. Meantime, ask for Bulletin 598.

Heard about the new Little Giant feature—the patented Vent Tube? Saves $90.70 annually. Makes lubrication necessary only *once weekly*. Know all about it. Address nearest Branch for details.

Chicago Pneumatic Tool Company

Chicago Pneumatic Building · 6 East 44th Street · New York

Sales and *Service Branches all over the world

*Birmingham
*Boston
*Chicago
*Cincinnati
*Cleveland
*Detroit
El Paso
Erie
Franklin
Houston
Joplin
*Los Angeles
Milwaukee
*Minneapolis
*New Orleans
*New York
*Philadelphia
*Pittsburgh
Richmond
Salt Lake City
*San Francisco
*Seattle
*St. Louis
Basle
*Berlin
Bombay
Brussels
*Buenos Aires
Christiania
*Fraserburgh
Havana
Helsingfors
Honolulu
Johannesburg
*London
Manila
Milan
*Montreal
*Montevideo
Osaka
Paris
Rio de Janeiro
Rotterdam
Santiago
*Sao Paulo
Seoul
Shanghai
Tampico
Tientsin
Tokyo
*Toronto
*Vancouver
*Winnipeg

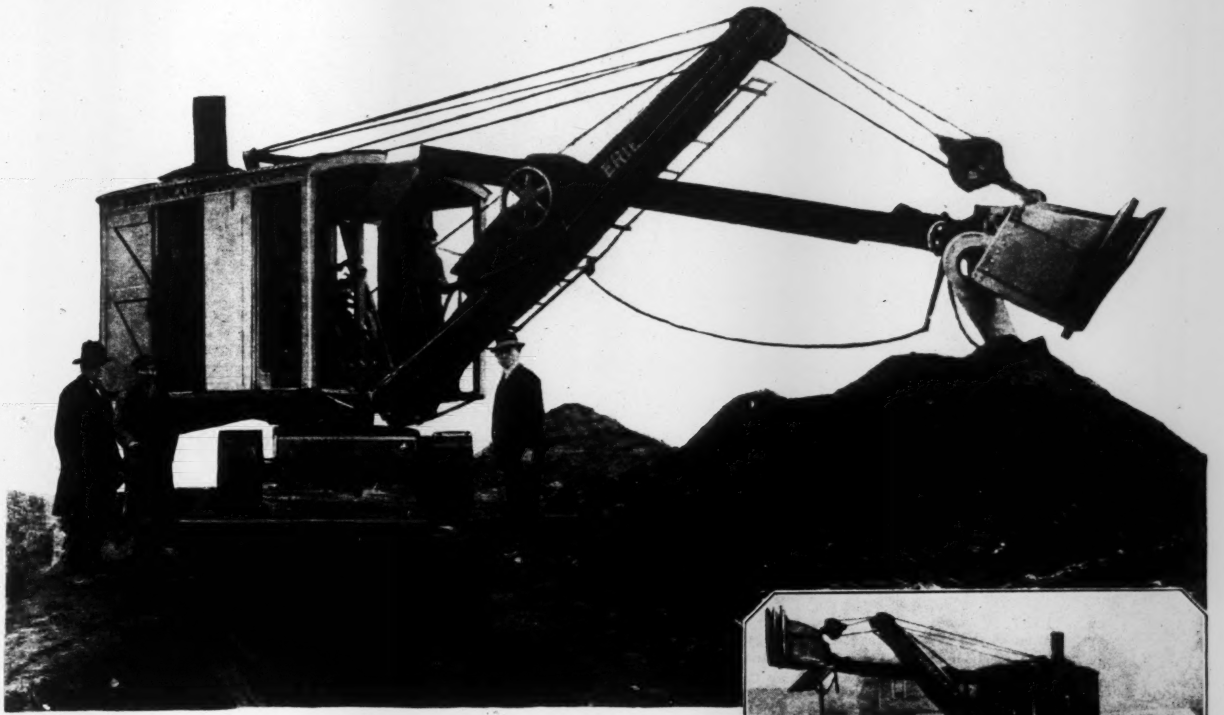
P-162

BOYER PNEUMATIC HAMMERS · · LITTLE GIANT PNEUMATIC AND ELECTRIC TOOLS
CHICAGO PNEUMATIC AIR COMPRESSORS · · VACUUM PUMPS · · PNEUMATIC HOISTS
GIANT OIL AND GAS ENGINES ROCK DRILLS · · COAL DRILLS

CHICAGO PNEUMATIC

LITTLE **GIANT**

The World's Standard ***Air Drill***



"Our 13-ton 'A' ERIE

did the excavating, laid the pipe, and backfilled

on this storm sewer contract,"—

Sweeney Bros., Scranton, Pa.

"While we dug ahead a short distance with the **ERIE**, the men prepared the trench for the pipe right behind the shovel. We would then swing the **ERIE** around to lay the pipe, which the men promptly jointed. Then the **ERIE** continued digging, dumping the excavated material upon the pipe laid. We got very satisfactory results with but very few men for the entire operation."— Sweeney Bros., Contractors, Scranton, Pa. (Owners of 5 **ERIES**).

As another contractor expresses it: "We have found that the **ERIE** is the best all-around trenching machine on the market."— **Austin B. Cable**, Pres., The Cable Co., Canton, O. (Owners of 5 **ERIES**).

If you have trench work, cellar work, road grading— it will pay you to investigate the "A" **ERIE**. It is economical in first cost and operating cost; for work in its class, it has many advantages over a heavier machine. *Write us for full information.*

ERIE STEAM SHOVEL CO., Erie, Pa., U. S. A.

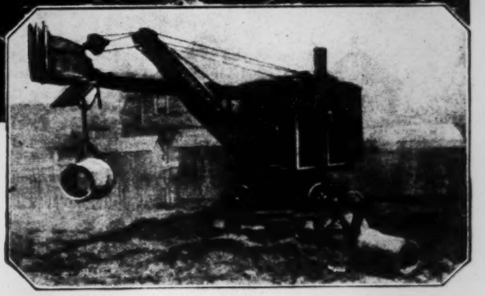
Incorporated 1883. Formerly BALL ENGINE CO.

Builders of ERIE Steam Shovels, Locomotive Cranes, Railway Ditchers

Branch Offices: Boston, New York, Philadelphia, Pittsburgh, Chicago

Representatives throughout the U. S. A.

ERIE Revolving Shovels



In order to handle all three operations as the machine goes along—digging the trench, laying the pipe and backfilling— you have to move the shovel over the excavated trench. When you strike soft and crumbly material like that shown in these two photos, you are mighty lucky if you have an "A" ERIE, weighing only 13 tons. The light weight prevents cave-ins and saves a lot of trouble. And the "A" has plenty of power for digging trench through stiff clay; easily handles large boulders.

For maximum output, or unusually hard digging, use the "B"

In material like hard shale, stiff clay or hardpan, the 20-ton "B" ERIE gives excellent output. Used for quarry work, cellars, coal stripping, road grading, as well as trench work.

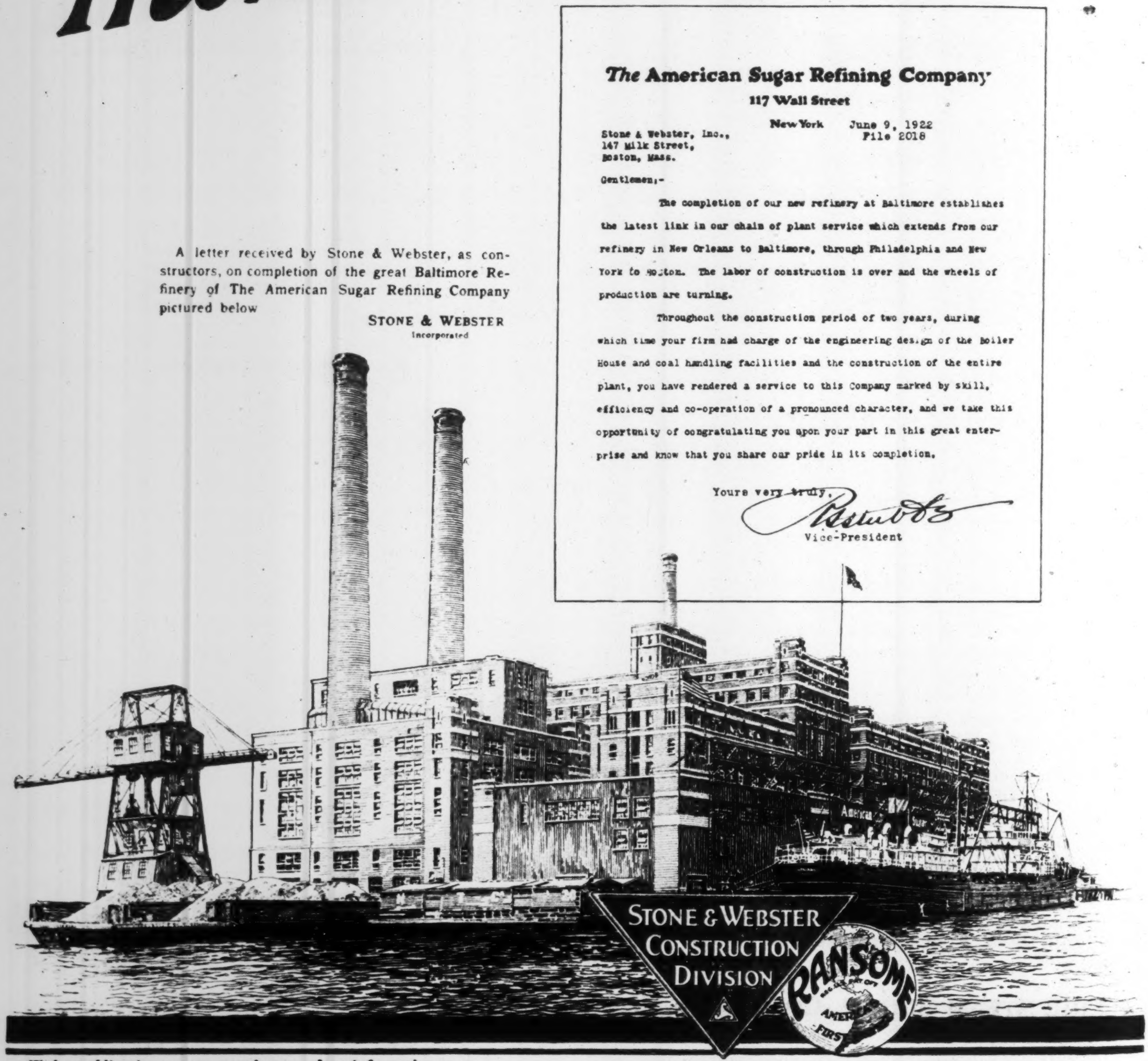
For very deep trench or wide ditch digging—

either the 13-ton "A" ERIE or the 20-ton "B" ERIE can be easily and quickly changed over to a locomotive crane to handle a clamshell bucket. Also gives excellent results handling a dragline bucket for digging drainage ditches, dredging, etc.

Ransome mixed the concrete

A letter received by Stone & Webster, as constructors, on completion of the great Baltimore Refinery of The American Sugar Refining Company pictured below

STONE & WEBSTER
Incorporated



The American Sugar Refining Company
117 Wall Street
New York June 9, 1922
File 2018

Stone & Webster, Inc.,
147 Milk Street,
Boston, Mass.

Gentlemen;-

The completion of our new refinery at Baltimore establishes the latest link in our chain of plant service which extends from our refinery in New Orleans to Baltimore, through Philadelphia and New York to Boston. The labor of construction is over and the wheels of production are turning.

Throughout the construction period of two years, during which time your firm had charge of the engineering design of the Boiler House and coal handling facilities and the construction of the entire plant, you have rendered a service to this Company marked by skill, efficiency and co-operation of a pronounced character, and we take this opportunity of congratulating you upon your part in this great enterprise and know that you share our pride in its completion.

Yours very truly,

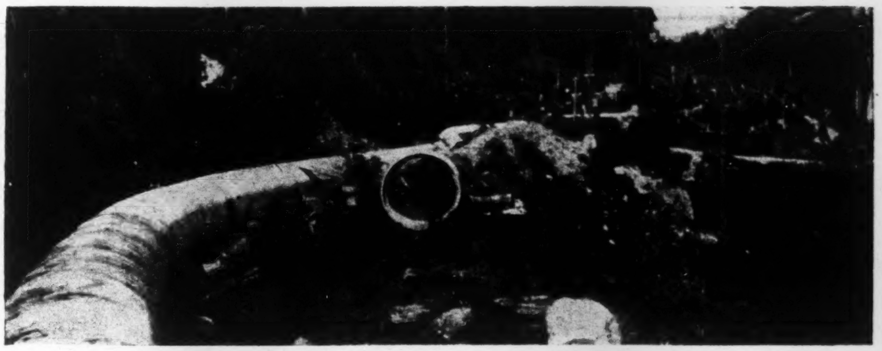
Vice-President

Without obligation on my part, please send me information on:—
Building Mixers, sizes 4-S__; 7-S__; 10-S__; 14-S__; 21-S__; 28-S__; 56-S__. Driven by Belt__, Steam__, Gasoline__, Electric__
Paving Mixers, sizes 7-E__; 10-E__; 14-E__; 21-E__. Concrete Chuting Plant for structure__ft. long by__ft. wide by__ft. high.

*NAME*________________ *ADDRESS*________________ 4486

RANSOME CONCRETE MACHINERY CO.

1750 Second Street, Dunellen, N. J.



THE old year flickers out, the new one flashes up, but

LOCK JOINT
Reinforced
Concrete Pipe

knows no passage of years. It has the permanence and the tightness which Reinforced Concrete and "Lock-Joints" alone can give.

A Happy New Year!

Pressure and Subaqueous Pipes

Lock Joint Pipe Co.
Ampere, N. J.

Culvert and Sewer Pipes

"Every Joint a Lock Joint"

Every Marion Revolving Shovel can be changed into orange peel or clamshell crane, or dragline excavator. Attachments are interchangeable and can be easily added in the field.

Are You Satisfied—

With Your Present Operating Costs?

Perhaps you are—but yet your shovel operations maybe costing far more than they should. To make sure, check your records with the cost data we have compiled on our new electric and gasoline-electric shovels.

One owner writes that he saved from $12.00 to $15.00 a day on a grading job—another tells us his total daily cost **for both labor and fuel** was $14.50 (just about the cost of the operator and fireman on a steam machine) —still another says the additional operating time each day increased his output fifteen percent, there being no time lost coaling up or waiting on steam.

Such savings as these are easily possible with Marion Electrics and Gasoline-Electrics. When you buy one of these shovels you get a decidedly practical and efficient machine—one that will make you **more** money than any other shovel of similar size and type now on the market.

Taking on Fuel

On a Marion Gasoline-Electric this requires only a few minutes time. Supply tank is located under the engine and holds sufficient gasoline for a full day's run. Compare this with the "coaling up" of a steam machine, especially in wet and muddy places or in isolated localities far from the source of fuel supply.

Consider the Many Advantages of This New Type

Less fire risk.
No fireman required.
No boiler feed water to supply.
Fast and flexible as a steam shovel.
Will do anything a steam shovel can do.
Can be operated at less cost.
Engine cannot be stalled.
No complicated and sensitive frictions to adjust.
Can be handled by any operator familiar with a steam shovel.

Marion Electric and Gasoline-Electric Shovels are fully described in Bulletin A-301

Request from you will bring a copy promptly.

265

The Marion Steam Shovel Company

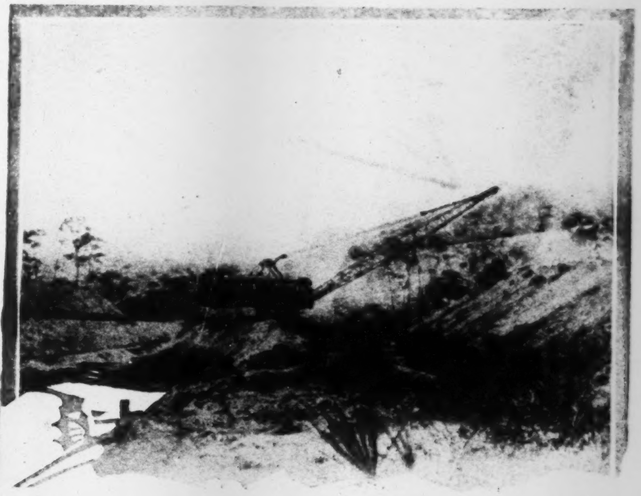
Marion Ohio.

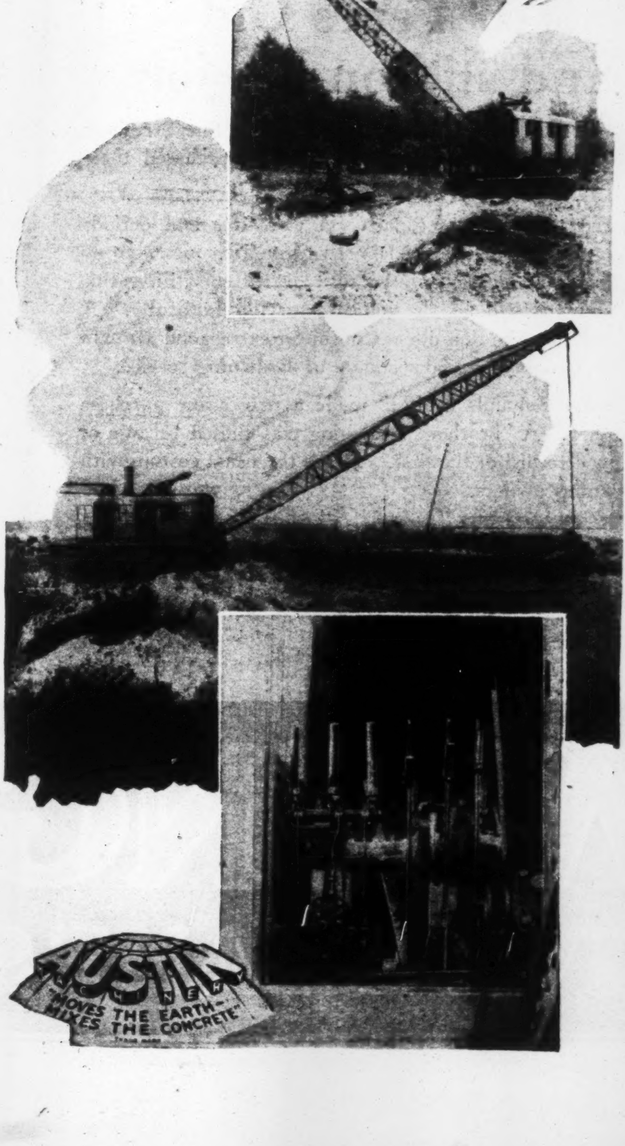
Marion Crawler Trucks Make Hard Going Easy

Austin Draglines have been developed from the Contractor's View-Point of a Practical Machine

AUSTIN MANUFACTURES

- CUBE MIXERS
- CUBE-HEX PAVERS
- CONCRETE TAMPERS
- GASOLINE LOCOMOTIVES
- WAGON LOADERS
- TRUCK TURNTABLES
- TRENCH MACHINES
- WHEEL EXCAVATORS
- BACKFILLERS
- DRAGLINES
- CLAMSHELLS
- CRANES
- SHOVELS
- SKIMMERS
- ASPHALT PLANTS





The completeness of design makes Austin draglines an asset.

Aside from the variation in weight of the machines, which is due to increased size of parts, the design of all Austin Draglines is standard.

The standardization of design has been brought about through repeated successful operation of machines on the job.

They are fast and smooth in operation.

The graduated valve, air or steam control, on sizes No. 6 and larger, increases their handling efficiency—as well as the yardage production.

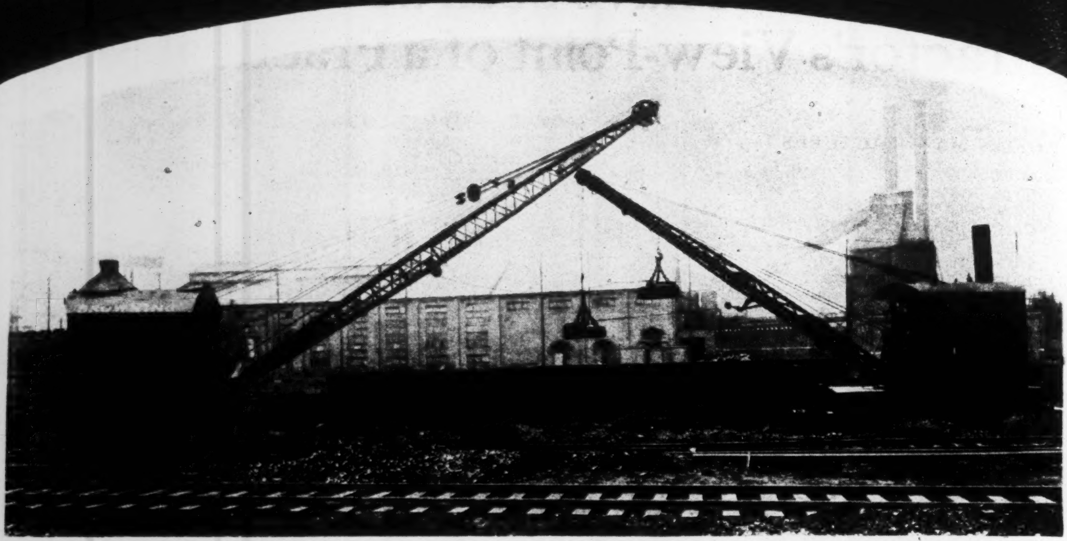
Write for Catalog DL-103-8

SEE OUR EXHIBIT AT THE GOOD ROADS SHOW

AUSTIN MACHINERY CORPORATION
3500 Dorr Street
TOLEDO, OHIO

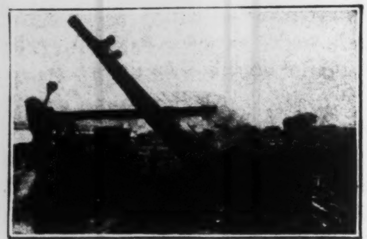
Chicago **Minneapolis** **Omaha**
Birmingham **New Orleans** **Pittsburgh**
Davenport **New York** **Portland**
Milwaukee **Philadelphia** **San Francisco**
Woodstock, Ont.

AUSTIN
"MOVES THE EARTH—MIXES THE CONCRETE"



Two Brownings now in use at Struthers, Ohio. The one on the right was purchased in 1906, the one on the left in 1922.

Browning Cranes are particularly adapted and famous for their all-around usefulness on construction work.



Browning equipped with steam shovel attachment. Note the clear height from the ground level to the bottom of the dipper door.

16 Years Old and still on the job

N MARCH 1906, over 16 years ago, The Struthers Furnace Company, Struthers, Ohio, purchased their first Browning.

Worked to maximum capacity in war time and periods of prosperity, but nevertheless always finding plenty to do in periods of depression, because of its versatility, this Browning is still on the job and serving faithfully. A performance like this doesn't mean an extra good Browning—it's simply a good example of Browning service.

Increased demands in 1922 made a new crane purchase necessary. A "brother" Browning was chosen because of the good record of the first. That's the usual custom with Browning owners.

Send for the complete Browning Catalog.

THE BROWNING COMPANY

Cleveland, Ohio, U. S. A.

New York Seattle Salt Lake City San Francisco Washington, D. C.
Chicago Portland Los Angeles Montreal Birmingham

BROWNING LOCOMOTIVE CRANES

The Haiss Bucket

We publish a **Bulletin** (No. 719) that tells you all about Haiss Bucket Design—we don't want to stop to tell you here. We want to say to you that *a Haiss Bucket will do more work* than other buckets of similar capacity—and that we stand ready to prove it.

Are you interested in Clamshell Buckets that do more work?

Haiss "Contractor" Type—For Re-Handling

Haiss "High Power" Type—For Digging and Excavating

Buying a Bucket

You don't buy a bucket for what it will do the first *day*—you buy a bucket for what it will do the first *year*.

A good bucket has more to it than proper shape and closing power—it must have "guts," an inelegant term, but the one that most strongly pictures the reason why Haiss Buckets have the call.

You may never have compared the weight of the plate in bucket bowls. You may never have compared the value of the "clear around" Haiss cutting shoe with other construction, or the cast-steel blade arms and bowl braces—the man who uses Haiss Buckets may not have studied out the "why" of it, but he knows that they do deliver the goods; they stay on the job.

The George Haiss Mfg. Co., Inc. **140th Street and Rider Avenue, N. Y.**

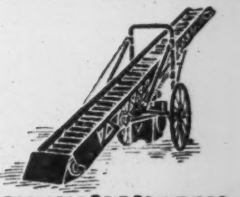
ESTABLISHED 1892 Millars' Timber & Trading Co., London, British Representative Representatives Throughout the World

TRUCK LOADERS

HAISS

MATERIALS HANDLING EQUIPMENT

CLAM SHELL BUCKETS



PORTABLE BELT CONVEYORS

They Stand the Gaff!

A-W GRADERS are built to last, and the large number of 20- and even 30-year-old machines still in active service testifies that they do. No matter what your requirements, there is a model somewhere between the 1000-pound Midget and the 10,500-pound No. 20 that will meet them perfectly.

A distinctive feature of the line is the wide range of adjustments found on all of its members. Take the above photograph as an illustration. How many other graders could cut such a perfect back slope without the use of a special back sloper attachment?

It Was Easy for This Austin Mammoth!

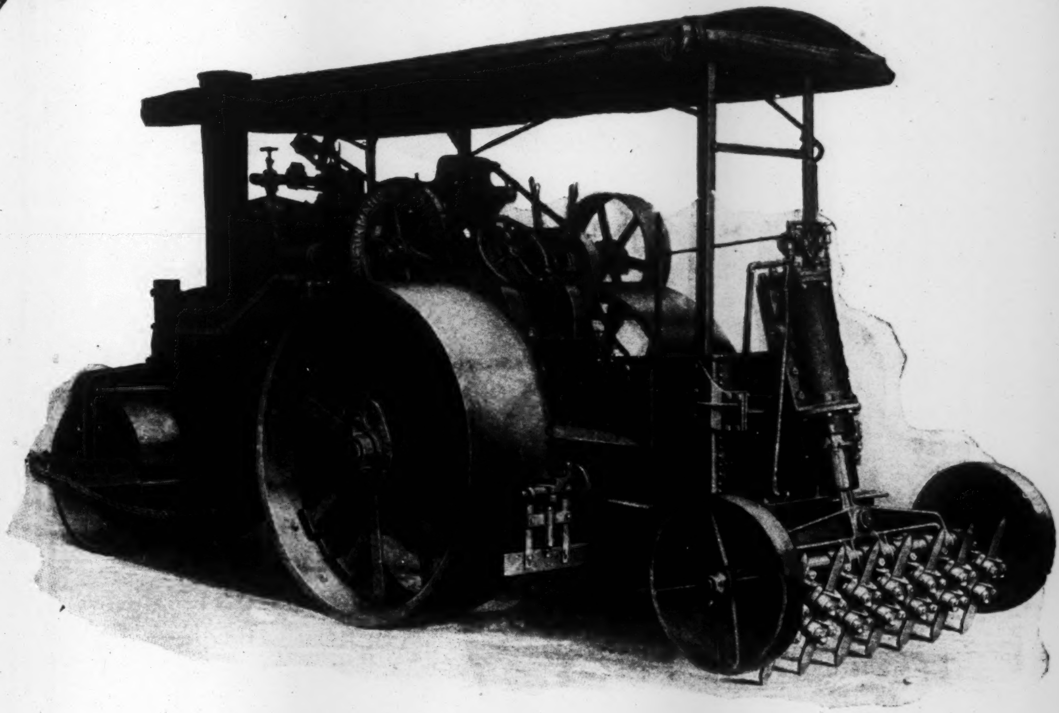
"Signs of Better Roads," our latest catalog, illustrates and describes the entire A-W line of road-making and maintenance machinery. Ask us for a copy.

The Austin-Western Road Machinery Co.

CHICAGO, ILLINOIS

Branch Warehouses and Service Stations:

Albany
Atlanta
Billings
Columbus
Dallas
Denver
Fargo
Jackson, Miss.
Kansas City, Mo.
Little Rock
Los Angeles
Louisville
Nashville
New Orleans
New York City
Oklahoma City
Philadelphia
Portland, Ore.
Richmond
Salt Lake City
San Francisco
St. Paul
Wahoo, Neb.



SCARIFYING

with an Austin Steamer

We could fill a dozen pages with a detailed description of the construction and operating features of the Austin Steam Roller, and not impress you half so much as you would be impressed by a brief demonstration of this machine on difficult work such as scarifying.

When we speak of an increase of 20% in boiler heating surface, you are interested, especially if you know through sad experience how badly something of the sort is needed; but when you actually see a machine on the job—see how it buckles down to the hardest tasks, not for a few moments only, but hour after hour and day after day—then you are convinced that we hit the mark when we aimed to build

THE WORLD'S BEST STEAM ROLLER

Write for a copy of Catalog F-H.
It's the next best thing to a demonstration.

The Austin-Western Line

"It Serves You Right"

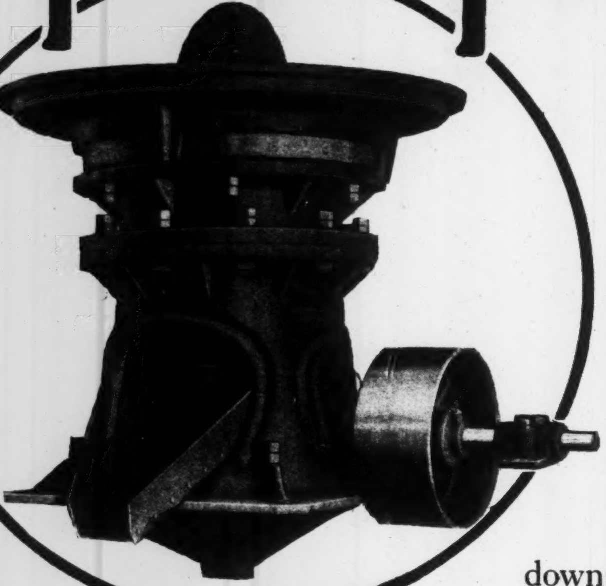
AUSTIN

Motor Rollers
Steam Rollers
Tandem Rollers
Roller-Scarifiers
Reversible Road Graders
Grader-Scarifiers
Road Scarifiers
Gyratory Rock Crushers
Crushing Plants
Elevating Graders
Dump Wagons
Motor Sweepers
Street Sweepers
Street Sprinklers
Sprinkler-Sweepers
Road Oilers
Road Planers
Culverts

WESTERN

Rock Crushers
Crushing Plants
Screening Plants
Reversible Road Graders
Grader-Scarifiers
Road Scarifiers
Road Planers
Elevating Graders
Dump Wagons
Wheeled Scrapers
Drag Scrapers
Fresno Scrapers
Tongue Scrapers
Grading & Rooter Plows
Ditchers
Back Slopers
Road Drags
Dump Cars

Austin Gyratory Crushers



Stationary and Portable Types

are making money for hundreds of owners scattered throughout the country. Exclusive Austin features are responsible for increased production records, greater freedom from shutdowns and lower operating costs, and have made the name "Austin" the symbol of satisfaction in the crusher world.

Catalog 29-H gives complete details. We would like to send you a copy.

Be sure to see the No. 3 Mounted Gyratory, with feeding conveyor and elevator, in our exhibit at the 14th National Good Roads Show, Chicago, January 15-19.

AUSTIN MANUFACTURING CO.

NEW YORK CHICAGO SAN FRANCISCO

EXPORT DEPARTMENT
ALMACOA ALLIED MACHINERY COMPANY OF AMERICA ALMACOA
51 Chambers St., New York, U.S.A. Cables: Almacoa New York

Lackawanna Railroad

PARTIALLY COMPLETED VIEW.
D. L. & W. ELEVATION—BRICK CHURCH STATION
EAST ORANGE, N. J. BLAW-KNOX COLUMN
FORMS USED TO FORM THESE COLUMNS

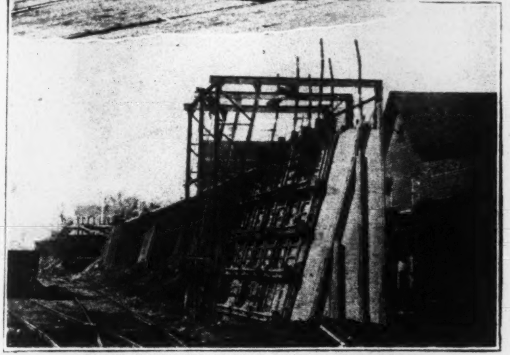
H. F. Curtis:
Blaw-Knox Steel Forms Show a 50% Saving

H. F. Curtis is using Blaw-Knox Steel Forms on the D. L. & W. elevation work at East Orange, N. J. This includes the construction of retaining walls and a concrete viaduct 75 ft. wide, 1,080 ft. long, supported by 230 round concrete columns. The long experience of Mr. Curtis in connection with engineering achievements of this character renders his opinion of special value. He says—

> *"On the above work I have and am still using the Blaw System of Steel Forms and by the use of these forms I have effected a saving over wood forms which I have used on previous work of this nature. I might add that the use of steel forms on my work has made a saving of 50% over wood forms."*

Mr. Curtis is enthusiastic about Blawforms because they prove their practical value and saving at every turn. Blaw-Knox Form Engineers will develop forms for you and prove their savings conclusively.

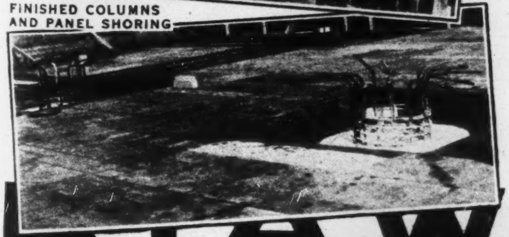
There is no job too big or too complicated for Blawforms to handle. Write for our catalog illustrating the work Blawforms have done.



BLAW-KNOX TRAVELING STEEL WALL FORM
USED ON CONCRETE VIADUCT—D. L. & W. ELEVATION

BLAW-KNOX STEEL COLUMN
MOLDS AT WORK

FINISHED COLUMNS
AND PANEL SHORING



BLAW◆KNOX
ROAD BUILDER'S EQUIPMENT
STEEL FORMS FOR CONCRETE
SECTIONAL STEEL BUILDINGS
CLAMSHELL BUCKETS
STRUCTURAL STEEL-PLATE WORK
TRANSMISSION TOWERS
WATER COOLED FURNACE APPLIANCES
FORGE AND HAMMER WELDING

BLAW ◆ KNOX

TRADE MARK BLAW-KNOX REG. U.S. PAT. OFF.

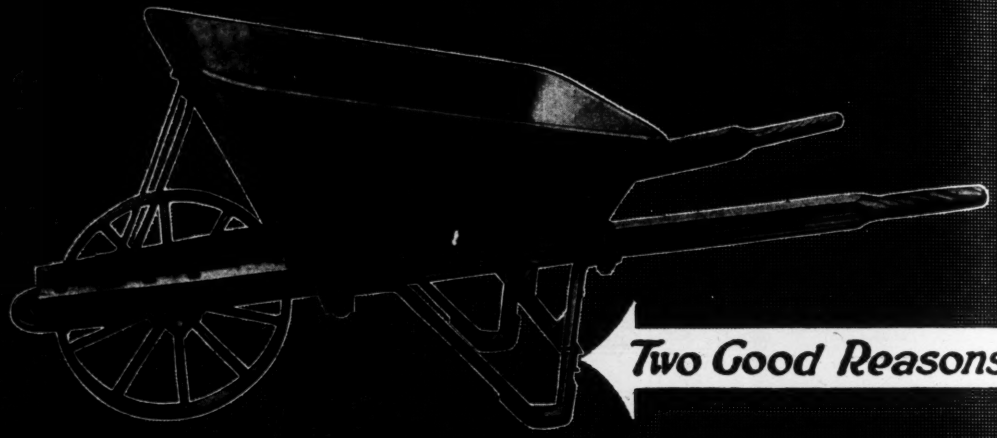
COMPANY

PITTSBURGH, PA.
601 Farmers Bank Bldg.

New York-Chicago-Detroit-Baltimore
Birmingham-San Francisco-London, Eng.

Sterling [illegible] MEANS

They are Cheaper because they Last Longer—



The longer and harder the service, the better Sterling Wheelbarrows show by comparison.

Ask the man who pushes one!

Sterling Wheelbarrow Company

[illegible]

MORE THAN STERLING ON SILVER Sterling

– more *Efficient because they Wheel Easier.*

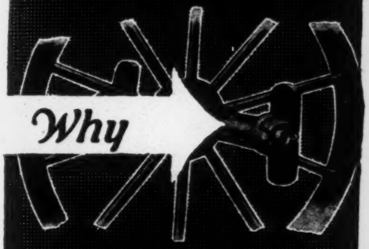
SAVE TROUBLE

Good wheelbarrows eliminate troubles on a building job, where poor ones cause plenty of extra grief, delay and expense.

Self-Lubricating Wheels
Riveted Legs

Two good reasons why Sterling Wheelbarrows stand up well under all conditions. Yes, and there are many more exclusive improvements which make "Sterling" a safe investment and give you real **wheelbarrow** efficiency.

Write for the
Sterling Catalog



Wheels 50%
Easier.

Sterling Wheelbarrow Company

KOEHRING
the Heavy Duty Mixer
KOEHRING
K
HEAVY DUTY

***Yardage, remember—
first goes into the mixer!***

The charging skip on a concrete mixer starts with heavy load from dead weight and elevates at high speed. Terrific strains throughout the mixer, unless the frame and super structure have heavy duty construction. Less strain on the Koehring because the Koehring skip cables get a more perpendicular "pull" —and the Koehring skip goes to the high charging angle that shoots material into the drum in a swift, clean slide, without need for pounding skip against the frame.

Koehring Heavy Duty Construction matches the operating speed of the Koehring paver—the fastest paving unit.

Capacities:

Construction Mixers: 10, 14, 21, 28 cu. ft. mixed concrete. Write for Catalog C—8.

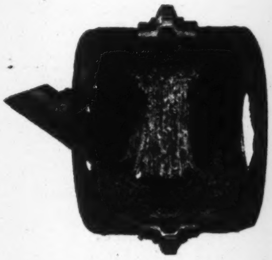
Pavers: 7 10, 14, 21, 32 cu ft. mixed concrete. Write for Catalog P—8.

Dandie: Light mixer, 4 and 7 cu ft. mixed concrete; power charging skip, or low charging platform. Light duty hoist. Write for Catalog D—8.

KOEHRING COMPANY
MILWAUKEE. WISCONSIN

Foreign Department, Room 1370, 50 Church Street, New York City. Canada, Koehring Company of Canada, Limited, 105 Front Street, East Toronto, Ontario. Mexico, F. S. Lapum Cinco de Mayo 21, Mexico, D. F.

SMITH MIXERS



Good Concrete and Speed

Users of Smith Mixers make speed because the aggregate when dumped into the drum is properly taken care of by the revolving buckets, and the "end-to-center" mixing action keeps the mix where it should be.

Also, many contractors have standardized on Smith Mixers, their working crews becoming more expert and efficient, and requiring less supervision,—both of which mean better coordination and steadier concrete production. Ample reserve is provided in the Smith power plant.

Confidence

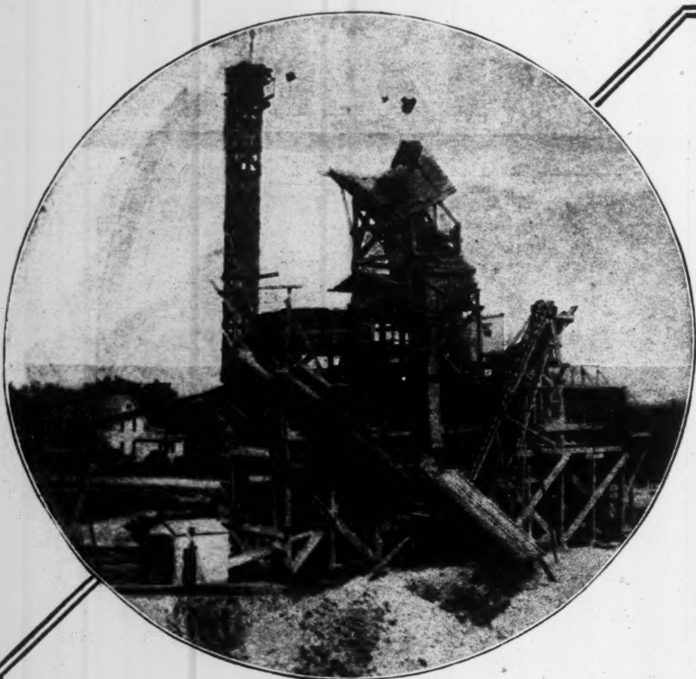
The confidence the public has in the strength of concrete structures—foundations, bridges, dams, etc.,—is really a blind confidence.

But the confidence the construction man has is to a great extent a result of his knowledge of the permanent concrete mixed in his Smith Mixers.

Construction men are aware of the responsibilities they are shouldering,—hence the desire to be sure of the best concrete mixing on their contracts.

Smith Mixers are made for the smallest and largest jobs. In all, the design insures thorough mixing.

THE T. L. SMITH COMPANY
1154 32*nd Street, Milwaukee, Wis.*
New York Office and Warehouse: 50 Church St.
Chicago Office: Old Colony Bldg.
Western Warehouse: Oakland, Calif.
Agents in Principal Cities.



Telsmith Solves a Gravel-Washing Problem

A little story illustrating the value of reliable engineering counsel in designing gravel handling plants.

In 1920, the City of Red Wing, Minnesota, owned a gravel pit, equipped with quite a large storage bin, a good drag-line outfit, a worn-out jaw crusher and a totally inadequate dry-screening plant. Mr. William Geisheker, city engineer, consulted the Telsmith agent in St. Paul. Mr. Geisheker furnished a drawing of this plant as it stood; and Telsmith engineers prepared plans and specifications for the re-construction of the plant. To secure an output of 20 cu. yds. of washed gravel per hour, the following new equipment was recommended:

Telsmith Primary Breaker, No. 3 size, manganese equipped;
Telsmith Plate Feeder, 16 in. x 5 ft.;
Telsmith Heavy Duty Washing Screen, 32 in. dia. by 12 ft. long;
Telsmith Sand Tank, No. 5 size.

It's a mean job to revamp an old plant, rectifying the errors in an earlier design—to sort out the good material from that which is worthless and fit in new machinery into an old structure. Telsmith did the job well. The Red Wing plant has now been operating for two years. It has produced excellent results under difficult conditions.

We don't yearn for "patch jobs," but we cite this one just to illustrate what Telsmith can do when necessary. Good machinery plus a thorough knowledge of gravel plant practise—that's a hard combination to beat. We are here to serve you—to furnish you modern machinery and reliable engineering counsel. Glad to send you our Catalog No. G-P-1 (Gravel Pit equipment) and Bulletin No. 155 (Telsmith Crushers). No obligation.

SMITH ENGINEERING WORKS

3198 LOCUST ST., MILWAUKEE, WIS.

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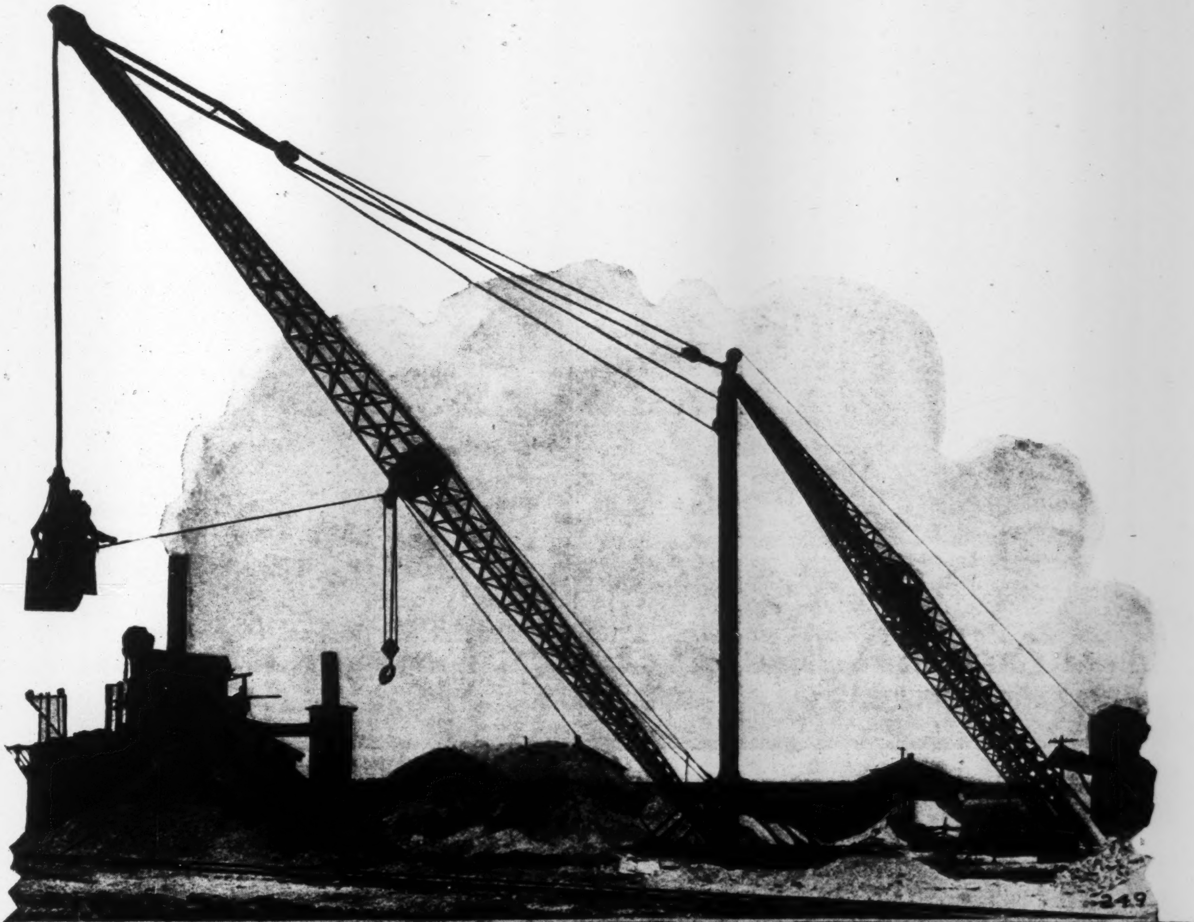


Insley Steel Derricks

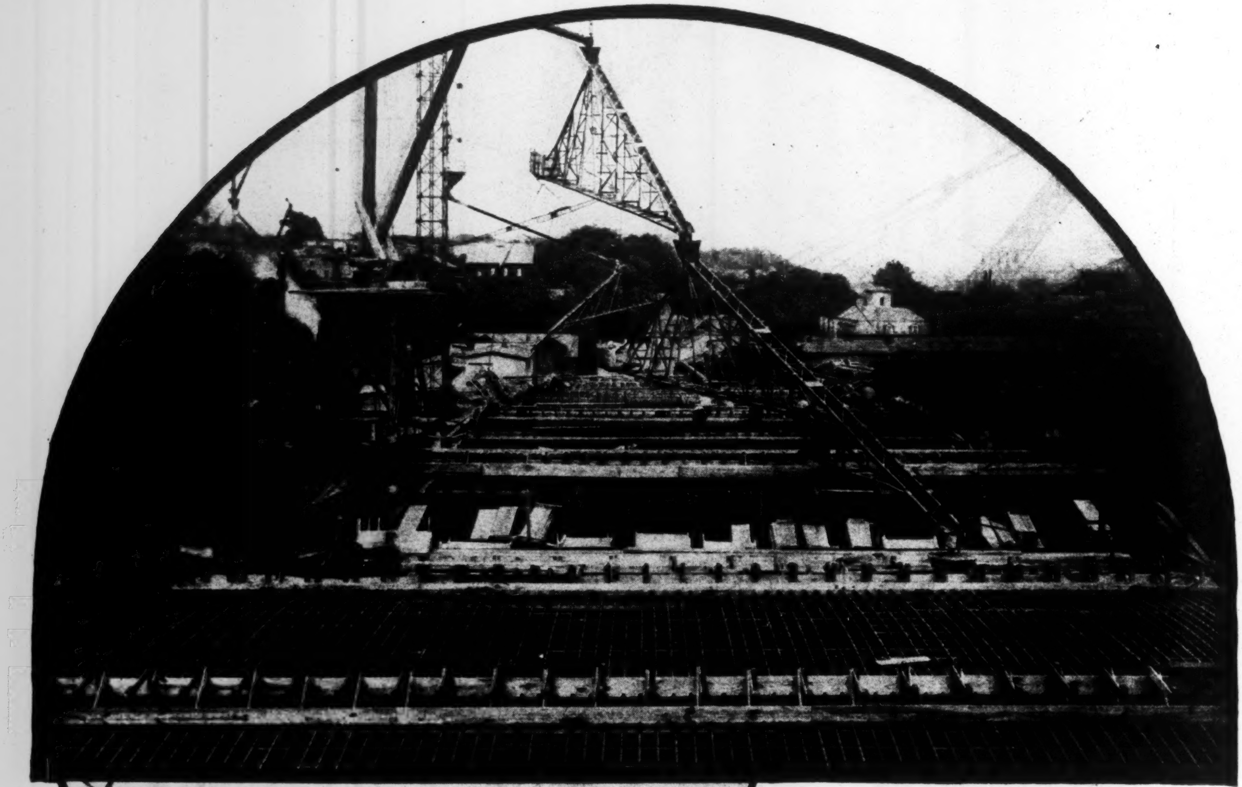
INSLEY
CONCRETE PLACING EQUIPMENT
INDUSTRIAL CARS
STEEL DERRICKS
DUMP BUCKETS

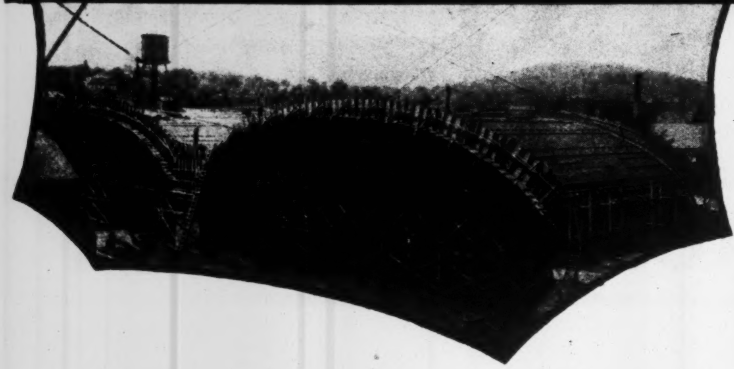
INSLEY DERRICKS are especially designed for use in the construction field, all details having been worked with the requirements of this class of service in view. Their strength of parts and rigidity of members make possible a speed of operation that will be a revelation to derrick users.

In addition to increased operating efficiency, the Steel Derrick is a money saving item of equipment as compared with the wood derrick, owing to the facility with which it can be moved from one job to another. No single section is over 40 ft. in length.

Write for Catalogue No. 43

INSLEY MANUFACTURING CO.
Engineers and Manufacturers
INDIANAPOLIS





Courtesy, Rogers & Hagerty, Inc., Contractors

Bethlehem Reinforcing Bars on "Hill to Hill Bridge," Bethlehem, Pa.

Bethlehem Reinforcing Bars *for* Concrete Construction

BETHLEHEM STEEL COMPANY—*General Offices:* BETHLEHEM, PA.

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New York Boston Philadelphia Baltimore Washington Atlanta Pittsburgh
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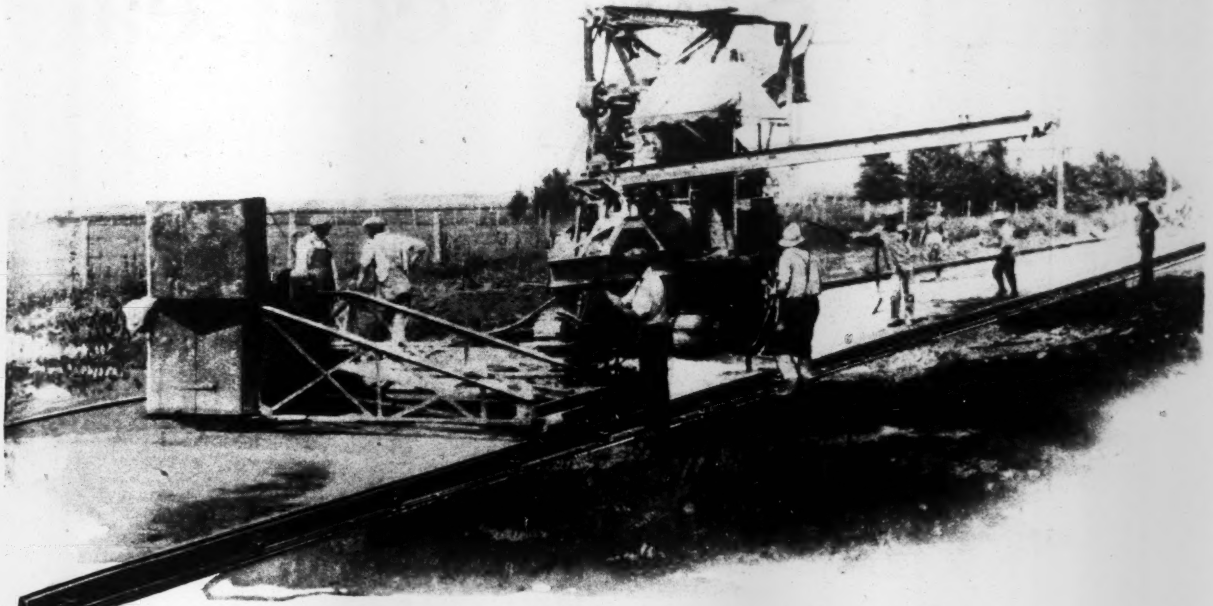
BETHLEHEM



Study These Points of Rail Design

DOMINANT strength—sturdiness adequate to the most punishing work—came to the road rail field with Metaform. The tube-like, continuous web construction of Metaform Road Rails offers not merely increased strength, but old-type strength literally multiplied.

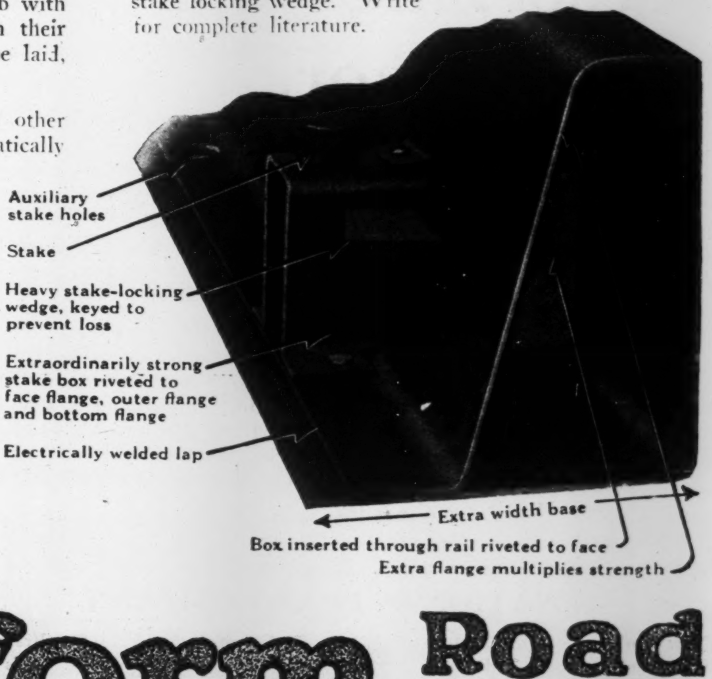
Metaform superiority rests not alone on the ability of these rails to come through job after job with absolutely no sign of deterioration—but on their handiness, the speed with which they can be laid, aligned and stripped.

Metaform design eliminates pedestals and other jointing devices. But the rail-ends automatically lock into a husky joint that helps make a set-up solid as a railroad track. Rails may be removed instantly, at any point in the set-up, to form side-roads.

Study the points of construction shown below. Note the continuous web—lapped, riveted and welded. The tremendously stout stake box, with non-losable stake locking wedge. Write for complete literature.

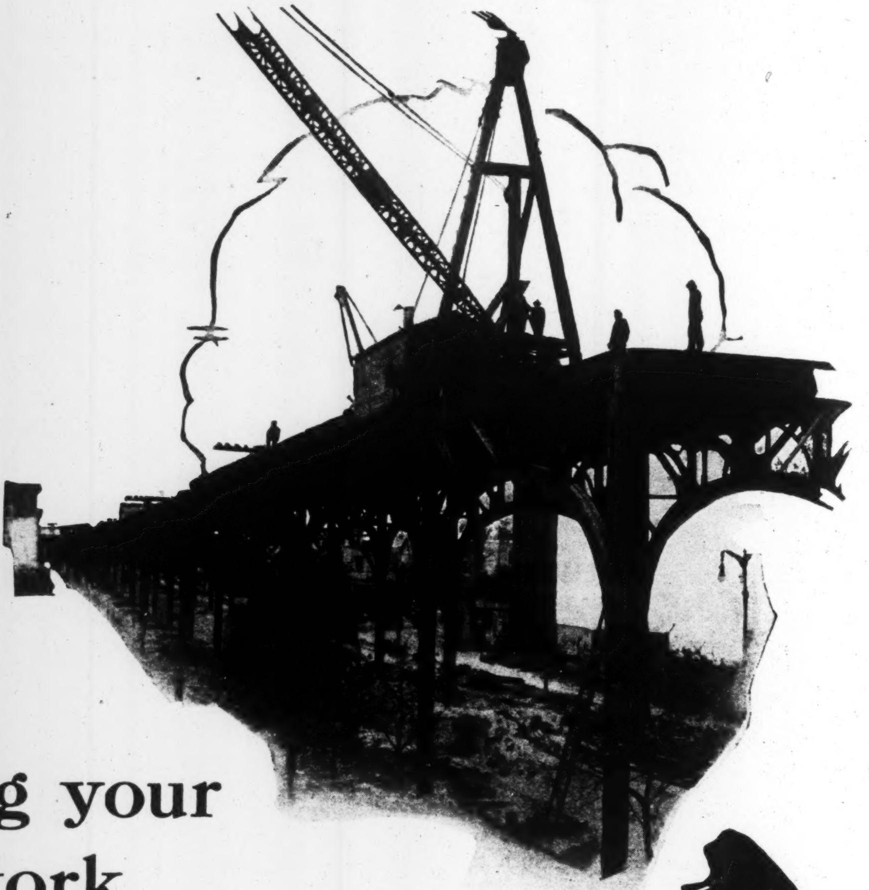
METAL FORMS CORPORATION
1445 Booth St. Milwaukee, Wis.

Sections can be instantly opened for side roads


Auxiliary stake holes
Stake
Heavy stake-locking wedge, keyed to prevent loss
Extraordinarily strong stake box riveted to face flange, outer flange and bottom flange
Electrically welded lap
Extra width base
Box inserted through rail riveted to face
Extra flange multiplies strength

Metaform Road Rails

Dutch Boy Red-Lead



Preserving your steelwork

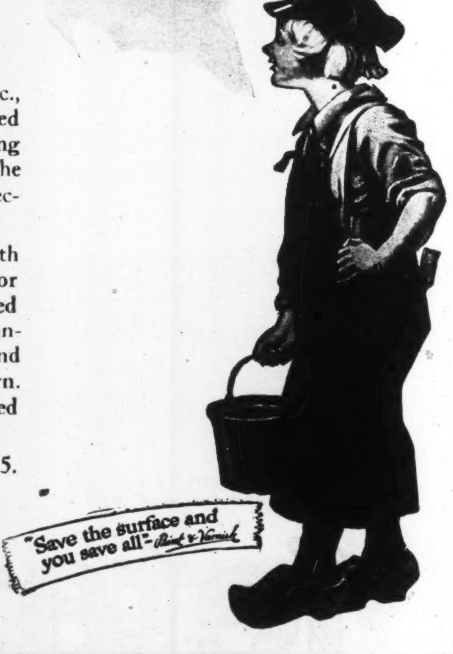
Strong and durable as iron and steel are, rust can eat into a big bridge or any such structure and eventually destroy it. But there is a way to prevent rust from eating your steelwork.

Dutch Boy Red-Lead paint prevents metal from rusting. It sticks tight to the surface and keeps out moisture and air. Weather cannot pry it loose. Hard enough to stand all kinds of weather, it also is elastic enough to expand and contract without cracking.

Contact surfaces, joints, rivets, etc., that are concealed after erection need particular attention. Here painting with Dutch Boy Red-Lead in the shop or before erection gives the necessary protection.

Dutch Boy Red-Lead comes both in paste and in liquid form. For priming coats it should be used straight. The liquid is supplied untinted and also tinted black, light and dark green, and light and dark brown. With the paste any dark color desired can be obtained.

Write for Painting Helps No. 5.


"Save the surface and you save all"—Paint & Varnish

NATIONAL LEAD COMPANY

New York	**Boston**	**Chicago**	**San Francisco**
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CHICAGO

JANUARY 15-19, 1923

ROAD SHOW

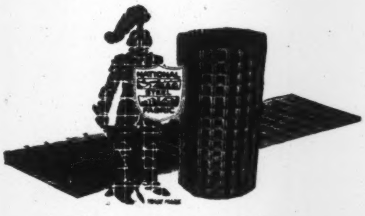
JANUARY 15-19, 1923

We extend you a cordial invitation to visit with our district managers at Booth 12-39, on the Second Floor Balcony of the Coliseum.

Messrs. Harry Beaton of Philadelphia, Charles Dugan of Chicago, Harry Gibboney of Atlanta, and one or two men from the home office will be present to welcome you.

All of them will do everything possible to make your trip pleasant and profitable. If there is anyway in which they can serve you, do not hesitate to call upon them.

Until the 15th, then.



Furnished in Rolls or Sheets

National Steel Fabric Company

(Subsidiary of Pittsburgh Steel Company)

700 Union Arcade, Pittsburgh, Pa.

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World's Largest Manufacturers of Welded Steel Fabric

NATIONAL STEEL FABRIC CO

Subsidiary of PITTSBURGH STEEL CO
UNION ARCADE BUILDING PITTSBURGH, U.S.A

KEYSTONE COPPER STEEL

The Testimony of a Decade

Time will tell—*it has told!* Ten years have now elapsed since Keystone Copper Steel was first offered to the trades as possessing unexcelled *rust-resistance.* Our original claims for this Copper Steel alloy have been fully substantiated—and the years continue to add to the weight of evidence.

KEYSTONE

COPPER STEEL

Through the exhaustive efforts of this Company, the enduring qualities of Sheets and Tin Plates for roofing, sheet metal work and kindred uses have been greatly improved. Keystone quality has been a remarkable success, because it has demonstrated its merit and superiority in actual service. It is more durable—and economical.

American Sheet and Tin Plate Company

General Offices: Frick Building, Pittsburgh, Pa.

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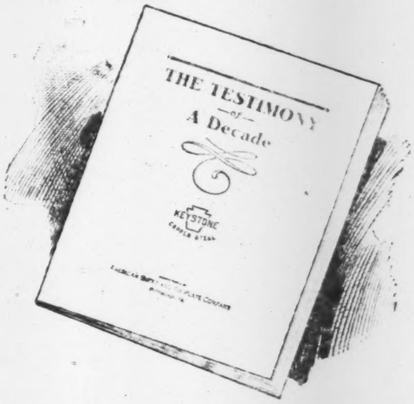
KEYSTONE COPPER STEEL

THE ACHIEVEMENT of alloying steel with copper to increase its *resistance to rust*, is a most important one. Copper puts into Sheet Steel a new measure of permanence that cannot be obtained without its help. The proof is positive and impartial—the result of time and weather exposure.

Your District Sales Office will be pleased to supply this booklet.



Send for new set of Weight Cards and Apollo Calendar.

We have assembled in a brief booklet a few of the outstanding facts showing the superiority of Copper Steel, together with opinions of eminent authorities, official photograph of weather tests, and graphic chart showing corrosion losses of steel and iron sheets. This booklet is of particular interest to engineers, contractors, and users of sheet metal—and will be gladly sent upon request.

This Company is pleased to assist you in the solution of your sheet metal problems. Our large group of modern plants provide extensive facilities, and with these we combine an able and skilled personnel of long experience, whose earnest desire is to serve you well—and supply products that render the full measure of satisfaction.

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General Offices: Frick Building, Pittsburgh, Pa.

MANUFACTURERS OF

Sheet and Tin Mill Products for all purposes—**Black Sheets, Galvanized Sheets, Tin and Terne Plates, Special Sheets for Stamping**
Corrugated and Formed Roofing and Siding Materials, Electrical Sheets
Wellsville Polished Steel Sheets, **Automobile Sheets in all grades, Deep Drawing Sheets,** Stove and Range Sheets, Black Plate, Etc.

The Winter Shovel

The Thew gasoline is the winter shovel.

It is just the shovel for those odd jobs that you can pick up this time of year to help keep down your overhead.

It has the same range and flexibility as the Thew steam shovel. Except for gearing to a single source of power it is identical in design and construction.

Of course the continuous tread truck has real power steer and two speeds. The steering is done from the cab.

With the gasoline you will save on fuel and maintenance cost. You won't have to have a night watchman and a fireman. The shovel is always ready for work and easy to run. With the Thew enclosed house, running even in zero weather is not uncomfortable.

The Ambler Davis Company of Philadelphia own this winter shovel. Get their opinion of it.

Or write for your copy of Bulletin 601.

THE THEW SHOVEL COMPANY
LORAIN, OHIO

EXPORT DEPARTMENT
ALLIED MACHINERY COMPANY OF AMERICA

Thew
Power Shovels

THE THEW SHOVEL CO. LORAIN OHIO
THEW

'UNIVERSAL'
the
CAST IRON PIPE
that Makes
its Own Joints

Resisting Severe Exposure to the Elements

THIRTY miles of Universal Cast Iron Pipe, sizes 2 in. to 12 in., laid by the Key West Gas Company nine years ago is giving perfect satisfaction.

The ability of 'Universal' to give dependable service under unusual conditions is readily appreciated. Consider the 'Universal' line shown above, recently photographed at Key West where the bank washed away in 1919. Despite repeated attacks of heavy seas, this 4-in. Universal Pipe line continues to give uninterrupted service.

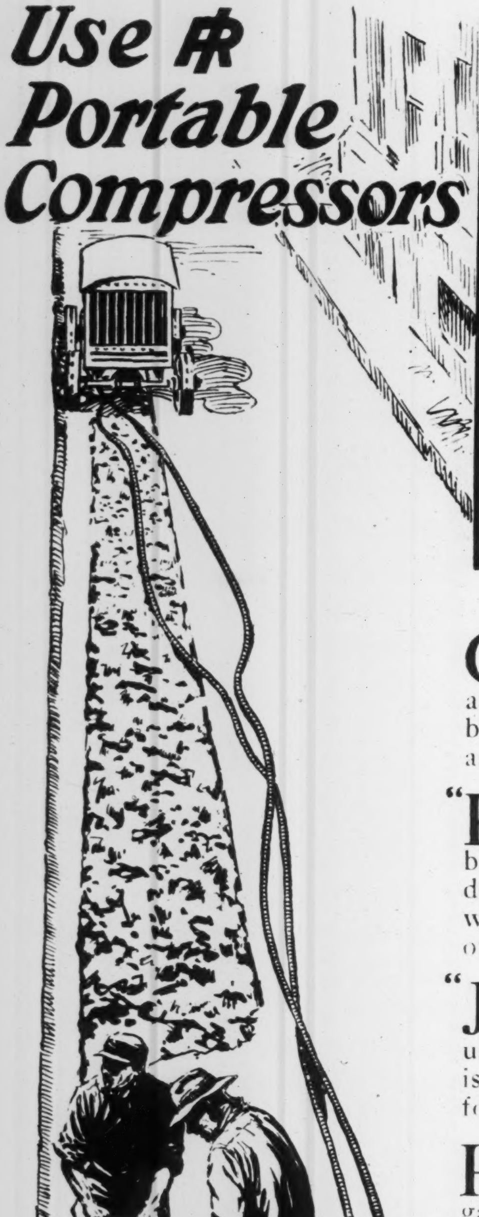
Universal Pipe is the ideal pipe for water supply, high pressure fire systems, gas lines and other service where freedom from leakage is paramount.

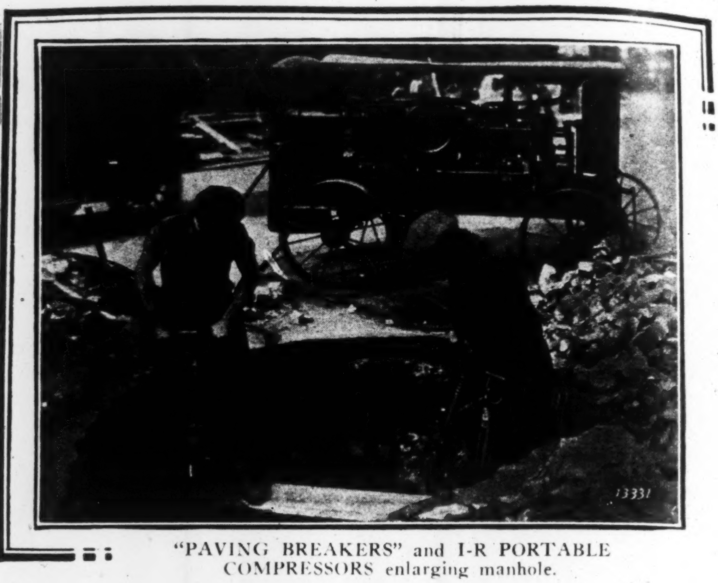
UNIVERSAL CAST IRON PIPE

no pouring, no calking—bell holes unnecessary

THE CENTRAL FOUNDRY COMPANY
Subsidiary of
IRON PRODUCTS CORPORATION
41 East 42nd St., New York
Sales Offices: New York, Chicago, Birmingham, Dallas, San Francisco

Use IR Portable Compressors





"PAVING BREAKERS" and I-R PORTABLE COMPRESSORS enlarging manhole.

COMPRESSED-AIR operated machinery is being used to a greater extent every day for cutting asphalt, breaking out concrete, drilling rock, sand-blasting, paint spraying, etc. It does the work rapidly and economically, is comfortable to operate and sturdy.

"PAVING BREAKER"—a light, compressed-air operated one-man machine for cutting asphalt, breaking up concrete roads and foundations and general demolition work. The compressed-air method does the work in one-fourth the time and at one-third the cost of hand methods.

"JACKHAMER" — an automatically rotated hammer type rock drill, hand held or mounted and used in all kinds of general rock drilling work. It is operated by one man and is now the standard drill for trench and contract work.

PORTABLE COMPRESSORS — complete air compressor plant consisting of: air compressor, gasoline engine or electric motor, radiator and cooling system, air receiver, etc., all mounted on a substantial all-steel truck with steel wheels and axles.

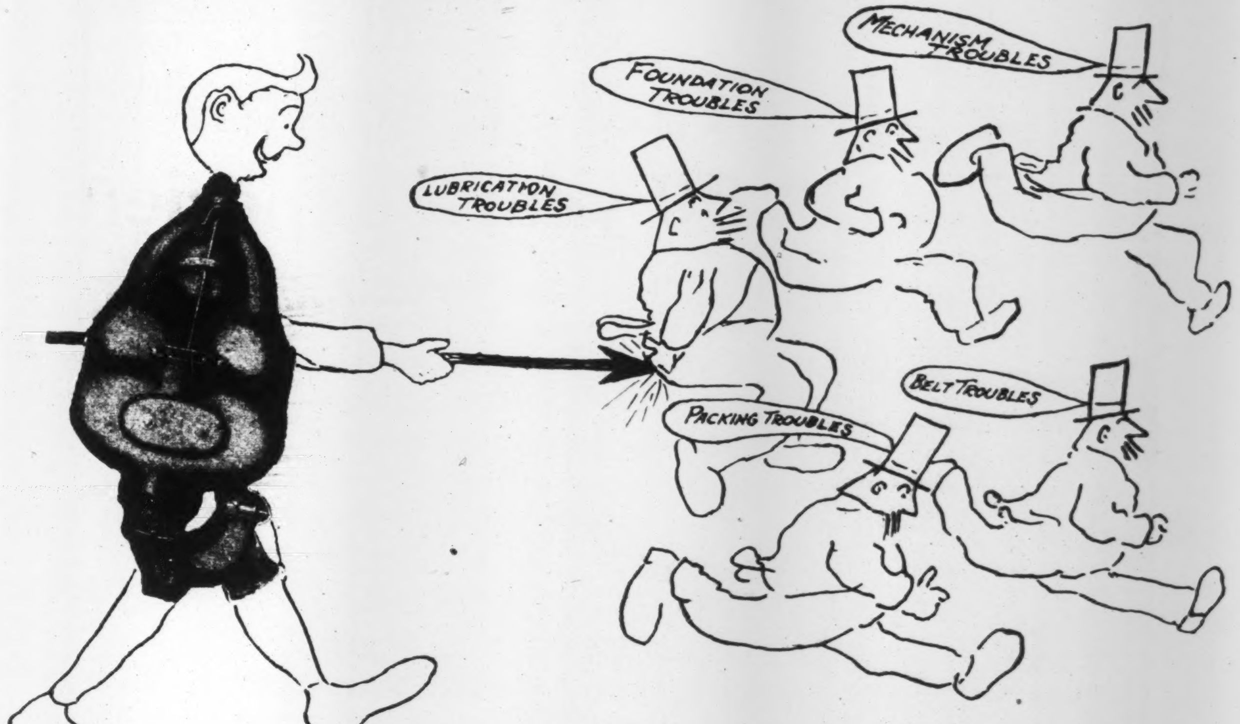
Bulletin No. 4051—"Paving Breaker"
Bulletin No. 4046—"Jackhamers"
Bulletin No. 3315—Portable Compressors

INGERSOLL-RAND COMPANY, 11 Broadway, New York

60-SD

Ingersoll-Rand

The Pulsometer Drives Away Your Pumping Troubles



How can there be Pumping Troubles with a Pulsometer? It has no cams, rods, pistons, packing and other trouble-making inside mechanism to get out of order. It has no sliding parts. It requires no lubrication. It requires no belting. It requires no adjusting, no attention. You do not have to build a foundation. Just hang the Pulsometer on a hook, stick the suction into the water, turn on the steam (exhaust steam will do)—and it will begin pumping and keep it up until it sucks dry.

Note. It's easy to get a Pulsometer. You can rent, lease or buy one. Just get in touch with us.

Get a catalog from us or the agent nearest

Note the small size Steam Pipes.

	Sizes of Pipes, Inches					AND NOTE
No.	Steam	Suction	Discharge	Gallons Per Minute	Horse Power Boiler	Weight Pounds
2	$\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{1}{2}$	25	4	95
3	$\frac{3}{8}$	2	2	70	5	140
4	$\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	125	6	295
5	$\frac{1}{2}$	3	3	200	9	430
6	$\frac{3}{4}$	$3\frac{1}{2}$	$3\frac{1}{2}$	350	12	570
7	$\frac{3}{4}$	4	4	450	15	745
8	1	5	5	750	25	1,375
9	$1\frac{1}{2}$	7	6	1,100	35	2,100
10	2	8	8	2,200	70	3,800

Note the small Boilers required

PULSOMETER STEAM PUMP

PULSOMETER STEAM PUMP CO.

Executive Offices: 220 West 42nd St., New York City

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Henry H. Meyer Company, 110 S. Howard St........ BALTIMORE
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J. L. Welborn.......HATTIESBURG, MISS.
Miller Supply Co.....HUNTINGTON, W. VA.
H. A. Paine, 119 Main St....HOUSTON, TEX.
Harron, Rickard & McCone, 225 S. San Pedro St..LOS ANGELES, CA

Hunter Machinery Co., West side of 16th St. Viaduct.MILWAUKEE
Wm. H. Ziegler Company, 423 S. Fifth St..........MINNEAPOLIS
Turner Supply Co............MOBILE, ALA.
Carthage Machine Co.....CARTHAGE, N. Y.
Woodward Wight & Company, Ltd. NEW ORLEANS
Bcrow Machinery Co., 220 West 42nd St......NEW YORK CITY
Edelen & Co., 235 Commercial Trust Bldg.PHILADELPHIA

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CHAPMAN

That stands for 50 years' experience

—Look for it!

Sluice Gates With a Pedigree

Any good foundry can produce a sluice gate. Perhaps it will be a *good* sluice gate. But is it worth while to take chances? You must ask yourself whether or not the sluice gates you purchase will simply save you money on *first* cost—or over a long period of years of operation. You must ask yourself whether they have been well designed, whether the workmanship and metals are up to a certain standard of excellence. And in Chapman Sluice Gates all these questions are answered affirmatively—because back of every Chapman Sluice Gate lie 50 years' of experience and reputation. Send for the Chapman Catalog 38—a fine "text book" of fine products.

The Chapman Valve Mfg. Co., Indian Orchard, Mass.

BRANCHES:

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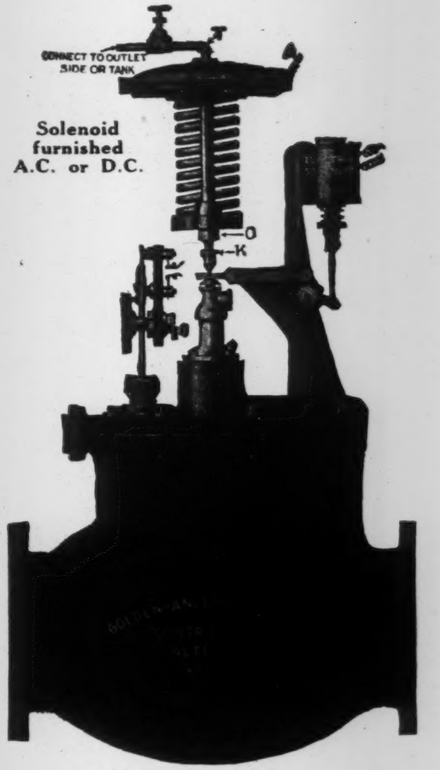
VALVES

The test of actual years of Service has demonstrated
Golden-Anderson
Patented Automatic Cushioned "Stop-Starter Electric" Controlling Altitude Valves

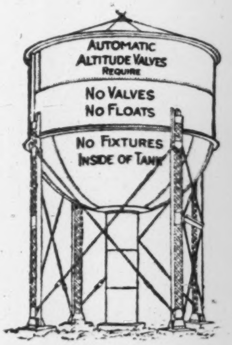


Solenoid furnished A.C. or D.C.

Sizes to 30 in.

You can't afford to experiment with systems of electrical control of water-level (pumps) in your standpipes, tanks, reservoirs. The failure of a "system" may mean heavy loss in water, revenue, troubles, complaints, etc. Select the *best you can* possibly afford, after thoro investigation —remembering always that the valves shown here have been proven efficient for this work by years of real service.

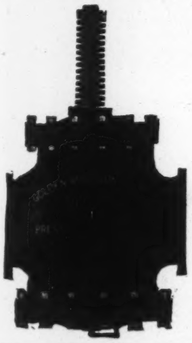
These valves will "cut in" or "cut out" one or more driven pumps. Actuated by the fall or rise of water level in standpipes, tanks or reservoirs. Control pumps automatically, from distant points if desired. By maintaining a constant water level, they stop water waste due to overflow, and also all unnecessary pumping. For high or low pressure. Air and water cushioned. No floats or fixtures. No water hammer or shock. No metal to metal seats. Solenoid furnished for alternating or direct current. Especially adapted for railroads, water works and industrial plants.



"No Floats or Fixtures"
"No Water Hammer or Shock"

Will Also Operate Warning Bells and Signal Lights

"Hosts of References"—Every Valve with an Absolute Guarantee



Golden-Anderson Patent
Automatic Cushioned Water-Regulating Valves

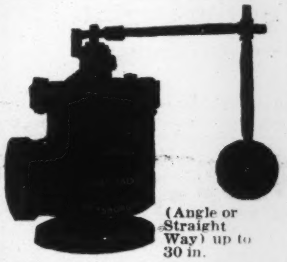
1. Maintain an absolutely constant reduced water pressure; regardless of pressure fluctuations on the initial side.
2. Perfectly cushioned both in opening and closing. No metal-to-metal seating. No sticking or chattering.
3. Absolutely self-contained. No auxiliary valve or by-pass is necessary.
4. Once adjusted, no further attention is required.
5. Sizes to 30 inches.

Golden-Anderson Pat.
Automatic Float Valves

1. Accurately control the water in open tanks, hot wells, reservoirs, etc., between two fixed limits.
2. Cushioned by both water and air. No metal to metal seating, pounding, sticking or chattering.

Can be regulated to operate quickly or slowly on High or Low pressures. Float swivels to any angle desired.

Construction. Heavy Iron Body . Bronze mounted. Virtually indestructible, due to service.

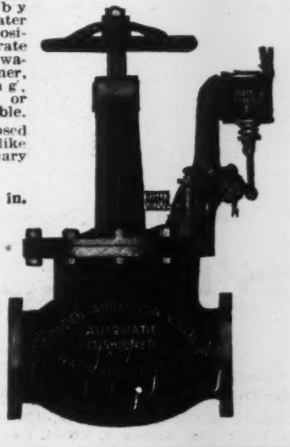


(Angle or Straight Way) up to 30 in.

GOLDEN-ANDERSON
Patent Automatic Cushioned Electric Water Service Valves

1. Give instant control of the water distribution from the pumping plant in case of fire or other emergency.
2. Can be opened or closed by electricity by closing a small switch for a few seconds only. Thus no current is wasted.
3. Can be provided with either d. c. or a. c. solenoid as circuits require.
4. Cushioned in opening and closing by both water and air. Positively operate without water hammer, surging, sticking or other trouble.
5. Can be closed by hand like any ordinary valve.

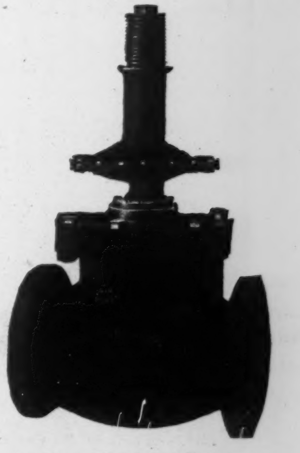
Sizes to 30 in.



GOLDEN-ANDERSON
Cushioned Water Relief Valves

Automatically Relieve Excess Pressure—

Prevent Stress, Strain and Bursting Mains

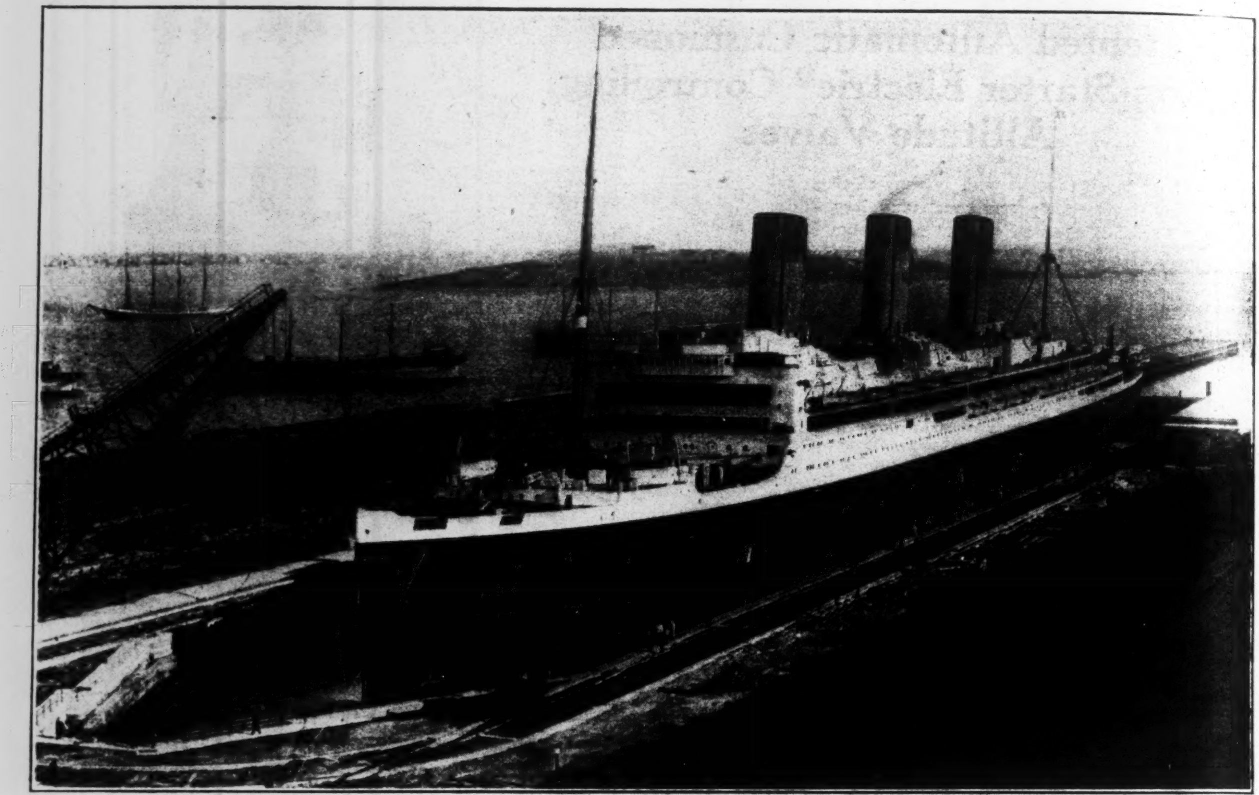


Angle and Globe Patterns
Sizes 3 in. to 30 in.

Golden-Anderson Valve Specialty Co., 1202 Fulton Bldg., Pittsburgh, Pa.

COFFIN VALVE COMPANY,

Makers of the Largest Sluice and Gate Valves in America



Coffin Valves

Operate the great South Boston Drydock

Used to repair the giant "Majestic"

The largest Steamship afloat—the largest Drydock in the country—the largest Manufacturers of the largest Sluice Gates and Gate Valves in America—significant!

Check Valves
Flap Valves
Foot Valves
Sewer Gates

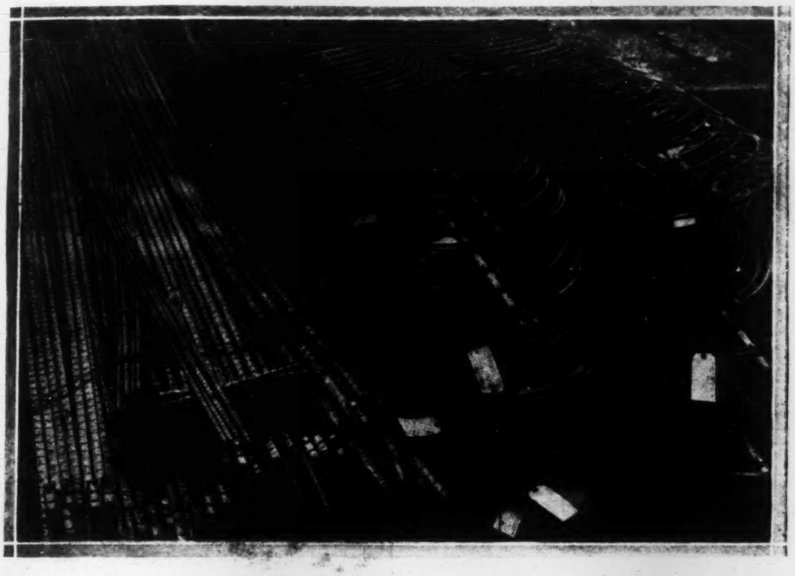
Office and Works, Neponset, Suburb of

BOSTON, MASS.,

Sluice Gates
Gate Valves
Butterfly Valves
Fire Hydrants

REPRESENTATIVES:

New York City: C. W. Bergen & Co., 50 Church St.
Cleveland, Ohio: Tomlinson Steam Specialty Co., 1597 St. Clair Ave.
Philadelphia, Pa.: DeHuff & Hopkins, Morris Building
San Francisco, Cal.: Theo. F. Dredge, Monadnock Building
Chicago, Ill.: Whitney & Ford, 4325 Cottage Grove Ave.
Toronto, Ont.: The Arthur S. Leitch Co., Ltd., 1001 Kent Building



Spirals and Bars
For Immediate Shipment

BESIDES furnishing bars and accessories for concrete reinforcing, we make column spirals of any size and specification and deliver the material at your job just when you specify—all cut, bent, bundled and tagged ready to be set in the forms. This includes column ties, bar spacers, stirrups, chairs, etc.

You will find it pays to get our lump sum or pound price estimate. Send in your engineers' or architects' plans and let us prove it.

Write for Ryerson Journal and Stock List, containing complete information on reinforcing materials and other steel products, such as structurals, bars, plates, sheets, tubes, rivets, bolts, etc.

ESTABLISHED 1842 INCORPORATED 1888

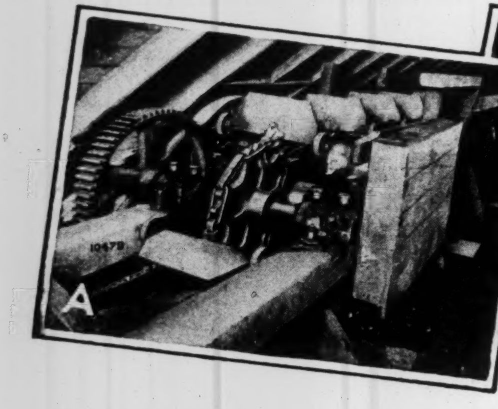
JOSEPH T. RYERSON & SON

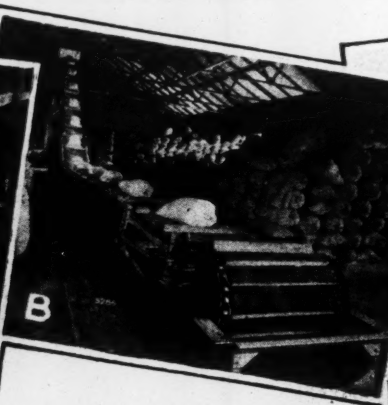
CHICAGO ST. LOUIS DETROIT BUFFALO NEW YORK

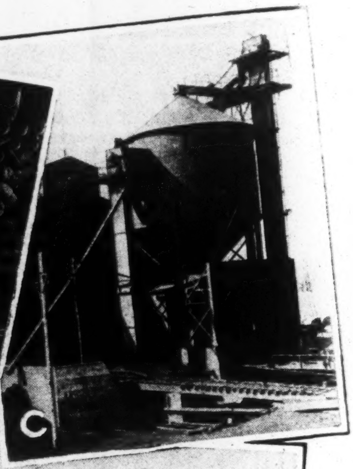
BRANCH OFFICES: DENVER HOUSTON JERSEY CITY

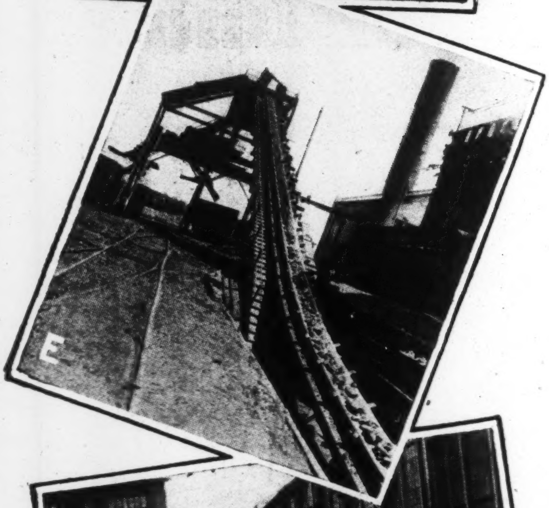
MILWAUKEE MINNEAPOLIS NEWARK SAN FRANCISCO TULSA

RYERSON STEEL-SERVICE









For Over Forty Years

Jeffrey Engineers have cooperated with the men responsible for results in the Engineering and Contracting fields, Industrial and Power Plants, Public Works, etc.

This has been productive of successful equipments, which have been a deciding factor in producing greatest production at lowest cost.

To meet the imperative demands of industry today will mean in many plants, new methods, faster and more dependable material handling equipments. Jeffrey experts are ready to help you select the right equipment to meet the emergency.

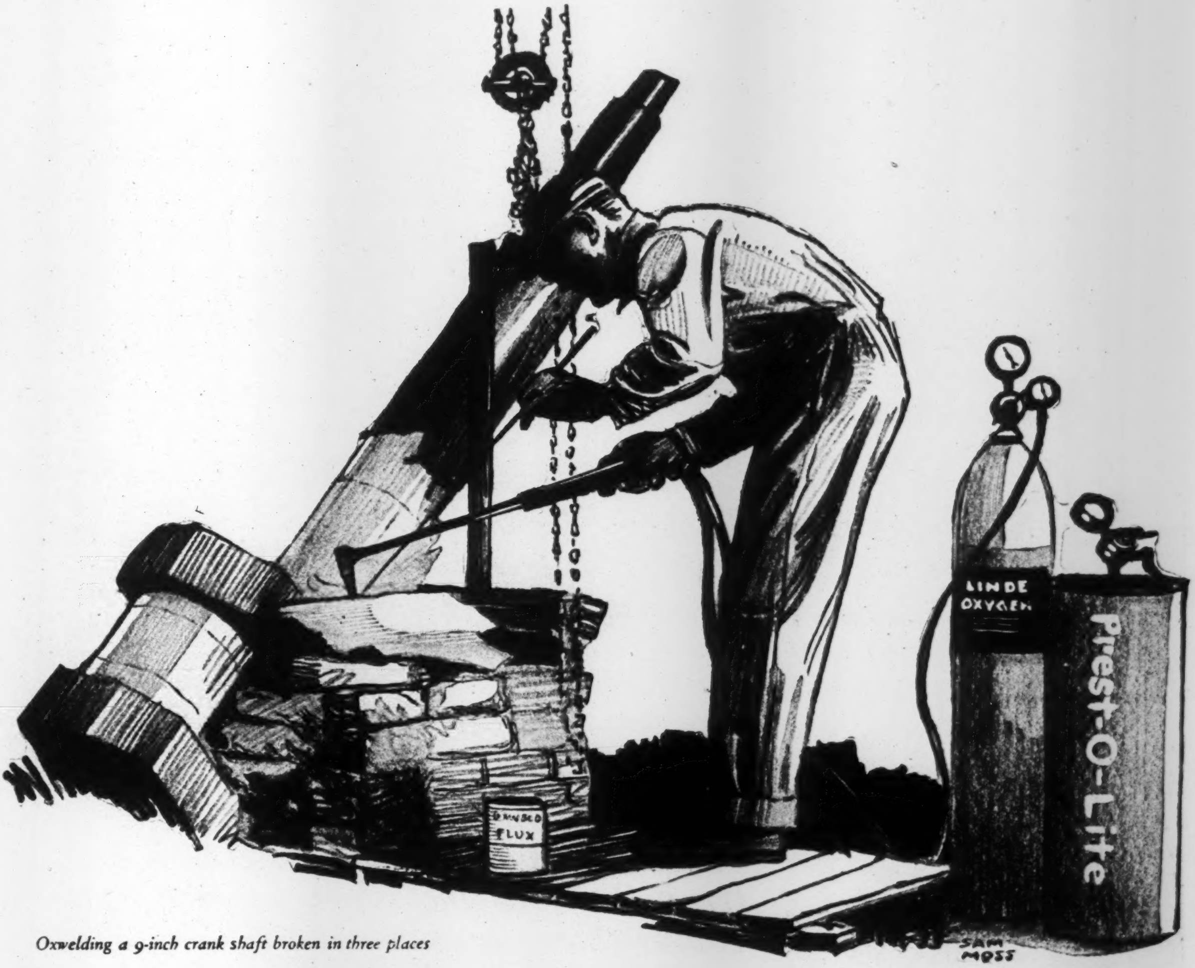
Jeffrey Standard Material Handling Machinery Equipments include:

Elevators; Chains for all Elevating Conveying and Power Transmission purposes; Conveyors of various types; Coal and Ashes Handling Machinery; Skip Hoists; Portable Bucket Loaders and Belt Conveyors; Industrial and Mine Haulage Locomotives; Coal Mining and Tipple Machinery, etc.

Ask for latest Catalogs.

The Jeffrey Manufacturing Company
923-99 North Fourth Street, Columbus, Ohio

JEFFREY
MATERIAL HANDLING MACHINERY



Oxwelding a 9-inch crank shaft broken in three places

An Ounce of Cure Cheats the Scrap Heap

What Oxweld has done for others—Oxweld can do for you.

OXWELD Can Do IT!

An illustrated book "Oxweld Can Do It" tells what oxwelding is doing—write for it

It would have cost a lot of money, to say nothing of lost weeks, to replace this badly cracked nine inch crank shaft.

The oxwelder's torch put it back to work — as good as new — in a few days and at a trifling cost.

That is the every-day story of oxwelding—saving time and money wherever machines of metal are subject to wear and tear.

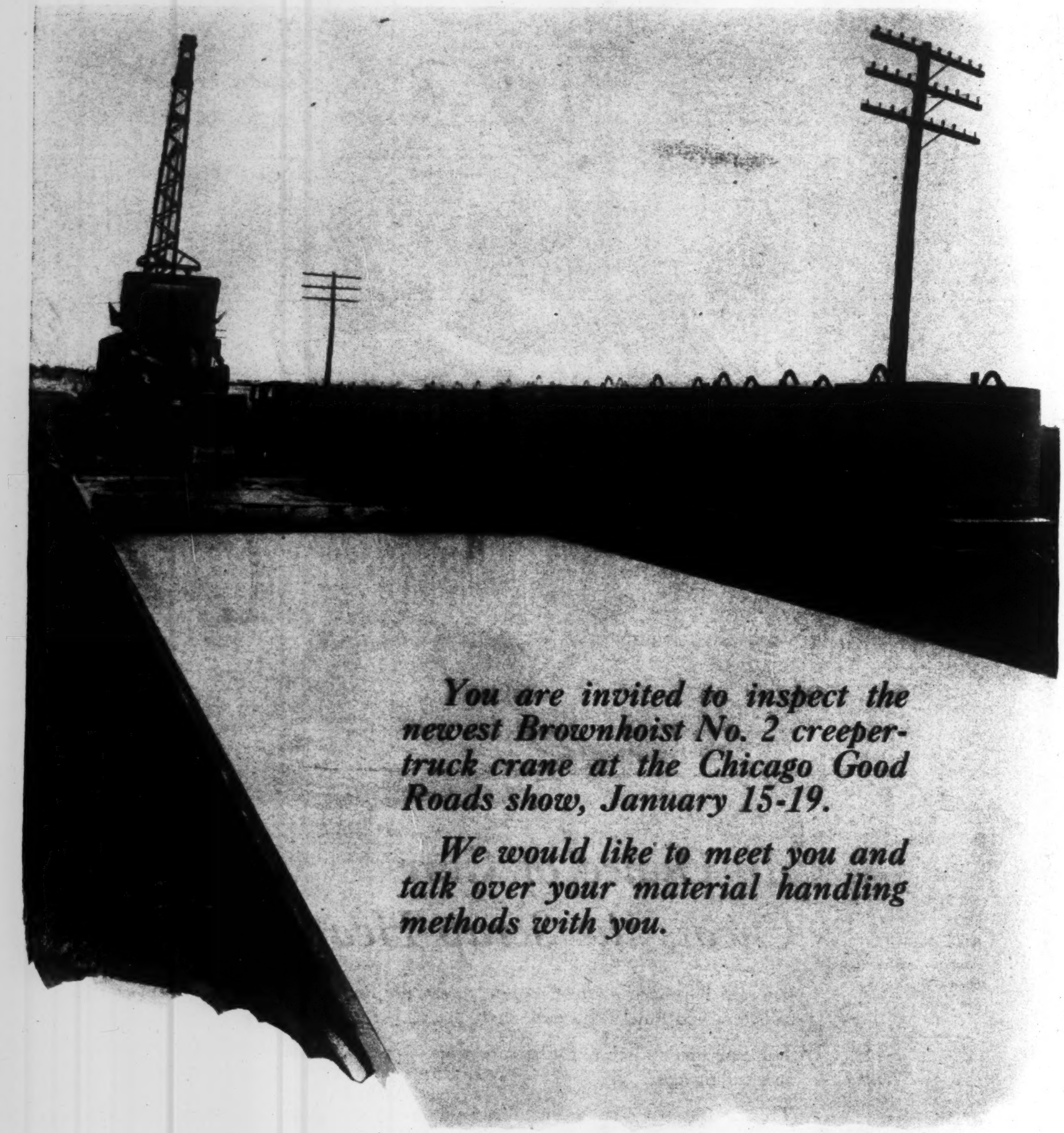
And in production, too, the oxwelding and cutting blowpipes are turning out stronger, neater products—quicker and at a great saving.

In more than fifty cities are stationed Oxweld Service Engineers—why not ask to have one of these experts demonstrate how oxwelding and cutting may be used in *your* plant to *your* profit. There is no charge for such service.

OXWELD ACETYLENE COMPANY · *Newark, N.J.* · *Chicago* · *San Francisco*
Sales Representatives in the Principal Cities of the World

WORLD'S LARGEST MAKER OF EQUIPMENT FOR OXWELDING AND CUTTING METALS

1315-22



You are invited to inspect the newest Brownhoist No. 2 creeper-truck crane at the Chicago Good Roads show, January 15-19.

We would like to meet you and talk over your material handling methods with you.

The Brown Hoisting Machinery Co., ***Cleveland, O.***

Branch Offices: New York, Chicago, Pittsburgh, San Francisco, New Orleans

Products: Locomotive Cranes, Buckets, Belt and Chain Conveyors, Contractor's Bunkers, Etc.

BROWNHOIST

MATERIAL HANDLING MACHINERY

POSITIONS WANTED

CALIFORNIA construction companies, office man, twenty-six and single, available March 1; nine years' experience on marine, business and industrial projects in Eastern states and tropics. PW-434, Eng. News-Record, 10th Ave. at 36th St., New York City.

ENGINEER as executive, practical inventive, on derricks, cranes or steel construction requiring development, desires position with progressive concern. Open about January, 1923. PW-373, Eng. News-Record, 10th Ave. at 36th St., New York City.

EXPERIENCED and skillful operator on locomotive crane, clam-shell or drag-line. Available immediately for long job. Age 34, married. PW-388, Eng. News-Record, Rialto Bldg., San Francisco, Calif.

HYDRAULIC engineer, at present responsible charge design and construction, hydro-electric and waterworks projects, thirteen years in charge projects of magnitude, Member Am. Soc. C. E., graduate C. E., age forty, desires change. PW-420, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

MAN having 18 years' experience on waterworks, heavy rock excavation, hydro-electric and transmission lines construction as general foreman and superintendent. A-1 mechanic on pumps, meters, motors and steam. Would like to connect with municipal plant. PW-356, Eng. News-Record, 10th Ave. at 36th St., New York City.

MUNICIPAL engineer and waterworks superintendent desires employment in a city of 25,000 or over; salary $5,000. PW-236, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

SALES manager, broad technical education, extensive experience, design, construction and production. Now employed as sales manager. Available Jan. 1st for bigger opportunity. PW-381, Eng. News-Record, 10th Ave. at 36th St., New York City.

YOUNG man, age 27, desires position as general foreman on concrete and brick work. Have technical education and can handle men. PW-423, Eng. News-Record, 10th Ave. at 36th St., New York City.

TRAINED executive, now employed, seeks position of greater responsibility and of harder work. Foreign service acceptable. Spanish speaking country preferred. Experience: Graduate civil engineer, seven years pioneer engineering in tropics, six years contractor's superintendent of construction on public improvements. Qualifications: Skilled in all clerical and manual labor of contracting and engineering; especially recommended for attention to details and skilful organization. PW-424, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

POSITIONS WANTED

Notice to Advertisers!

Owing to the holiday — New Years — the *"Searchlight"* pages of the January 4th issue of *Engineering News-Record* will close for press earlier than usual. Copy should reach us for

Display and Want Ads
by 10 A.M., Saturday,
December 30th.

Proposal Ads
Copy received as usual up to
11 A.M., Tuesday, Jan. 2nd.

REPRESENTATION WANTED

Representatives Wanted

We want live representatives in all large cities for the sale of steel reinforcement and accessories for reinforced concrete, etc. We are an old established concern. Liberal commissions paid to live sales engineers who are willing to enter into yearly contracts. Sales engineers with established business preferred. RW-431, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

REPRESENTATIVES AVAILABLE

Sales Representative

Civil and architectural engineer, with office at 219 North American Building, Philadelphia, wants to represent the product or products in this vicinity of some established manufacturer. D. C. Finston.

AGENCIES AVAILABLE

Manufacturer's Agent

Iron, steel and contractor's equipment; established offices in Philadelphia; would like to take on additional line to follow up inquiries or leads and do some missionary work. A-436, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

WANTED

A POWER SHOVEL SALES ENGINEER

to sell the products of a Company well known throughout the country for over thirty years

To qualify, the candidate selected must be entirely familiar with the application of power shovels, dragline and trench excavators.

He must have a knowledge of gasoline engines and vision to see the tremendous possibilities when used on dirt moving machinery.

A wide acquaintance among contractors in New York City and State is essential as immediate results will be expected.

A two-fisted, hard hitting, business producing salesman, fully conversant with modern sales methods, is the man we want.

Headquarters: New York City

Address AS-422, Engineering News-Record
10th Ave. at 36th St., New York City.

ADVANCE AGENT WANTED

A well established concern of engineers and builders, who have developed a type of fireproof construction specially adaptable to industrial buildings, are seeking representatives to forward information as to industrial buildings under contemplation in their section of the country. Manufacturer's Agents already engaged in a well founded business along industrial lines can have a profitable side line by representing us.

AS-421, Engineering News-Record
Old Colony Bldg., Chicago, Ill.

WANTED*

Conveyor

About five hundred feet of used gravity conveyor wanted. What have you to offer? Philadelphia Storage Battery Co., Ontario & C Streets, Philadelphia, Pa.

Wanted to Buy

A 2½ yard or 3 yard Hayward type Orange Peel Bucket. Must be in first-class working order. McWilliams Dredging Company, 1537 McCormick Building, Chicago, Illinois.

BOOKS AND PERIODICALS

Complete Set For Sale

Of U. S. Geological Survey Water Supply publications of nearly 500 copies, to highest bidder for next thirty days, perfect condition. Gurley Light Mountain transit with straight standards, reversion level, with complete Burt Solar equipment; mountain tripod. Excellent condition, $285.00. BP-413, Eng. News-Record, 10th Ave. at 36th St., N. Y. C.

PATENT ATTORNEYS

PATENTS — Send for form "Evidence of Conception" to be signed and witnessed. Form fee schedule, information, free. Lancaster and Allwine, 262 Ouray Bldg., Washington, D. C.

WANTED

CEMENT GUN OUTFIT

for re-finishing concrete building. State price and capacity. With or without compressor.

W-332, Engineering News-Record
10th Ave. at 36th St., New York City.

EXCAVATION

Steam Shovels for rent with crews or work taken by contract.

Dinkeys and cars or teams furnished.

H. C. AMBLER
3717 Old York Road, Philadelphia, Pa.

Second-Hand Transits and Levels

Guaranteed in Good Order and Adjustment.

Write for New Bargain List

WILLIAMS, BROWN & EARLE, INC.
918 Chestnut St., Philadelphia, Pa.
Department D

NEW AND USED SURVEYING INSTRUMENTS AT FACTORY PRICES

Satisfaction guaranteed or money refunded. Write for complete list and catalogue of our high grade instruments and supplies for civil engineers, surveyors, mining, builders, contractors, etc.; 40 years' experience in repairing instruments of all makes at reasonable prices. Prompt service.

WISSLER INSTRUMENT CO.
607 N. Broadway, St. Louis, Mo.

LOCOMOTIVE CRANE

Industrial 10-ton, 8-wheel Steam Crane, 48-ft. boom, bucket handling drums, standard gauge, good condition. Immediate shipment. F.O.B. Milwaukee, $3800 cash.

H. Y. SMITH COMPANY, Milwaukee, Wis.

LAND FILLING

CLEAN STEAM

CINDERS

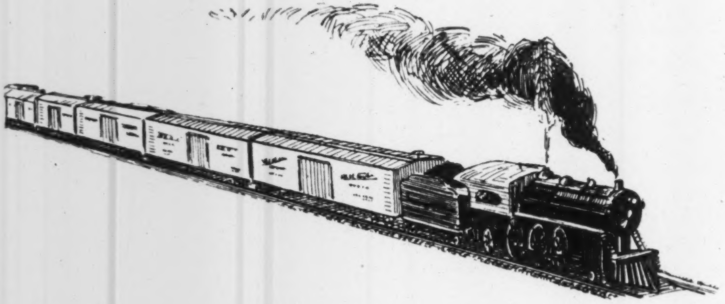
ROAD BUILDING

SCOW LOAD QUANTITIES

500 to 2000 cu. yds. daily output

Phone: Mulberry 2670 HENRY B. COOKE CO., Inc. 810 Broad St., Newark, N. J.

Railway Equipment



Contractors enter your bids before January 16th

Industrial and Standard Gauge Rolling Stock

Push Cars
Motor Cars
Locomotives
Box Cars
Flat Cars
Dump Cars
Powder Cars
Passenger Cars
Tank Cars

SEALED bids for any or all of the equipment listed below will be received in the Office, Chief of Engineers, Room 2830 Munitions Bldg., Washington, D. C., before 3 p.m., Jan. 16. This equipment is in general good condition and may be inspected upon application to the commanding officer, point of storage. Send for proposal of sale which gives all information concerning equipment and terms of sale. Address, as above.

Ordnance Reserve Depot, Tullytown, Pa.—1 gasoline motor car, stand. gauge; 4 push cars, stand. gauge; 5 push cars, 36-in. gauge; 15 flat cars, 36-in. gauge; 25 box cars, 36-in. gauge; 15 black powder cars, 36-in. gauge; 1 tank car, 36-in. gauge; 1 dump car, stand. gauge.

Watertown Arsenal, Watertown, Mass.—4 dump cars, stand. gauge; 11 flat cars, stand. gauge; 7 standard car wheels.

Morgan Gen. Ordnance Depot, South Amboy, N. J.—1 box car, stand. gauge; 1 saddle tank locomotive, American, stand. gauge; 12 dump cars, stand. gauge.

Ordnance Reserve Depot, Toledo, Ohio—2 box cars, stand. gauge.

Camp Dix, N. J.—1 tank car, 36-in. gauge; 4 flat cars, 36-in. gauge; 18 box cars, 36-in. gauge; 17 electric motor cars, 36-in. gauge.

Curtis Bay, Md.—4 passenger cars, stand. gauge, vestibule platforms. No seats in cars.

The Government reserves the right to reject any or all bids

WAR DEPARTMENT

SEARCHLIGHT SECTION

USED EQUIPMENT AND NEW

Offered for Re-sale

Space for these advertisements is sold by the advertising inch—30 inches to a page. The price per inch is based on total space used—multiply ad space by number of insertions.

RATE PER INCH:

1 to 3 inches	$5.00 an inch
4 to 7 inches	4.80 an inch
8 to 14 inches	4.70 an inch

An inch is measured vertically on one column—three columns to a page. Any space may be used measured by the even inch in height by 1, 2, or 3 columns in width.

RATES FOR LARGER SPACES, OR SPACE ON A YEARLY BASIS, FURNISHED ON REQUEST.

E. N. R.

LET GEORGE DO IT!

FOR SALE OR RENT

LET GEORGE DO IT!

PUMPS

3-in. Diaphragm, gas and electric.
3- to 8-in. Centrifugals.
6-in. Centrifugal, dir. conn. to gasoline engine.

MIXERS

1—¾-yd. Ransome, electric.
2—½-yd. Ransome, electric.
1—15-ft. Lansing, gasoline.
2—10-ft. Eureka Power Loaders, gaso. & elec.
2—10-ft. Ideal, gasoline and electric.

SAW TABLES

2—No. 7 Knickerbockers, gas or electric.

TRACK TOOLS

1—Electric Track Drill and Tools.

COMPRESSORS

1—7 x 10 Chicago Pneumatic, gasoline, portable.
1—8 x 8 Clayton, belt driven.
1—No. 3 Schramm, gasoline, portable.

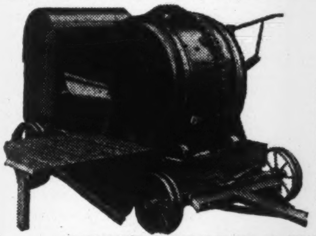
TOWERS

500 ft. Standard Size Wood Tower.

All equipment may be inspected at Brooklyn Yard.

Write for George's Red Book.

E. GEORGE & CO., 407-409 Broadway, New York City
Established 1873



FOR SALE OR RENT

Rebuilt Mixers and Hoists
From our New York Warehouse

5—7-S Knickerbocker Mixers, gasoline driven.
3—4-S Standard Mixers, low charging. Novo engines.
4—Mortar Mixers, continuous type, gasoline driven.
1—14-S Ransome Mixer, batch hopper, elec. drive.
1—14-S Smith Mixer, tilting drum, steam driven.
1—28-S Ransome, batch hopper, steam engine.
1—7-in. x 10-in. Lidgerwood D.D., D.C. hoist with boiler and swinger.
1—6¼-in. x 8-in. Lidgerwood D.D.,D.C. hoist with boiler.
1—9-in. x 12-in. National Three-Drum Hoist with boiler and swinger.
Gasoline Hoists, 6 to 10 hp., single or double drum.

THE HUBBARD-FLOYD CO., INC.
MAIN OFFICE: Grand Central Palace, New York, N. Y., Vanderbilt 1465
BOSTON OFFICE: Old South Building, Main 4233.

DERRICK BOAT FOR SALE

Two hulls 90 ft. x 16 ft. each, clearance over all 35 ft., fully equipped locomotive type return tube boiler, triple drum 9 x 12 National hoist, swing engine, necessary spud hoists and spuds, etc., boom 55 ft. long	$7500
1—10 x 16 Vulcan Locomotive, 36 in. gauge	1200
7—12-yd. Oliver Dump Cars (entirely rebuilt and not since used), each	1000
1—65-ton Bucyrus Shovel	7500
1—70-ton Bucyrus Shovel	5000
1—1-yd. Hayward Orange Peel Bucket	550
1—3-yd. Hayward Orange Peel Bucket	1500

Also other construction equipment at low prices.

James H. Dawes, General Contractor, Tonawanda, N. Y.

New Structural Steel

200 tons (4700 pieces) 5 in. 9¾ lb. I Beams 9 ft. 0 in. To complete shipments from this point $22. net ton, f.o.b. New Cumberland, Pa.

Henry A. Hitner's Sons Co.
4501 Richmond St., Philadelphia, Pa.

FOR RENT AND SALE

14—4-yd., 36-in. gauge, heavy duty Western dump cars.
20—12-yd. Western air dump cars, std. gauge.
50—60,000-lb. capacity flat and box cars.
1—Western std. gauge spreader, used sixty days.
1—Osgood 18 revolving shovel, traction wheels, No. 794, ¾-yd. bucket, built 1920.
1—Marion 76 steam shovel, No. 3503, std. gauge, weight 110 tons, used 10 months.
1—Class 14 Bucyrus dragline on caterpillars, 70-ft. boom, 2-yd. bucket, built in 1921.
2—Foote 40-S 1-yd. side discharge concrete mixers, with steam engine and boiler.
32—NEW 20-in. I-beams, 80 lb. per ft., 40 ft. long, not drilled.
1—NEW Lakewood concrete chuting system.

LOCOMOTIVES

1—50-ton, 18 x 24-in., 6-wheel switcher.
1—40-ton; 17 x 24-in., 4-wheel switcher.
2—NEW 24-ton, 6-wheel Porters, separate tender, 36-in. gauge.
2—18, 14 and 10-ton Vulcans, 36-in. gauge.

INDUSTRIAL EQUIPMENT CO.
McCormick Building, Chicago, Ill.

CRANES

1—O. & S. 15-ton, 8-wheel Crane, full M. C. B.
1—20-ton McMyler, 8-wheel Crane, full M. C. B.
1—Little Giant Traction Crane.
1—Brand new gasoline, on caterpillar.
1—Model 3 Keystone with skimmer scoop.

SHOVELS

1—21 Marion Caterpillar with shovel and Crane booms.
1—36 Marion Traction, 1½-yd. Dipper.
1—No. 0 Thew with clam shell attachment.

CRUSHERS

1—No. 10 McCully, manganese fitted.
1—No. 9 Gates, Style K almost new.
1—No. 8 Austin, chilled iron fitted.
1—No. 6 McCully, manganese fitted.
1—No. 5 McCully, chilled iron fitted.
1—No. 3 Gates, manganese fitted.
1—28 x 36 Traylor Jaw Crusher.

CARS

30—100,000 capacity, std. gauge, all steel, double hopper gondola cars.

MIDWESTERN CO.
140 South Dearborn Street, Chicago
Telephone State 8356

NEW TRACTION CRANES

Full Revolving Road Cranes; 7-ton capacity, with ¾-yd. bucket.

ASPHALT PLANT

1—Iroquois 1250-yd., 3 unit Road Asphalt plant; complete.

PAVER

1—Austin Semi Caterpillar, 21-E Paving Mixer 5 Bag Machine, with boom and bucket; fine condition; low price.

ROAD ROLLER

1—Kelly-Springfield, 10-ton, 3-wheel, double cylinder, steam road roller.

STEAM SHOVELS

1—Marion, Model 28; ⅝-yd. dipper; on traction wheels; first class condition.
1—Marion, Model 31, on caterpillars, 1-yd. dipper.

LOCOMOTIVES

American 6-wheel Switcher. Cylinders 18 x 24-in., drivers 44 in., wheel base 11 ft. 6 in., weight 60 tons.

LOCOMOTIVE CRANE

1—20-ton McMyler 8-wheel M.C.B. bucket drums, 40-ft. boom.

We carry in stock concrete mixers, air compressors, hoisting engines, boilers, buckets, pipes, cars and other equipment.

F. MAYER
737 Monadnock Bldg., Chicago, Ill.

FOR SALE OR RENT

STEAM SHOVELS

1—Type B Erie, full revolving trac. shovel, Shop No. 618, special high lift boom, long dipper and boom hoist, ¾-yd. dipper.

1—Model 28 Marion, full revolving traction shovel. Shop No. 3374; ⅝-yd. dipper.

1—Osgood 18, caterpillar traction, ¾-yd. dipper steam shovel, Shop No. 875, new in 1920. Also includes 30-ft. crane or dragline boom, with ¾-yd. Page dragline bucket.

1—18B Bucyrus, full revolving, traction wheels, Shop No. 1870, ⅞-yd. dipper.

1—Model 36 Marion, full revolving traction shovel, Shop No. 3304, new 1½-yd. dipper. Delivery Jan. 15th.

2—70-c Bucyrus, Shop No. 1536, 1287; 2½-yd. dippers.

1—70-ton Bucyrus, Shop No. 939; standard 70-C boom, 2½-yd. dipper.

1—65-ton Bucyrus, Shop No. 394; 2½-yd. dipper.

1—Model 60 Marion, Shop No. 1301, 2½-yd. dipper.

SPREADER CARS

1—Std. Gauge, all steel Jordan Air Spreader; 100,000-lb. capacity.

1—Std. Gauge Western hand spreader car.

DRAGLINE EXCAVATORS

1—Class 7 Bucyrus steam-operated Dragline, Shop No. 798, mounted on skids and rollers with floats, 42-ft. boom, 1-yd. bucket.

1—Class 14 Bucyrus Dragline; 60-ft. boom, 2 yd. Page Bucket, skids and rollers.

2—Class 24 Bucyrus Dragline, Shop Nos. 3445 and 3500, built 1920; 100-ft. booms, 3½ yd. Page buckets, steam-operated.

1—Model 220 Marion, Shop No. 2840; 71-ft. boom with 20-ft. extension; 2-yd. Page bucket; skid and roller, also 4—4-wheeled truck mounting.

LOCOMOTIVES

1—17 x 24 Davenport, 6-wheeled switches with tender; 47 tons n drivers, 180 lb. steam pressure, 10-ft. 6-in. wheelbase, 42-in. wheel centers. Shop N. 1268. New in 1912.

1—16 x 24 Vulcan, 4-wheeled switcher with tender; 39 tons on drivers, 180-lb. steam pres-pressure. Shop No. 1764. New in 1911.

1—16 x 24 Baldwin, 4-wheeled switcher with tender; 39 tons on drivers, 180-lb. steam pressure. Shop No. 34631. New in 1910.

1—15 x 20 Davenport, 4-wheeled switcher with tender; 30 tons on drivers, 160-lb. steam pressure. Shop No. 770. New in 1908.

3—16 x 24 Davenport, 4-wheeled switchers with tenders; 36 tons on drivers, 170-lb. steam pressure. Shop Nos. 858, 860 and 861. New in 1909.

1—36-in. Gauge, 10 x 16 cyl., Vulcan, 4-wheel saddle tank locomotives. Shop Nos. 1226, weight 18 tons.

1—36-in. Gauge, 10 x 16 cyl., American 4-wheeled Saddle Tank Locomotive. Shop No. 42507, weight 16 tons.

LOCOMOTIVE CRANES

1—15-ton McMyler-Interstate Crane (Shop No. 676), full M.C.B., 8-wheeled, with 50-ft. boom and bucket-handling drums.

1—Pintle Type Crane, built by Variety Iron & Steel Works. New in 1919; 48-ft. boom, 15-ton cap. at 18-ft. radius; 7-ft. 10½-in. gauge, 12-ft. wheelbase, self-propelling. Base of boom 17 ft. above track. Bucket-operating drums. Wt. 50 tons. Price, 25% of new.

R. R. PILE DRIVER

1—Track Pile Driver, Industrial Type No. 2, mounted on all steel M.C.B. car body. All steel leaders, 40 ft. high. Drop hammer and double-acting steam hammer. Shipping wt. 140,000 lb.

DUMP CARS

24—16-yd. Western air dump cars.

30—12-yd. Western Std. Gauge Dump Cars; [illegible] brakes and air dump, full M.C.B., 19-[illegible] beds, steel underframes, box girder doors.

90—12-yd. Western Std. Gauge Dump Cars, [illegible] brakes and hand dump, full M.C.B., st[illegible] underframes, 19-ft. beds, box girder doo[illegible] 60,000-lb. capacity trucks.

8—12-yd. Western hand-dump cars, 19-ft. bed[illegible] steel underframes, truss rod doors.

5—12-yd. Oliver dump cars, hand dump, ste[illegible] underframes; full M.C.B.

2—4-yd. K. & J. 36-in. gauge side dump car[illegible]

30—1½-yd., 24-in. gauge Western dump cars.

HOISTING ENGINES

3—7 x 10, D.C., D.D. American Hoising Engine, complete with boiler and swinging attachment.

1—7 x 10, D.C., D.D. Lambert Hoisting Engine, without boiler.

1—7 x 10, D.C., 3-Drum Lambert Hoisting Engine, complete with boiler.

1—7 x 10, D.C., D.D., Clyde Hoist with A.S.M.E. boiler.

1—7 x 10, D.C., D.D Lidgerwood Hoisting Engine without boiler.

MISCELLANEOUS

1—Williams 1½-yd. heavy digging clam shell bucket, brand new.

20—Sets Standard Chain Tug Harness, with collars, brand new.

1—Stiff-leg Derrick, wood, 55-ft. boom, 39-ft. mast, bucket handling shieves.

1—No. 2 Vulcan Steam Hammer.

1—Industrial Steam Pile Driver Hammer, Serial No. 324.

1—Pair steel Pile Driver Guides for derrick, 42 ft. long.

1—60-hp. Boiler, Locomotive type, 125 lb., pressure, lap joint, complete with fittings.

2—Stable tents, 30 ft. x 50 ft.

CLAPP, RILEY & HALL EQUIPMENT CO., 14 So. Canal St., Chicago

(Successors to Clapp, Norstrom & Riley Equipment Co.)

TRANSMISSION

New and Used Dodge Equipment for Immediate Delivery

Shafting—Cold rolled steel—All sizes and lengths.

Shaft Hangers—All types and sizes.

Bearings—Capillary, Ring and Standard Oiling.

Pillow Blocks

Friction Clutches—Dodge Split, Solid and Jaw.

Collars—Solid, Split and Thrust

Pulleys—Split and Solid—Cast Iron, Steel and Wood.

Bushings

Grease Cups

Our Bulletin No. 15 will give you complete information

Nashville Industrial Corporation
Jacksonville, Tennessee.

FOR SALE

3—6-ton **Whitcomb Locomotives.**

1—6-ton **Plymouth Locomotive.**

2 Miles 20-lb., 24-gauge **Portable Track.**

1 Mile 25-lb., 24-gauge **Portable Track.**

Switches and turnouts for the above

20—Lakewood **Roller Bearing Batch Box Cars.**

15—Atlas **Roller Bearing Batch Box Cars.**

70—Western **Wooden Dump Bottom Batch Boxes.**

With seperate compartments for sand, gravel and cement.

1—Holt, 10-ton **Caterpillar Tractor.**

The above equipment has been used to build approximately five miles of Federal Aid Road and can be purchased very cheap

SHEA & COMPANY
Hammond, Indiana.

IMMEDIATE DELIVERY

Send Us Your Steam Shovel Inquiries

66 x 86-in. TRAYLOR JAW CRUSHER.
No. 18K GATES CRUSHER.
25-50-80-110-hp. Electric hoists.
Nos. 4, 5, 6, 7½, 9 and 10 CRUSHERS.
6- and 12-ton Gasoline Locomotives.
NEW 1469-ft. SULLIVAN COMP., 2-stage type. WN4, ½ coupling, $1900.
2—DISC CRUSHERS, 36- and 24-in. SYMONS.
100-ton, 2½-yd. ELECTRIC SHOVEL.
Columbus Portable Conveyor, 25-ft. Eng. drive.
50-500-ft. steam, belt and electric drive comp. JAW AND ROLL CRUSHERS.
10-15- and 20-ton Locomotive Cranes.
13 x 30-in., 10 x 18-in., 9 x 14-in. JAW CRUSHERS.
1000 g.p.m. UNDERWRITERS' STEAM PUMP, practically new.
24 x 54 McLANAHAN ROLL CRUSHER.
Send us your inquiries for Steam Engines, Cent. Pumps, Quarry and Contrs. Equip., etc.

ROSS POWER EQUIPMENT COMPANY
Indianapolis, Ind.

PAVERS—ROLLERS

1—10-E Smith Steam Paving Mixer, Wheel traction, boom and bucket, 2-bag. Size, 192. Model, like new, $1800.

1—Foote 13-E, Steam Wheel Paver, 2-bag size chute, Wisconsin, $950.

3—Austin Gasoline Rollers, 10-ton, 3-wheel, good condition, working every day, each $1100.

H. Y. SMITH CO., Milwaukee, Wis.

FOR SALE OR RENT

STEAM SHOVELS

1—14B Bucyrus revolving, new 1921; all steel caterpillar tread standard boom. ¾-yd. dipper.

1—18B Bucyrus revolving, new, late 1920, all-steel caterpillar tread power boom hoist, standard boom, ⅞ cu. yd. dipper.

1—18B Bucyrus revolving, traction wheels, standard boom, ⅞ cu. yd. dipper.

1—Model 18 Osgood; revolving traction wheels. Combination steam shovel, clamshell and dragline attachments; ¾-yd. dipper, 32 ft. Crane boom, ¾-yd. Page bucket.

1—70-ton Bucyrus, standard gage, R.R. type, 2½-yd. dipper.

LOCOMOTIVES

1—American Passenger; type 4-4-0; stand. gauge; 50-ton.

3—14 x 22, 40-ton American Saddle Tank standard gauge.

2—10 x 16, 18-ton Davenport, saddle tank, 36-in. gauge.

TRACTOR AND TRAILERS

1—120 hp. Holt Caterpillar Tractor, completely rebuilt at factory July, 1921.

3—5-ton Troy Trailers.

10—3-yd. Troy Trailers, bottom dump, reversible, steel wheels, 8-in. face.

DRAGLINES

1—Model 36 Marion, steam operated caterpillars, 50-ft. boom, 1½-yd. bucket.

1—Class 9½ Bucyrus, steam operated caterpillars, 45-ft. boom, 1½-yd. bucket.

1—Class 14 Bucyrus; skids and rollers; 60-ft. boom; 2-yd. bucket.

2—Class 14 Bucyrus, steam operated, shop Nos. 3691 and 3692, new July, 1922, skids and rollers, electric light plants, 60-ft. booms, 2-yd. Page buckets.

1—Class 14 Bucyrus truck mounting, 60-ft. boom, new 2-yd. bucket.

1—Class 20 Bucyrus, steam operated, skids and rollers, 75-ft. boom, 15-ft. extension, 3-yd. bucket.

2—Class 24 Bucyrus Steam operated, shop Nos. 3445 and 3500. New 1920; 100-ft. booms, 3½-yd. Page buckets.

1—Class 24 Bucyrus Electric skids and rollers, 100-ft. boom, 3½-yd. bucket.

1—Monighan, A-1, steam; traction wheels; 40-ft. boom; 1 yd. bucket.

1—No. 2 Monighan Steam skids and rollers, 60-ft. boom, 2-yd. bucket.

The above list is constantly changing. No matter what your machinery requirements are, write us—we may have it.

BECK & BABB, 29 La Salle Street, CHICAGO, ILL.

Increase In Price—After Jan. 1st, 1923, $1,800

(On account of expense in the removal of remaining equipment from Hog Island to Primos, Pa.)

Primos, Pa. is 8 miles west of Philadelphia on the P. B. & W. R.R.

HOISTS DERRICKS

Where else can you save at least $2,000 on an Electric Hoist and Derrick?

We defy you to duplicate this SAVING!

THINK of it! Hoists and Derricks that are *standard late models,* made by the American Hoist & Derrick Co., St. Paul, Minn. Not old, used-up equipment. No sir! Almost NEW—every one GUARANTEED to be in A-No. 1 running order.

The Hoists have two drums and swingers, and are complete with Starting and Control Equipment. Either side or bank control, and rated 6000 pounds, single line on each hoisting drum. Slewing rope 36 ft. per minute, and hoisting rope speed 160 ft. per minute. The MOTORS are Otis 37 H.P. A.C., 60 cycle, 3 phase, 440 volt, intermittent duty slip-ring induction type and, if desired, may be changed to suit the individual current requirements of purchasers at cost.

You can see these hoists and Derricks easily—**at any time.** We sell as a set—or in Units of a Hoist or a Derrick. We can make quick shipment anywhere—but it is **up to you** to take QUICK ACTION to get yours. These tremendous bargains are selling fast—so get in touch with us at once if you want to save.

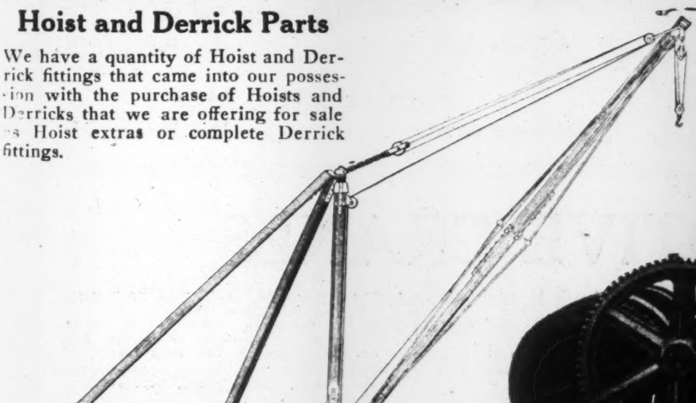
DIMENSIONS OF DERRICKS

Mast	16 in. square, 40 ft. high.
Boom	Made of (2) 14 in. sq. timber 48 ft. long spliced to lengths of 80 ft. with (2) ⅞ in. and (2) 1⅛ in. truss rods.
Stiff Legs	14 in. sq., 60 ft. long or 16 in. sq., 50 ft. long, will furnish either length desired, capacity 5 to 12 tons. Bull wheel 16 ft. dia. Principal sheaves 16 in. dia. and 14 in. single blocks.

The Cable which was formerly used will be given with each purchase of a Hoist and Derrick.

Hoist and Derrick Parts

We have a quantity of Hoist and Derrick fittings that came into our possession with the purchase of Hoists and Derricks that we are offering for sale as Hoist extras or complete Derrick fittings.



Wire Phone or Write

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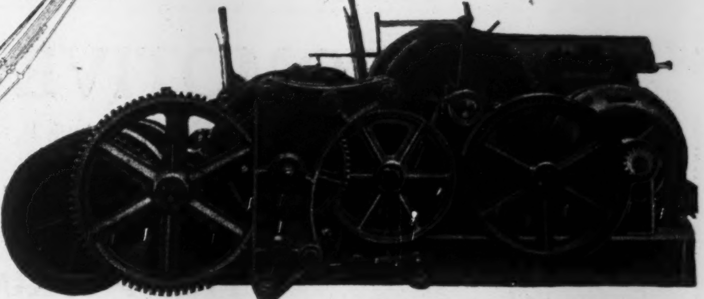
The Electric Hoist & Derrick Co.
Primos, Penna.



Reproductions from Photos of Hoists

GUARANTEED REBUILT EQUIPMENT

SELL OR RENT

OUR PRICES ARE RIGHT —TRY US

DERRICKS

3—All-steel Stiff-leg derricks, sectional booms 60 to 100 ft., 5 to 20-ton cap.
2—Wood stiff-leg derricks, bucket operating; also several derricks for two- and three-line work
1—Steel guy, 40-ton, 90-ft. mast.

HOISTS

5—Electric D.D., ranging from 55 to 100 hp.
6—Novo D.D., 12 hp., 2 cyl.
7—7 x 10, D. C., D.D. boilers, Mundy-Lambert, Lidgerwood and Meade-Morrison.
1—Lambert 8½ x 10, D.C., 3D skeleton.
1—Flory 8¼ x 10 D.C., 3 D., with Boiler.
1—Mundy 7¼ x 10 D.C., 3 D., with Boiler.

HAMMERS

1—No. 3 McKiernan-Terry.

LOCOMOTIVES, CARS AND TRACK

1—Std. Ga. Lima 10 x 16.
1—Std. Ga. Vulcan 21 ton.
3—Std. Ga. Americans, 50 to 60 ton.
1—Std. Ga. American, 20 ton.
1—Std. Ga. Whitcomb, 12 ton, gas.
1—36-in. Ga., 8-Ton Whitcomb Gas.
2—24-in. Ga. Plymouth & Whitcomb Gas.
3—36-in. Ga. Davenport, Porter & Vulcan.
30—36-in., 4-yd. Western Dump Cars.
15—24-in. Ga., 1½-yd. All-Steel Side Dump.
30—24-in. Ga. Western Flat Batch Box Cars.
6—Std. Ga. K. & J. 6-yd. Dump Cars.
20—Std. Ga., 12-yd. Western Dump Cars.
1½ miles, 24-in. Ga. Portable Track.

STEAM SHOVELS AND DRAG LINES

5—Traction and Caterpillar Shovels, including Erie, Bucyrus, Thew and Osgood.
1—Marion No. 31 Caterpillar.
1—Bucyrus 70-C Std. Ga.
1—Monighan Walker Type Dragline, 40-ft. Boom.
1—Bucyrus Dragline No. 14, 60-ft. Boom.

CRANES

1—O & S 15-Ton Std. Ga.
1—Type B Erie Traction Wheels.
1—31 Marion Traction Wheels.
1—Byers Auto Crane Traction Wheels.
1—Industrial 20-Ton, Std. Ga.

STEAM SHOVELS AND DRAGLINES

1—P & H No. 205.
1—Marion 60 shovel.
1—Marion 221 combination shovel and dragline.

STEEL TOWERS AND MISCELLANEOUS

1—¾-yd. Blaw-Knox Clam Shell Bucket.
1—Telsmith Jaw Crusher, 9 x 18 on Trucks with 22-ft. Bucket Elevator.
1—Eureka, 7 x 8 Jaw Crusher.
1—Insley 140-ft. Steel Tower with Spouting.
1—Insley 200-ft. Steel Tower with Spouting.
5—Centrifugal Pumps from 5 in. to 12 in.
1—Austin Rip Snorter.
1—Lakewod Tamping Machine.

We also have in stock Concrete Mixers, Clam Shell Buckets, Dump Buckets, Road Rollers, also complete line of Road and Building Equipment

OUR NEW ADDRESS:

RENNOLDS EQUIPMENT CO.

711 Standard Trust Bldg.
Telephone: Randolph 4184 Chicago, Ill.

LOCOMOTIVE CRANES

2—McMyler 25-ton, 8-wheel, 50-ft. booms, bucket operating, 7½ kw. generators, located Youngstown and Cincinnati.
1—McMyler 20-ton, 8-wheel, 40-ft. boom, bucket operating, located Youngstown.
1—Brownhoist 15-ton, 8-wheel, 50-ft. boom, single drum, 5 kw. generator, located Chicago Heights.
2—Ohio 20-ton, 8-wheel, 50-ft. booms, bucket operating.
1—Browning 15-ton, 8-wheel, 38-ft. boom, bucket operating.
1—Brownhoist 15-20-ton, 8-wheel, 42-ft. boom, hook block.
1—Industrial 7½-ton, 4-wheel.
1—Browning 4-wheel electric.

Hoisting Machinery Co.
50 Church Street, New York.

CRANES—COAL CARS

FOR SALE OR RENT

1—40-ton, 8-wheel Brown Hoist, 60-ft. boom.
1—30-ton, 8-wheel Browning, 50-ft. boom.
1—25-ton, 8-wheel Industrial, 50-ft. boom.
2—20-ton, 8-wheel Ohio, 50-ft. booms.
1—15-ton, 8-wheel Industrial, 40-ft. boom.
100—50-ton, standard gauge, all steel, hopper bottom, self-clearing, first-class condition, meeting M.C.B. requirements, ready for immediate service.
10—50-ton, standard gauge, all steel hopper bottom, self-clearing, built 1920, only slightly used, like new.

GREY STEEL PRODUCTS COMPANY

111 Broadway Telephone, Rector 5542 New York, N. Y.

FOR SALE

AUTO CRANE

1—Rebuilt Byers, equipped with a ¾-yd. Owen Clam Shell Bucket. Boiler is steam, and Crane is on road wheels. 180 deg. swing, 30-ft. steel boom. Has same guarantee by the Byers Company as a new machine. Price, $3,000 for the outfit, f.o.b. Glens Falls.

LLEWELLYN-SMITH CONSTRUCTION CO.
M. & F. Bldg., Glens Falls, N. Y.

BYERS CRANE

Type C, traction wheels, 35-ft. boom, ¾-yd. bucket. For sale or rent.

HENRY LEVIS & CO.,
Commercial Trust Bldg., Philadelphia, Pa.

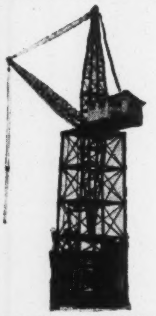
LOCOMOTIVE CRANES

15 ton Link-Belt, 4-wheel, 40 ft. boom.

20 ton Brown Hoist, 8-wheel, 50 ft. boom.

Bargains for Quick Sale

L. A. GREEN
1120 First Nat'l B'k Bldg., Pittsburgh, Pa.



For Sale

Terry Gantry Crane

(New)

Electrically operated

Boom 74 ft. Long. Capacity 40,000 lbs.

Samler Bros, Inc.
701 West St. Baltimore, Md.

LOCOMOTIVE CRANES

1—25-ton Industrial double drums, 50-ft. boom, 8-wheel M.C.B., built 1918.
1—30-ton Browning, double drums, 52-ft. boom, 8-wheel M.C.B., built 1919.
1—15-ton Industrial, double drums, 45-ft. boom, 8-wheel M.C.B., built 1917.
2—20-ton Brownhoists, single drums, 50-ft. booms, 8-wheel M.C.B., built 1918.
1—30-ton Ohio, boom, length to suit, double drums, NEW, 8-wheel M.C.B.
1—25-ton Ohio, boom length to suit, double drums, NEW, 8-wheel M.C.B.
5—7½-ton Osgoods, single drums, 35-ft., 40-ft. and 45-ft. booms, 4-wheel standard gauge railroad trucks, built 1918.
1—20-ton Brownhoist, single drum, 70-ft. boom, 8-wheel M.C.B., built 1915.
4—50-ton Industrials (never used), double drums, either goose-neck or straight boom furnished, 8-wheel M.C.B., built 1919.
1—10-ton Byers, full-revolving, double drums, 40-ft. boom, traction wheels, built 1921.

All the cranes listed above are owned by us and have been carefully inspected by a first-class crane mechanic and all necessary repairs made. They are all equipped with A.S.M.E. boilers and are ready for work.

Cortland 1501

PHILIP T. KING

The Crane Man

30 Church St., N. Y.

E. C. A. REBUILT EQUIPMENT AT ROCK BOTTOM PRICES

All the Equipment listed below is owned by us and may be inspected at one of our own warehouses.

CONCRETE MIXERS

58—Concrete Mixers, Sizes 28S, cap. 1 yd.; 21S cap. ¾ yd.; 14S, cap. ½ yd., and 10S, cap. 1/3 yd. With steam or electric power; with side loaders or batch hoppers. Following makes: Marsh-Capron, Koehring, Milwaukee, Ransome, Smith, Smith-Chicago, Rex, Lakewood, Foote, Cube, or Oshkosh.

30—7S, cap. 1 bag, with low charging platforms, with gasoline engines.

CRANES

3—Byers Auto Cranes. One on caterpillar; 2 on traction wheels, with 30-ft. boom, with ½ or ¾-yd. clam shell buckets.

1—15-ton, 8-wheel O. & S.; 40-ft. boom.

1—Little Giant fully revolving crane on traction wheels, with 35-ft. boom, with ¾-yd. clam shell bucket.

ELECTRIC HOISTS

Large number of American double drum Hoists, with attached swinger, with 37-hp. AC Motor, 60 cy., 3 ph., 220 or 440 v.

DERRICKS

Large number of American stiff-leg derricks with mast 16 in. x 16 in. x 40 ft., boom made up of 2—14 in. x 14 in. x 48 ft. spliced to lengths of 80 ft., with 1—Truss rods, Legs 14 in. x 14 in. x 62 ft. Bull wheel 16 ft. dia., with or without sills.

12—Stiff-Leg Derricks, with booms ranging from 50 to 80 ft.; mast, legs and sills in proportion, for handling ½, ¾ or 1-yd. buckets.

1—Dobbie Guy Derrick, mast 16 in. x 16 in. x 80 ft., Boom, 16 in. x 16 in. x 72 ft.

STEAM HOISTS

25—Three-drum Hoists, with or without boilers. Sizes 10 x 12, 9 x 10, 8¼ x 10, and 7 x 10 with separate swingers for derrick work. All makes.

35—Two-drum Hoists, with or without boilers. Sizes 10 x 12, 9 x 10, 8¼ x 10, 7 x 10, 6¼ x 10, 6 x 8, and 5 x 8. Can be equipped with holding drum for bucket work. Several special Cableway Excavator or Drag Scraper Hoists. All makes.

6—Gasoline Hoists. Single and Double Drum, 6, 10, and 15-hp. engines.

6—Swinging Engines.

1—Double Drum Belt Hoist, cap. 6000 lb.

CLAM SHELL BUCKETS

32—Clam shell buckets. Sizes ½, ¾, 1, 1½, or 2 yd. All makes.

RAIL AND TRACK

2 Miles. 24-in. Gauge Portable Track with steel ties, made up of 20-lb. rail with switches.

PUMPS

Large number of pumps: DIAPHRAGMS, on trucks, 3-in. and 4-in. suction with gasoline engine. CENTRIFUGALS, from 12-in. suction down to 2-in. suction, belt driven, dir. conn. to steam engine and motor. Several Nye and Pulometers.

STEAM SHOVELS

1—Bucyrus, 70 ton, on M.C.B. std. gauge trucks, with 2½-yd. dipper.

2—Keystone Excavators, 1—No. 3, 1—No. 4 with clam shell booms.

1—Marion No 28 Traction Wheels, ⅜-yd. bucket.

2—Erie Type B with ¾-yd. dipper; one with High Lift Boom.

1—Type B Erie Crane on caterpillar with ¾-yd. bucket.

EQUIPMENT CORPORATION *of* AMERICA

PITTSBURGH, 855 Empire Bldg.
Phone, Smithfield 1502

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Phone, Randolph 6586

PHILADELPHIA: 655 Land Title Bldg.
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Water Tube Boilers

250 to 1000 H.P. Immediate Delivery!

New Water Tube Boilers, built for pressures of 200 lbs. and 225 lbs., ready for immediate delivery from Chicago; Dumont, New Jersey, opposite New York City; or Slidell, Louisiana, near New Orleans.

Our low prices present a saving of from 25% to 50%. We will take in your old equipment on a liberal exchange basis.

Write for our new catalog fully describing our boilers. Your copy will be mailed on request.

HARRIS BROTHERS COMPANY
West 35th and Iron Sts., Chicago

RARE OPPORTUNITY

New Marion Model 61, 2½-yd. 70-ton Steam Shovel

Can be purchased at nearly the price of good second-hand Model 61.

Erie B, ¾-yd. high-lift, Mass. boiler, also extra dragline attachments.
Thew O Tr., shipper shaft type, Mass. boiler.
Other Revolving Shovels, ¾, 1 and 1½-yd.
Railroad Shovels, all sizes and makes.
Cars, Locomotives, Locomotive Cranes.

W. R. WADDELL
50 Church Street, New York.
Tel. Cortlandt 4873.

FOR SALE

Marion 31 Steam Shovel

Caterpillar Traction, 1-yd. bucket. Equipped with boom hoist. First class condition.

J. T. WALSH
500 Brisbane Bldg., Buffalo, N. Y.

FOR SALE OR FOR RENT

Concrete Mixers, Lakewood Concrete Towers, Hoisting Engines, Derricks, Pumps, Gasoline Tractors, Steam Hammers, Buckets and Compressor outfits.

Edward Ehrbar, Inc., 270 West St., New York City

CLAM SHELL BUCKETS
½ and ¾ cu. yd. R[illegible] $22 per cal. week
1 and 1½ cu. yd. Rental $2[illegible] per cal. week
FOR SALE NEW AND REBUILT HAISS
For All Purposes
D[illegible] and Rehandling
[illegible] and Rider [illegible] New Y[illegible]

TRENCH MACHINES

1—Austin 00 digs 10 ft. deep up to 29 in. wide, gasoline driven.
3—Parsons Backfiller, caterpillar traction.
2—Buckeye No. 4, Gasoline driven.
1—042 Austin digs 18 ft. deep up to 42 in. wide, gasoline driven.

J. McELROY, 11 S. La Salle St., Chicago

No. O Austin

TRENCHING MACHINE

15 ft. x 42 in., Engine rebuilt, many new parts. Reasonable price.

FRANK A. BOWMAN
1970 La Salle Gardens South, Detroit, Mich.

FOR SALE

PARSONS' TRENCHING MACHINE

For Immediate Delivery

JOHN B. McLANE & COMPANY
Newport, Kentucky

MACHINERY and SUPPLIES

Immediate Delivery!

PUMPS

1—16 in. x 8½ in. x 12 in. Duplex Steam.
1—14 in. x 10¼ in. x 10 in. Duplex Steam.
1—12 in. x 7 in. x 10 in. Duplex Steam.
1—10 in. x 6 in. x 10 in. Duplex Steam.
3—6 in., x 4 in. x 6 in. Duplex Steam.
4—5¼ in. x 3½ in. x 5 in. Duplex Steam.
2—4½ in x 3¾ in x 4 in Duplex Steam
1—8 in. x 8 in. Deane Triplex Single Acting Power Pump.
1—Kingsford Horizontal Centrifugal Water Pump 24 in suction, 24 in. discharge.
1—Platte Iron Works Horizontal Centrifugal Water Pump, 14 in. suction, 12 in. discharge.
1—Fulton Horizontal Centrifugal Water Pump, 12 in. suction, 10 in. discharge.
2—Buffalo motor driven Centrifugal Pumps, 4 in. suction, 3 in. discharge, direct connected to 5 H.P. Westinghouse Motor, 220 volts, 3 phase, 60 cycle.

BOILERS

14—150-hp. Triple Riveted Return Tubular Boilers, 72 in. x 18 ft., 100 lb. pressure.
2—150-hp., Triple Riveted Return Tubular Boilers, 66 in. dia., 20 ft. long, 115 lb. press.
1—125-hp. Triple Riveted Return Tubular Boiler. 72 in. dia., 16 ft. long, 115 lb. pressure.
2—125-hp. Triple Riveted Return Tubular Boilers, 66 in. dia., 18 ft. long, 100 lb. press.
2—100-hp. Triple Riveted Return Tubular Boilers, 66 in. dia., 16 ft. long, 100 lb. press.
1—50-hp. Locomotive Firebox Boiler, 48 in. dia., 16 ft. 6 in. long, 100 lb. pressure.
1—30-hp. Vertical; 110 lb. pressure.
1—20-hp. Vertical; 100 lb. pressure.

DUMP CARS

150—12-yd. Western & Oliver, all-steel, two-way Dump Cars, standard gauge.
50—1¼-yd., 20-in. gauge, wood body, two-way Dump Cars.
3—36-in. gauge, 8-wheel Flat Cars, 40,000-lb. cap., 7 ft. wide, 20 ft. long, wheel 24-in. diameter.

STEAM SHOVELS

6—95-ton Bucyrus Railroad Type, 5-yd. dipper; 90 per cent new.
10—70-ton Bucyrus Railroad Type, 2½- to 3-yd. dipper; 90 per cent new.

HOISTING ENGINES

4—7½ x 10-in., double cylinder, single geared drum Hoisting Engine, with reversing throttle valves.
1—6¼ x 8-in., Clyde Double Cylinder, double friction, drum steam Hoisting Engine, with two winch heads, drums 14 in. dia., 20 in. between flanges complete with fittings. (No Boiler). Base is made for boiler.

LOCOMOTIVE CRANES

1—15-ton American Hoist & Derrick Company, 8-wheel type Locomotive Crane, 50-ft. boom.
1—10-ton capacity Industrial, 8-wheel type, Locomotive Crane, 35-ft. boom.
1—15-ton Industrial, 8-wheel type, Locomotive Crane, 35-ft. boom.

GENERATORS AND MOTORS

2—Westinghouse 250-hp. Motors. Types C.C.L., 440-v., 60-cy., 3-ph. motors, speed 514 r.p.m., with base and starters. Can be furnished with pulley or flange coupling.
1—60-kw., Triumph Generator, 125 v., D.C., belted.
1—300-kw., G. E. Rotary Converter, 25 cy.

TANKS

25—30,000 gal. vert., storage.
20—10,000 gal., horiz., storage.
15—5,500 gal. horiz., storage.
10—2,000 gal. horiz., storage.
25—1,000 gal. horiz., storage.
25—560 gal., vert. or horiz., storage.
50—Complete Underground Gasoline Storage Tanks, consisting of 160-gal., galv. tank, 14-gauge material, bearing Underwriters' label, with hand pump, also pipe and fittings complete.
25—Complete Underground Gasoline Storage Tanks, consisting of 200-gal. steel tank, 3/16-in. material, with hand pump, also pipe and fittings complete.
25—22 in. x 54 in., 150-lb. pressure.
10—20 in. x 8½ ft.-9½ ft., 150-lb. pressure.
10—16 in. x 42 in., 150-lb. pressure.

Line of Tanks and Machinery of All Kinds.

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Guaranteed Equipment for Sale or Rent Located in this City.

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66-ft. Ing.-Rand High Pres. Steam Driven.
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324-ft. Ing.-Rand Belt Driven, motor and fittings.
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New Air Compressor

Sullivan Angle, 2 Stage WJ3. 1469 cu. ft.
Capacity. Belt or Motor Drive.
Immediate Delivery.

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5300-3300 ft. PRE I. R. Electric.
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1145 ft. O-CB Chicago, two stage belt.
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1190-888-599 ft. XB-2 Ingersoll, two stage belt.
NEW 599 ft. XB-2 Ingersoll, two stage belt.
324-64 ft. ER-1 Ingersoll, two stage belt.
5715 ft. ORC Ingersoll, steam.
1955-1260 ft. XPV-3 Ingersoll, steam.
1190 ft. X-3 Ingersoll, steam.
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NEW 100 H.p. G. E. 3 ph., 60 cy., 550 v. Motor.

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Steel Tanks

1000 Tanks of every description and size from 100 gallon to 55,000 gallon capacity, ¼-in. to ⅝-in. steel plate, horizontal and vertical Suitable for all kinds of storage purposes. Many are equipped with agitators.

These tanks will stand the most rigid inspection.

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$100.00 Each

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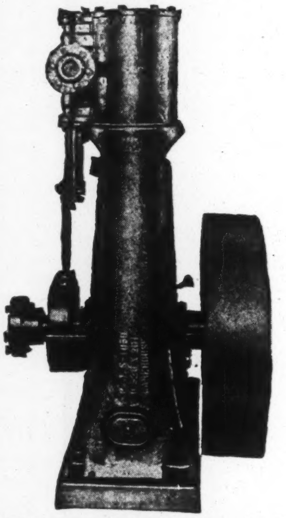
Made by American Blower Co.

7 x 7, Type A, 10 H.P., 400 R.P.M., 150 lb. Steam Pressure.



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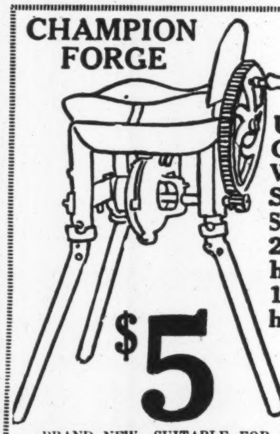

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1—Thew "A1" Crane, traction wheels.
1—Marion "28" Shovel, traction wheels.
2—P & H "205" Cranes, semi-caterpillar.
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LOCOMOTIVE CRANES AND EQUIPMENT

LOCOMOTIVE CRANES

1—30 Ton Browning Crane No. 1708, 8-wheel, Standard Gauge, 52 ft. Boom, Double Drum, Mass. Standard Boiler. Equipped with Outriggers.
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2—25 Ton Industrial Cranes, 8-wheel, Standard Gauge, 50 ft. Booms, Double Drum, ASME Boilers.
1—20 Ton Browning Crane, No. 1149, 8-wheel, Standard Gauge, 50 ft. Boom, Mass. Boiler, Single Drum.
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AIR COMPRESSOR

1—1955 cu.ft. Steam Driven Ingersoll-Rand Air Compressor. Available for immediate inspection and shipment from Philadelphia.

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1—50 Hp. ASME Upright Boiler. New 1918. 54 in. dia. x 7 ft. 6 in. high. 236 2 in. flues. 125 lb. Steam.

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1—50 ft. Steel Lattice Locomotive Crane Boom. Perfect cond. Suitable for 15 to 20 Ton Crane.

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1—13 x 18 American Saddle Tank, 30 Ton Locomotive. Machine completely rebuilt and in first class condition. Boiler completely retubed, new tires, new flues, new hardwood bumpers, etc.

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2—Osgood 18 Steam Shovels, ⅝ yd. Dipper, Traction Wheels. One also equipped with 30 ft. Crane Boom.
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R. R. TYPE STEAM SHOVEL

4—Model 60 Marion, 2½-yd. dipper, Nos. 1995-1999-2059-2372.
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REVOLVING SHOVELS ON TRACTION WHEELS

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12 YD. STANDARD GAUGE CARS

35—26-ft. Bed Western Air Dump
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36 in. GAUGE DUMP CARS

40—4-yd. Western, Wood beam.
20—4-yd. Western, Steel beam.
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36 in. GAUGE SADDLE TANK LOCOMOTIVES

6—10 x 16 H. K. Porter, 18 ton.
2— 7 x 12 Davenport, 10 ton.
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1—3-5-ton, 4-wheel Brownhoist Crane. Standard gauge, 26-ft. boom, bucket operating.
1—15-ton, 8-wheel Brownhoist, bucket operating, 45-ft. boom.

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1—No. 4 Champion Crusher with elevator and screens.
1—56-ft. boom, stiff-leg derrick.
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1—1-yd. Hayward Clam Shell Bucket.

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Road-Rollers; Pavers; Shovels; Keystone Excavators; Locomotives; Track; Dump and Flat Cars; Hoists; Cranes; Graders; Finishers.

All necessary Equipment for complete plant.

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Here's your chance to get a real asphalt plant at a price that is right. Better get in touch with us quickly.

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Feed Water Heaters

8—Patterson-Allen, closed Water Heaters. Capacity 50,000,000 B.t.u. per hour or 470 gallons per minute. Size 44 in. diameter x 10 ft. 2 in. long.
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18-ton, 36-in. gauge Porter, extended saddle tank, 160-lb. working pressure, in Pennsylvania. Steam Shovels—Locomotive Cranes—Railway and Contractors' Equipment.

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400 tons of 6-in., 12¼-lb. Steel Beams, 15 ft., 9 in. long.
200 tons of 10-in., 25-lb., 14- to 16-ft. Beams.

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1—Twin Drum Coal Hoist, made by Geo. Haiss Mfg. Co., N. Y.; cylinders, 8 x 12; drums, 24 in. dia.; 16-in. face, 37 in. dia. flanges; 40 hp., grab ½ ton.

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4—Manning Vertical Boilers, 500 hp., will insure for 175 lb. Immediate delivery.

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Deck Pin Truss R. R. Bridge

157 ft., E40, 125 tons.

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56S Lakewood; equipped with cut steel motor gear reduction, Batch Hopper and Water Tank. Cost new, May, 1922, $4,350.

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5000 Tons
14 in. x $\frac{3}{8}$ in. arch web
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10,000 TONS 75 lb. RELAYING RAILS

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Delivery—Any point on the line of the St. Louis Southwestern Railroad in

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Contractors look here
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ALBERT & DAVIDSON Corp.

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Large Stock
All Sizes
Threaded and
with Couplings
Also Cut to Sketch

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¾ to 18 inch with threads and couplings.
Guaranteed for service.
Pipe up to 18-in cut to sketch.

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1200-ft., 24-in., O.D., ⅜-in. wall.
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1400-ft., 9-in., Extra Heavy.

Also 30,000-ft., New National Tube Co., 6-in. pipe, full weight, with couplings and protectors.

Quantity spiral galvanized pipe, sizes 12 in., 18 in. and 20 in. Also have 300,000 ft. black and galvanized rethreaded wrought pipe, with threads and couplings from 1 in. to 12 in. All above offered considerably below present market prices. State quantities and we will quote for prompt deliveries; cars here. For prices apply

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From the immense stock of surplus material at the Old Hickory Powder Plant.

This stock includes hundreds of staple valves and fittings of all kinds, up to 3 in. Also Flange fittings from 3 to 16 in. New valves from Jenkins, Crane, Stockham and Walworth at greatly reduced prices.

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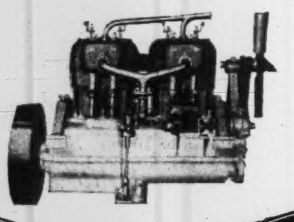

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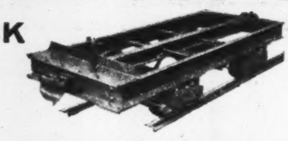

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Write for latest bulletins of this and other waterworks appliances.

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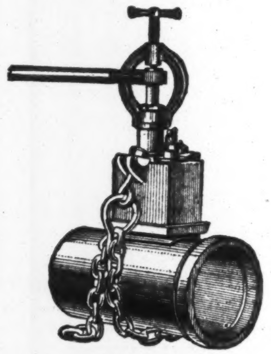

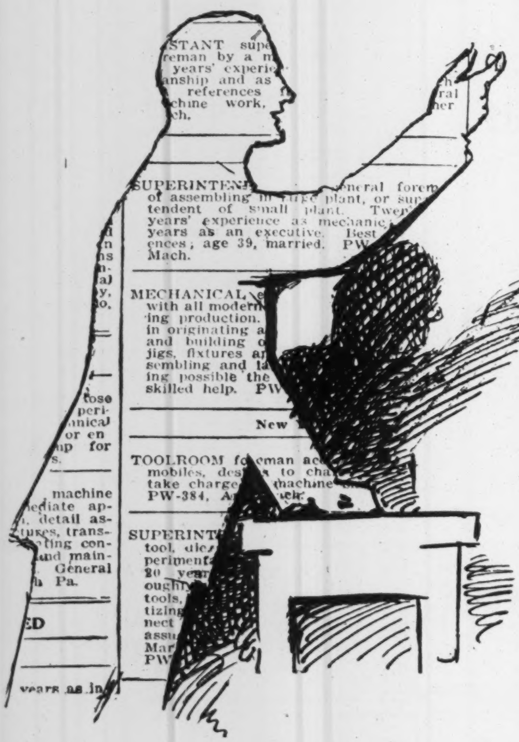

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- Employment Agencies
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For Every Business Want
"Think* SEARCHLIGHT *First"

0194

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Do you know that hundreds not to say thousands of the executives of the Biggest Corporations turn to the Ridgway ad every issue just to "catch the Ridgway pep and inspiration"?

One of the Carnegie folks once said to "Old Hook 'er" "The old man always turns to the Ridgway stuff the first thing when the paper comes in and I often hear him chuckle over the way you put things."

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WE POINT THE WAY TO SUCCESS.

The same Poor Quality Brain that will turn down the Ridgway Elevator will run the concern he is supposed to guide into the ditch.

Real Ability with steam available will never put in the always-out-of-order, always-need-repairs, the going-into-the-overhead, the "consarn-it-there-she-goes-again," the $120-a-year inspection "to keep her going," winding elevator when he can get PERFECTION IN ELEVATORS IN A RIDGWAY.

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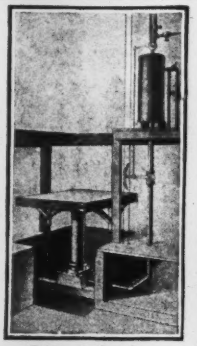
Just go over this bunch from the Prosperity point of view. Well I guess so. And we have 3000 more like them who

"HOOK 'ER TO THE BILER"
CRAIGE RIDGWAY & SON CO., Coatesville, Pa.
ELEVATOR MAKERS TO FOLKS WHO KNOW



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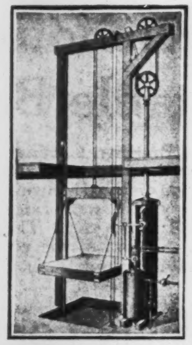
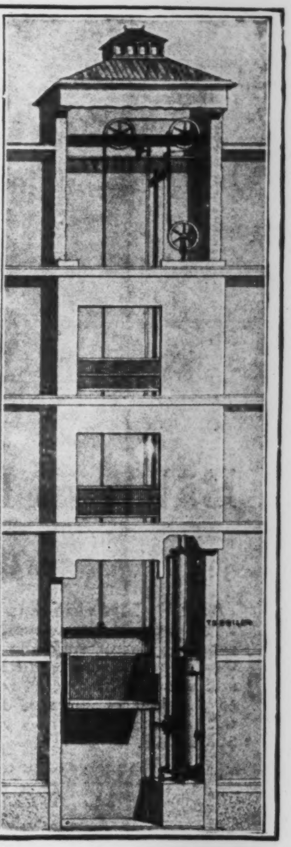


Double Geared



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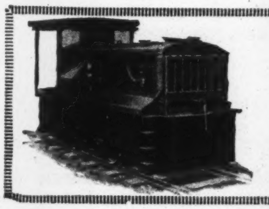

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Gasoline Locomotives
For all Industrial Haulage
Ask for Bulletins
THE FATE-ROOT-HEATH CO.
Plymouth, Ohio, U. S. A.

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Established 1881
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Switches, Frogs, Crossings, Etc.
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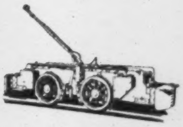
A type for every project



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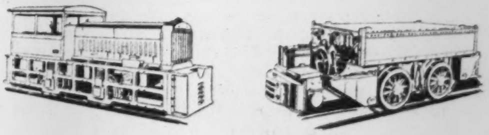

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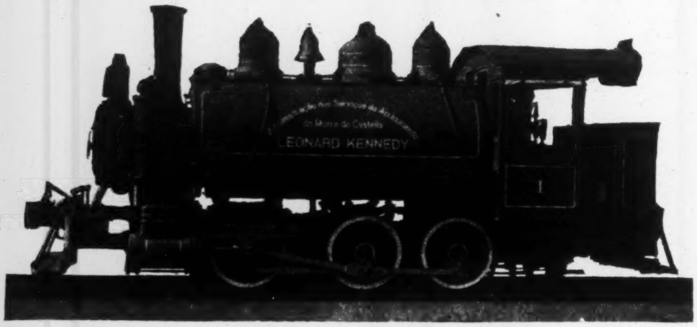
Geo. D. Whitcomb Company
Rochelle, Illinois, U. S. A.



Baldwin Six-Wheeled Switcher used in Brazil. Gauge, 4 ft. 8½ in. Cylinders, 13 in. by 18 in. Working pressure, 160 lbs. Driving wheels, diameter, 37 in. Weight, 67,000 lbs. Fuel, coal.

Baldwin locomotives employed in a notable Brazilian engineering project

AMERICAN visitors to the Brazilian Government's International Exhibition at Rio de Janeiro, will be interested in witnessing the work of the Baldwin locomotives used in the razing of the Morro do Castello ridge, which will add about 150 acres of ground to the city. This ridge rises to a height of 200 feet and the cost of the project, which will require about two years to complete, is estimated at $6,000,000. When the contract for this great improvement was awarded to Leonard Kennedy & Co., Inc., of New York, an order for the building of four locomotives, as illustrated, to be completed in 30 days, was given to us. These locomotives are now in service.

Baldwin Contractors' locomotives are always to be depended upon in any kind of work.

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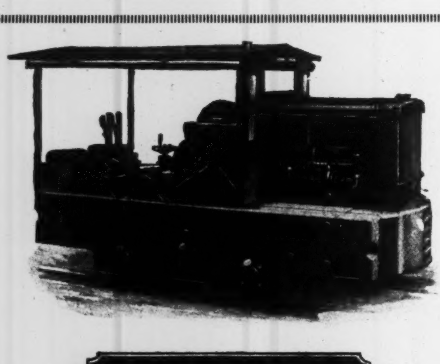
887



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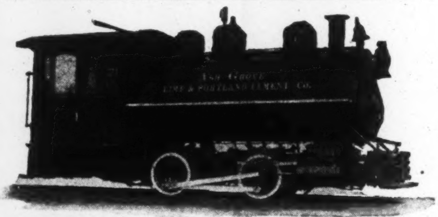

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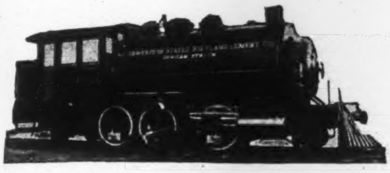
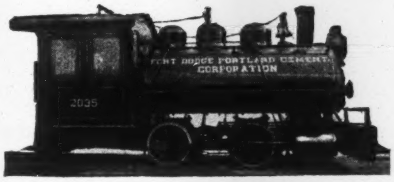
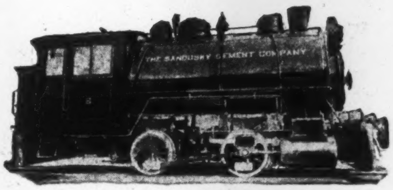


The Cement Industries


FORT DODGE PORTLAND CEMENT CORPORATION
2035

THESE Vulcan Locomotives are only representative of the many built for the cement industries located in every cement manufacturing state in the United States and Canada.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What is the State Highway pavement in Rhode Island?

* * *

At the beginning of the present year, 97% of the paving higher than waterbound macadam was of the bituminous types.

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94% of the total mileage of Federal Aid Projects completed in this State up to 1922 also have been constructed with bituminous paving.

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TEXACO Asphalt pavement on Putnam Pike, Rhode Island, showing section near Centerdale

How logical was the decision of Rhode Island in selecting this paving is evidenced by the fact that miles of bituminous construction laid twelve and fifteen years ago are affording today the same fine service that characterized their first years under traffic.

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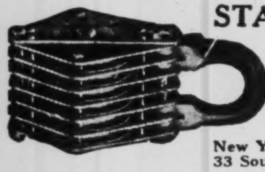

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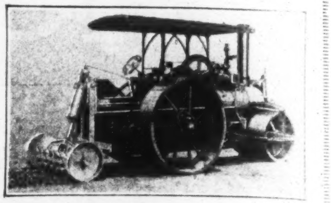

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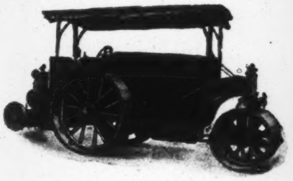

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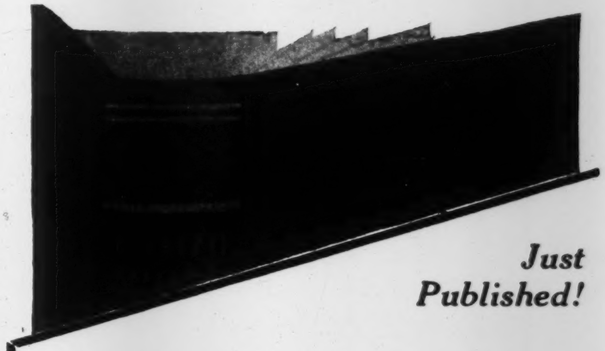

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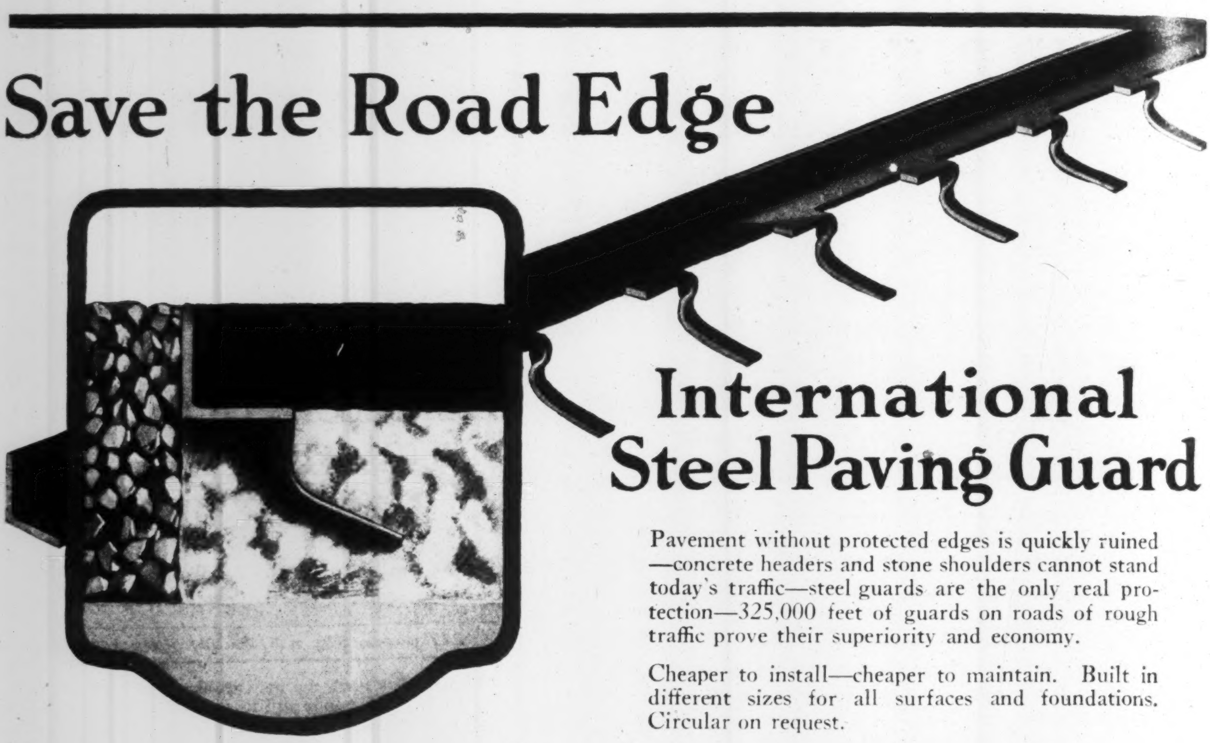

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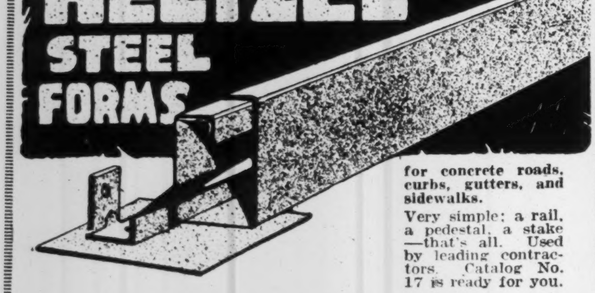

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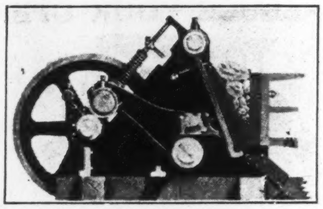

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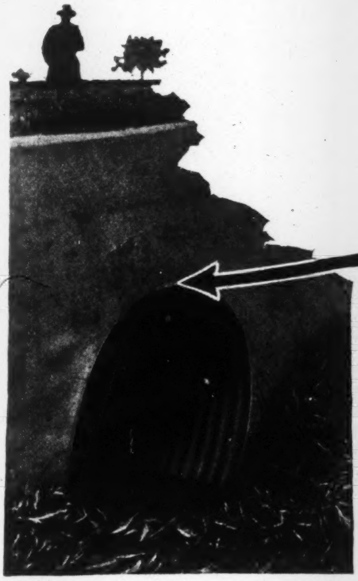

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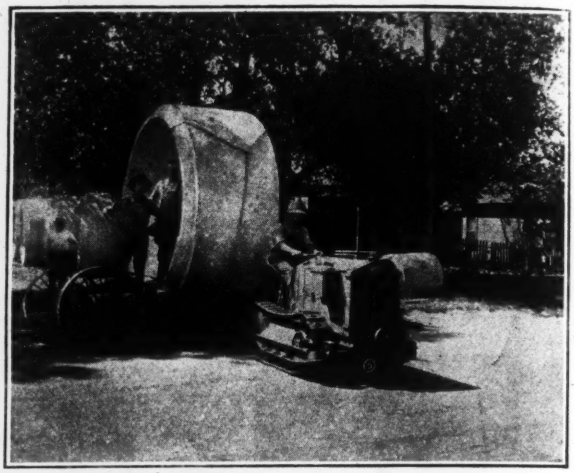

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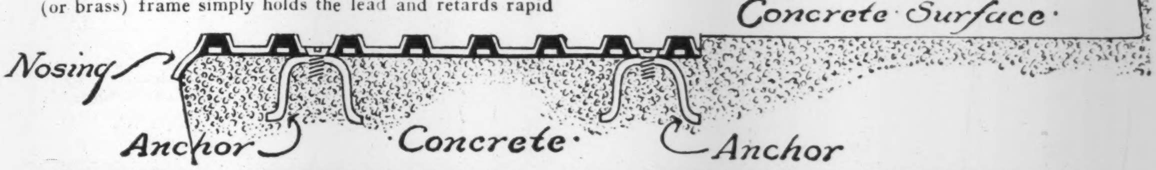

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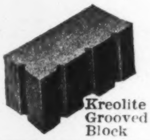
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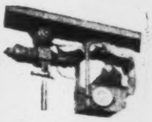

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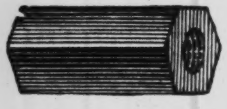

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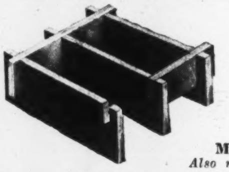
All types for factory, power house and office. Continuous steel sash for monitors and sawtooth construction. Operating devices for all types of movable sash and doors. Steel skylight and ventilators, steel office partitions, hinged steel doors, sliding steel doors.

ALLISON TRADE MARK REGISTERED

STEEL CONSTRUCTION FOR LIGHT AND VENTILATION IN BUILDINGS

ALLISON STEEL PRODUCTS CO.
CHESTER, PA.



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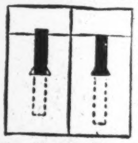
INTERLOCKED GRATINGS

No bolts. No rivets. No bent metal. Every joint locked by metal spread in dovetail. No clogging. Write for data. See half page advertisements.



Mitchell-Tappen Co., 15 John St., N. Y.
Also makers of "S.M.C." Standardized Metal Caging.

Steelcrete TRADE MARK REGISTERED

CONCRETE REINFORCEMENT

EXPANDED Metal versus Bars—a Booklet of facts for every Concrete Engineer—free.

The Consolidated Expanded Metal Co's
BRADDOCK, PA.

Pittsburgh Chicago Phila. New York

KERLOW

222-238 Culver Ave., Jersey City, N. J.

GRATING PRODUCTS

100% Efficient (for traction) 78% Open (for ventilation)
100% Steel (for strength) 22% Surface contact (for comfort)
Two work Surfaces (for longevity)

NEMCO PRODUCTS

Kno-Burn

EXPANDED METAL LATH

Northwestern Expanded Metal Co.
900 Old Colony Bldg. Chicago

MARKS SYSTEM GYPSUM ROOFS

POURED IN PLACE

MARKS SYSTEM
—MARKS—
GYPSUM ROOFS

PRE-CAST SLAB

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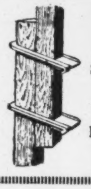
The "ANTI-PLUVIUS" Puttyless Skylight

Structurally perfect in its every detail. Send for catalogue No. 20-E.

The G. Drouvé Company
Bridgeport, Conn.



Rogers Timber Clamps

"Wherever you splice" shoring and scaffolding.
See our full page advertisement in the December 7th issue.

PYLE-ROGERS CORPORATION
Manufacturers and Distributors
New York 501 Fifth Ave., New York Chicag
Eastern Agents:
Richmond Screw Anchor Co., Brooklyn, N. Y.

LACLEDE STEEL COMPANY
St. Louis, Mo.
CONCRETE REINFORCING BARS

Works:
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General Offices:
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Chicago Office: 208 S. La Salle Street
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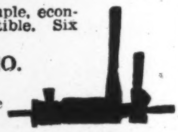
For all kinds of concrete forms. Speedy, simple, economical, secure. Low in first cost. Indestructible. Six sizes. Write for free sample and prices.

UNIVERSAL CLAMP CO.
15 N. May St., CHICAGO
George Bendixen, Representative
51 East 42nd St., N. Y.



Safety, Comfort and Efficiency Assured in This Industrial Power Plant

By Using

IRVING SUBWAY TRADE MARK
(PATENTED) REG. U.S. PAT. OFF.
THE FIREPROOF VENTILATING FLOORING

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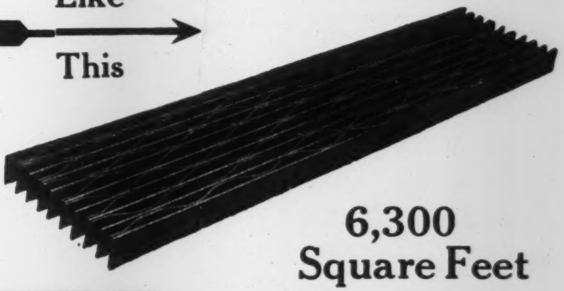

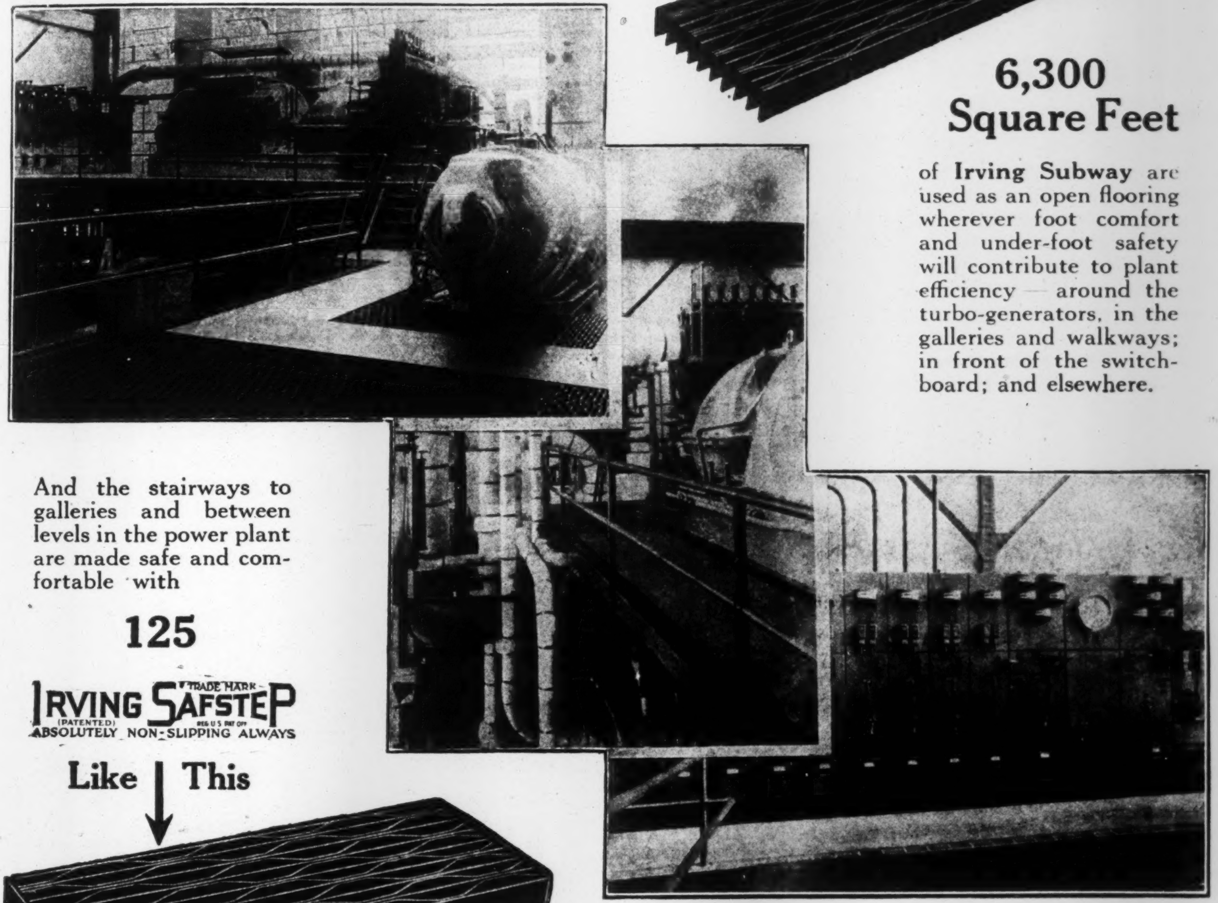

6,300 Square Feet

of **Irving Subway** are used as an open flooring wherever foot comfort and under-foot safety will contribute to plant efficiency — around the turbo-generators, in the galleries and walkways; in front of the switchboard; and elsewhere.

And the stairways to galleries and between levels in the power plant are made safe and comfortable with

125

IRVING SAFSTEP TRADE MARK
(PATENTED) REG. U.S. PAT. OFF.
ABSOLUTELY NON-SLIPPING ALWAYS

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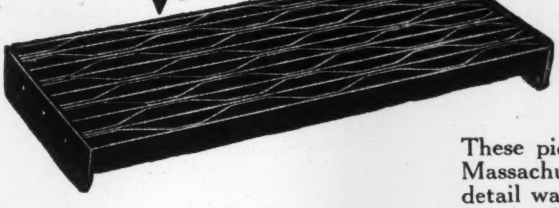


These pictures are interiors of the Lindale (Ga.) plant of the Massachusetts Cotton Mills, John A. Stevens, Engineer, where no detail was neglected that would make for high efficiency. It is but another instance of the increasing use of **Irving Subway** and **Irving Safsteps** in the industrial world—wherever a smooth, cool, safe, comfortable floor is wanted, to walk or work or wheel upon, indoors or out. The narrow, edge-on steel members grip the foot unfailingly —even when polished bright with use—even with water, ice, oil or grease upon them. And their first cost is their last cost—there are no after-costs. Let us send Catalog 3A5.

IRVING IRON WORKS CO.
LONG ISLAND CITY, N.Y., U.S.A.

INFORMATION GLADLY FURNISHED

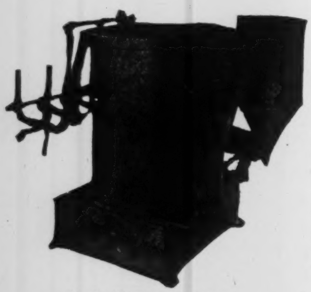
FOR CORRECT METHODS
OF USING CONCRETE

VULCANITE PORTLAND CEMENT CO
PHILADELPHIA BOSTON NEW YORK

Get All the Cement You Pay For

A bag of cement goes back to the mill in each 100 empty bags.

The time and labor spent in cleaning by hand is ineffectual and costly.



Style B Power Driven

This machine will save an average of 42 lbs. of cement after 100 bags have been cleaned by hand.

Users are paying for this machine from reclaimed bags alone. Saving of cement, freight time and labor are extra profit.

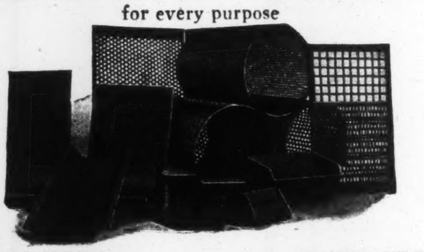
Further information and prices will be mailed you on request.

The Willsea Works
Successor to Century Cement Machine Co.
Builders of special machinery. The Hercules Concrete Block and Trimming Stone Machine.
60 Browns Race, Rochester, N. Y.

Business Established 1832
The Lawrence Cement Co.
No. 302 Broadway New York, N. Y.
Selling Agents for

Dragon
PORTLAND CEMENT
In Successful Use a Third-Century

HENDRICK SCREENS
for every purpose



ELEVATOR BUCKETS (plain and perforated) **STACKS AND TANKS**
GENERAL SHEET AND LIGHT STRUCTURAL WORK
LIGHT AND HEAVY STEEL PLATE CONSTRUCTION

HENDRICK MFG. CO. CARBONDALE, PENNA.
New York Office, 30 Church St. Pittsburgh Office, 544 Union Arcade Bldg.
Hazleton, Penna., Office, 705 Markle Bank Bldg.

CEMENT-GUN
Trade Mark
And the Traylor Portable Compressor
See our full page ad in the last issue and in the next issue.
Cement-Gun Co., Inc., Allentown, Pa.

RP
TRADE MARK REG U S PAT OFF
ROBERTSON PROCESS
ASBESTOS PROTECTED METAL
A Rust and Corrosion-Proof Building Material for Permanent Roofs, Siding and Trim
Write for Sample
H. H. Robertson Co., Pittsburgh, Pa.

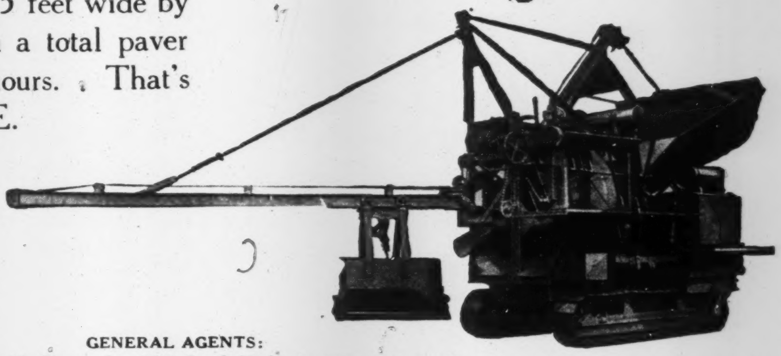
TRUSCON Agatex HARDENER
BOOKLET ON REQUEST
Shipped as dry Crystals, for making Concrete Floors Hard as Iron
THE TRUSCON LABORATORIES — DETROIT

ROAD MULTI FOOTE PAVER
TRADE MARK REGISTERED

STEADY FOOTAGE

Last year, in 758 working days, 10 MultiFoote pavers laid 390,309 lineal feet of concrete road, 17.5 feet wide by 6 x 7 inches thick, with a total paver delay of only 5.7 hours. That's STEADY FOOTAGE.

EVERY FOOTE A MIXER



GENERAL AGENTS:
Foote Concrete Machinery Co., 1241 South Michigan Ave., Chicago, Ill.
Edward R. Bacon Co., 51 Minna St., San Francisco, Cal.
Wilcox Bros., Inc., 152 West 42nd St., New York, N. Y.
E. J. McHarg & Co., 3 Crandall St., Binghamton, N. Y.
Burton Franklin, Volunteer Bldg., Chattanooga, Tenn.
Made by The Foote Company, Inc., Nunda, N. Y.

STEERS BY POWER ~ ~ ~ ~ ~ TURNS IN ITS OWN LENGTH

CEMENT GUNS
Bought—Sold—Rented
GET OUR PRICES AND ESTIMATES BEFORE BUYING.
Cement Gun Construction Co.
537 So. Dearborn St. CHICAGO, ILL.
Oliver Building PITTSBURGH, PA.

TECHNICAL PAINTS
for every purpose. Bridge Paints and Metal Preservative Paints of all kinds. Fume Resisting, Acid Resisting, Heat Resisting, Mill White, Concrete Paints, etc.
CHEESMAN-ELLIOT CO., INC., *Paint Makers*
Established 1876
23 Flatbush Ave., Brooklyn, N. Y.
Works: Williamsport, Pa., and Brooklyn.

"ANTI-HYDRO" FOR PERMANENT CONCRETE
HARDENS WATERPROOFS
FOR HARDENING & WATERPROOFING CONCRETE
A liquid integral hardener makes concrete dustless and waterproof. Used successfully for eighteen years. Write for details.
ANTI-HYDRO WATERPROOFING COMPANY, Newark, N. J.

CEMENTILE ROOFS
The FIRST COST is the LAST
AMERICAN CEMENT TILE MANUFACTURING CO.
OLIVER BUILDING
PITTSBURGH, PA.

Pyramid Brand
Pennsylvania Slate

CENTURIES OF SERVICE
PYRAMID NATURAL SLATE STRUCTURAL
Proof against Time-Wear-Water-Fire!

for all Industrial purposes

Our service does not consist only of the prompt delivery of the slate. Through a complete and fully illustrated series of publications we provide basic specifications and detailed drawings to assist in securing the most satisfactory installation of:

Toilet Enclosures, Stairs, Urinals, Shower Stalls, Laundry Tubs, Sinks and Sink Tops, Switchboards, Fuse Blocks, Bus Bar Supports and Panel Boards.

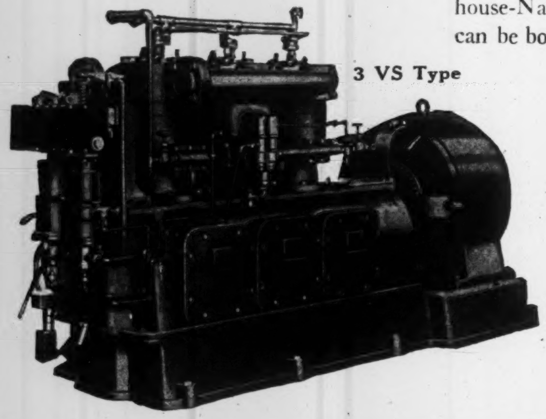
The Structural Slate Co.
Pen Argyl, Penna.

WESTINGHOUSE-NATIONAL
AIR COMPRESSORS

Bearings Can't Run Dry

ALL Westinghouse-National compressors equipped with the distinctive "HP" control are "fool-proof" in the matter of lubrication. Bearings *can't* run dry. When the oil in the crank case drops below a certain level the automatic control prevents further operation of the compressor until the oil supply is replenished.

This is only one of many features which combine to make Westinghouse-National compressors the most economical and serviceable that can be bought.



3 VS Type

Westinghouse-National Air Compressors are furnished in all sizes from 11 to 550 cu. ft. piston displacement; stationary and portable types; A.C. or D.C. motor. Especially adapted for factories, foundries, garages, office buildings, railway shops and yards, printing plants, etc. Literature on request.

Westinghouse Traction Brake Company

General Offices and Works: Wilmerding, Pa.

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Chicago, Ill.	Mexico City	Pittsburgh
Columbus, O.	St. Louis, Mo.	Washington
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Houston, Tex.		San Francisco

"WAY DOWN UPON THE SUWANEE RIVER!"—

You know the old tune—

here are some new words!

Here you see a McKiernan-Terry No. 7 driving 25-ft. Concrete Piles for the ED SCOTT Memorial Bridge over the old "Suwanee Ribber," White Springs, Fla.

Listen to the story:

A jet was used before driving and carried down to about 20 feet. The piles were driven to an average depth of about 23 feet, and to a required safe load of 30 tons. In fact practically three-fourths of the 98-25 foot piles in this bridge were driven to ultimate refusal. A cushion built up of three 2-inch planks was used.

These piles were 17 in. square at butt, tapering to 10 in. square at the point. Not one was shattered in the driving!

Well, sah, "all de world am sad and weary" messing around with second rate pile hammers, until a McKiernan-Terry gets on the job. Why? Send for Bulletin 28 and see details!

McKiernan-Terry Drill Company

Rock Drills Pile Hammers Lifting Jacks
Mining and Quarrying Machinery
13 Park Row, New York
Works at Dover, N. J.

Agencies in the following Cities: Boston, Chicago, Pittsburgh, Cleveland, Detroit, St. Paul, San Francisco, Columbus, O., New Orleans, Philadelphia, Portland, Oregon. *Foreign Representatives:* British Steel Piling Co., London, England.

Parsons, Klapp, Brinckerhoff & Douglas

84 Pine St., New York **Hanna Bldg., Cleveland**

WM. BARCLAY PARSONS
EUGENE KLAPP
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Engineers—Constructors—Managers

Design, Estimates, Supervision, Operation and Management, Examination and Reports

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The Underpinning & Foundation Co. 342 Madison Ave. New York City

Difficult Foundations

Pneumatic, Steel, Concrete and Wooden Pile Foundations. Bridge Piers; Underpinning Heavy Buildings

"HERCULES" STEEL PILES

VULCAN IRON WORKS

THE WARRINGTON (VULCAN)

STEAM PILE HAMMERS

PILE DRIVERS AND PILE DRIVING MACHINERY

327 NO. IRVING AVE.——CHICAGO

New England Foundation Co., Inc.

120 Tremont Street, Boston, Mass.

SIMPLEX CONCRETE PILING

Open Caissons—Difficult Foundations

Engineering and Construction

For Trenching in Rock—

You can cut your time, labor and overhead expense by using

SULLIVAN ROTATORS

Operated by a

Sullivan Portable Air Compressor

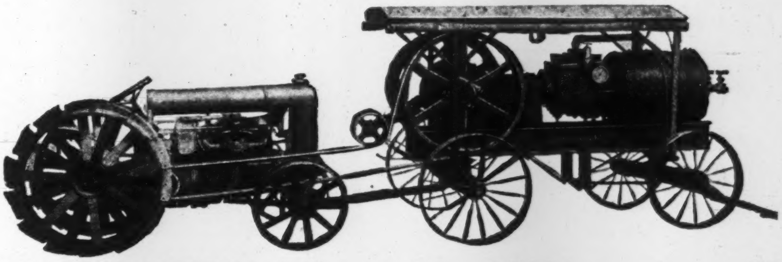
Rotators weigh 38 lb., drill easily to 14 ft., and are easy on the runner.

The "WK-34" tractor-driven compressor on wheels, shown here at work on a sewer job at Breckenridge, Texas (Mackenzie Constr. Co.) is one of several Sullivan Portable types.

14TH NATIONAL
GOOD
ROADS
SHOW
UNDER THE AUSPICES
A·R·B·A·
COLISEUM CHICAGO ILL
JAN 15-19, 1923
VISIT OUR EXHIBIT

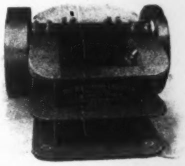
Ask for Bulletin 477-D

At right: Sullivan "WK-34" Portable Compressor, belted to a tractor



SULLIVAN MACHINERY CO., 124 So. Michigan Ave., Chicago, Ill.

Buchanan All-Steel Crushers



Simple—Strong—Durable

C. G. BUCHANAN COMPANY
Incorporated
92 West St., New York City

MILBURN
CARBIDE LIGHTS
FOR CONSTRUCTION WORK

Burn carbide, obtainable everywhere.

Write for Catalog No. 21

The Alexander Milburn Co.
1420-1428 W. Baltimore St., Baltimore, Md.
STOCKS IN ALL LARGE CITIES.

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For Testing Foundations and Tunnel Lines
ACKER DRILLING CO.
Contractors
CONNELL BLDG., SCRANTON, PA.

THE UNION LINE

Consists of pile driving, excavating machinery, road builders, and contractors' equipment.
See larger advertisement second issue of each month.

Union Iron Works
Lackawanna Siding, Hoboken, New Jersey

PENNSYLVANIA
PORTLAND CEMENT

Highest Quality

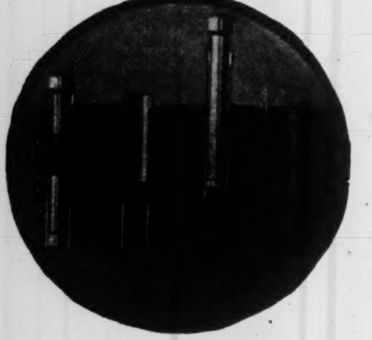
Manufactured by

Pennsylvania Cement Co.

New York Boston Philadelphia Buffalo

"The Pile With a BIG Foot"
MacARTHUR PEDESTAL PILE

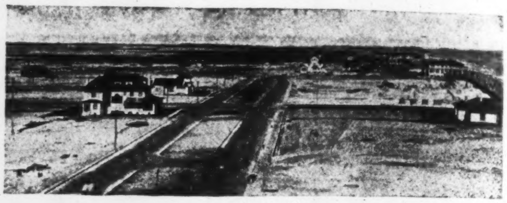
Four operations do it — driving the shell and core into the ground, withdrawing the core and half filling the shell with concrete, partly withdrawing the shell and tamping the concrete, filling in the remainder of the concrete, tamping that and wholly withdrawing the shell.



We have gotten out a mighty interesting little book — "MacArthur Facts" — which you will be glad to read. Ask us for a copy.

MacARTHUR CONCRETE PILE & FOUNDATION COMPANY, Inc.
12 John Street, New York City
Chicago Pittsburgh Cleveland, Ohio Montreal, Que.
Canadian MacArthur Concrete Pile Co., No. 10 Cathcart Street, Montreal, P. Q.

Dredging



Filling, Land Reclamation, Canals and Port Works
River and Harbor Improvements, Deep Waterways and Ship Channels

We are equipped to execute all kinds of dredging, reclamation and port works anywhere in the United States.

CONTRACTORS to THE FEDERAL GOVERNMENT

Correspondence Invited from Southern Officials and Corporate and Private Interests Everywhere.

Largest Plant Longest Experience

Atlantic, Gulf and Pacific Co.
New York: 21 Park Row
Houston, Texas: Scanlon Bldg.

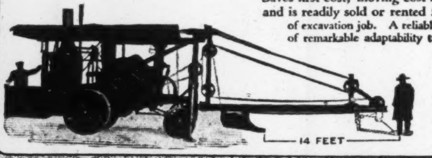
Small in Size, but a Big Money-Maker if you need a machine to move 100 to 300 cu. yd. per day.
Here is just the type of power drag scraper outfit—compact, inexpensive, easily moved from place to place—that owners of small gravel pits, have been looking for. Write for folder.

SAUERMAN BROS.
53 W. Jackson Blvd., Chicago

Sauerman Portable Power Scraper delivering gravel to a small screening plant

TRADE MARK KEYSTONE REGISTERED U. S. PATENT OFFICE

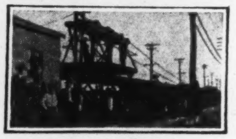
The KEYSTONE is a highly versatile traction steam shovel with all the efficiency of specialized design, usable with three different interchangeable scoops —*Skimmer, Ditcher and Clamshell*—for Road Grading, Trenching, Back Filling, Cellar Digging, Pit Mining, Loading, Unloading and Handling Materials. Can be equipped with electric motor drive for use in buildings. Saves first cost, moving cost and upkeep, and is readily sold or rented for any sort of excavation job. A reliable road shovel of remarkable adaptability to other uses.



Model 4
14 ton
All Steel
Excavator
with ½ yd.
Skimmer

Keystone Driller Company Beaver Falls, Pa.
170 Broadway, New York Monadnock Block, Chicago Joplin, Mo.

AMBURSEN DAMS
Best For Any Foundation
High Safety Factor Low First Cost
Rapid Construction No Maintenance
Send for Cost Data, Literature, Photos.
Ambursen Construction Co., Inc.
New York Atlanta Kansas City



Rental or Sale

POTTER
Trench Machines, Trench Braces, Buckets
POTTER MFG. CO.
3505 E. Washington St.,
INDIANAPOLIS, IND.

Spencer, White & Prentis
100 West 41st St., N. Y. C.
Foundation Specialists
Steel Tubes to Rock *"Pretest" System*

Monighan
Walking Drag-Line
Excavator

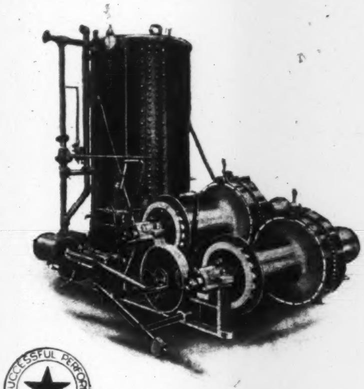
Monighan Machine Co.
2020 Carroll Ave., Chicago

TRADE MARK
MUNDY
ESTABLISHED 1869

HOISTING ENGINE for DERRICK WORK

in connection with

MUNDY SWINGING ENGINES



OUR improved engine with double friction drums, as shown here, is constructed for quarry work and is customary equipment for derrick work with separate swinger.

When used in quarries for operating a boom derrick, one drum is used for lifting the stone, the other for raising and lowering the boom.

FOR SUCCESSFUL PERFORMANCE A.G.C. of A.

Write for Steam Hoist Bulletin Fully Describing This Hoist

J. S. MUNDY HOISTING ENGINE CO.

New York Sales and Export Office: 30 Church St. **NEWARK, NEW JERSEY, U. S. A.**

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BEAUMONT, TEXAS
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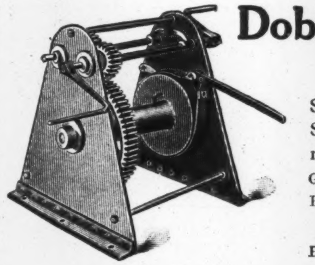


Dobbie Derricks and Hoists

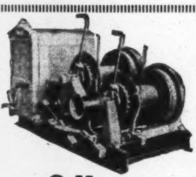
Stocks of Fittings, Blocks, Sheaves, Winches, etc., carried by our agents—

G. S. Green Co., New York.

Beckwith Machinery Co., Pittsburgh, Cleveland, Charleston, W. Va.

P. I. Perkins Co., Boston

DOBBIE Foundry & Machine Co.
Manufacturers
Niagara Falls, N. Y.



O. K. Double Drum Hoist
with Multiple Cylinder Gasoline Engine

Four cylinder, 15-hp. gasoline engine similar to a motor truck, adapted to heavier demands of hoisting. Hoist is considerably lighter, takes up less space, can be moved readily. Repairs in any automobile garage.
In 8, 12 and 15 hp., hoisting speeds from 125 to 150 ft. per minute; lift 1500, 2200 and 2800 lb. respectively.* Write us.
*We also can furnish HOISTS, electric motor equipped.

O.K. Clutch & Machinery Co., Columbia, Pa.

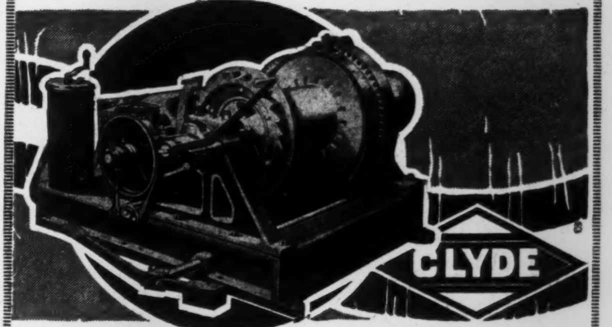
TRADE MARK
Get the Catalog

FLORY HOISTS

S. FLORY MFG. CO., BANGOR, PA.

New York: 95 Liberty St.
Hartford, Conn.: K. B. Noble Co.
Chicago: Monadnock Bldg.
Birmingham, Ala.: Chas. T. Lehman Co.
Huntington, W. Va.: Banks Supply Co.
Pittsburgh: House Bldg.
Buffalo, N. Y.: Finlay Wheeler, Inc.

Clyde Electric Hoists



The satisfaction of possession and the pride of performance distinguish the owner of a Clyde Electric Hoist.

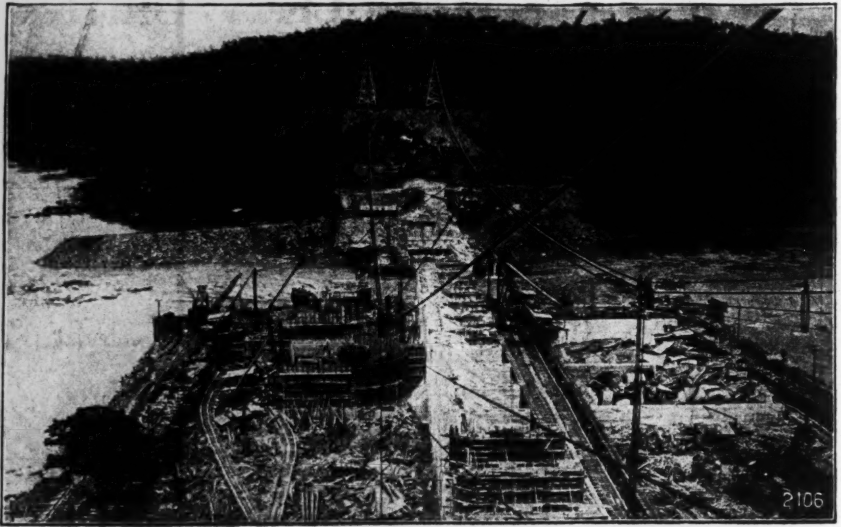
Continuous Service and the low Operating Cost are guarantees for better profits.

CLYDE

Clyde Iron Works Sales Company
DULUTH, MINN., U. S. A.
Sole Distributors for Clyde Iron Works

NEW YORK
CHICAGO
NEW ORLEANS
JACKSONVILLE
SEATTLE
CINCINNATI
PORTLAND

LIDGERWOOD CABLEWAYS



Steam—Electric
Stationary—Radial
Traveling

Illustration shows five Lidgerwood Cableways used by the Dixie Construction Co., building hydro-electric dam at Verbena, Ala., for the Alabama Power Co. Cableways have proven themselves invaluable on this class of work.

They handle plain or automatic dumping skips, grab buckets, concrete tubs, forms, and move derricks, hoists and other construction machinery.

HOISTS
DERRICKS

Requests for catalogs invited

LIDGERWOOD MANUFACTURING COMPANY
96 Liberty Street, NEW YORK

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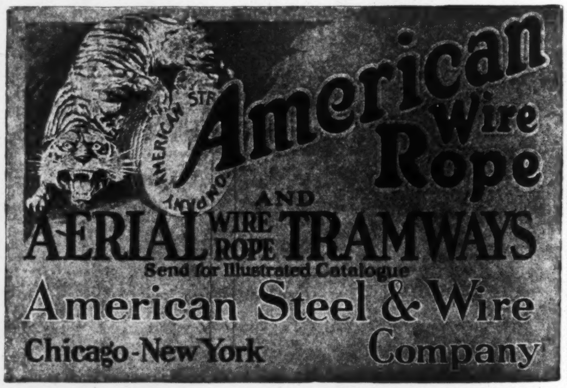

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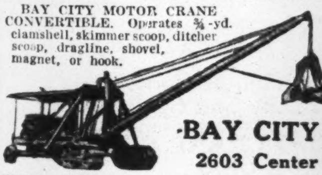

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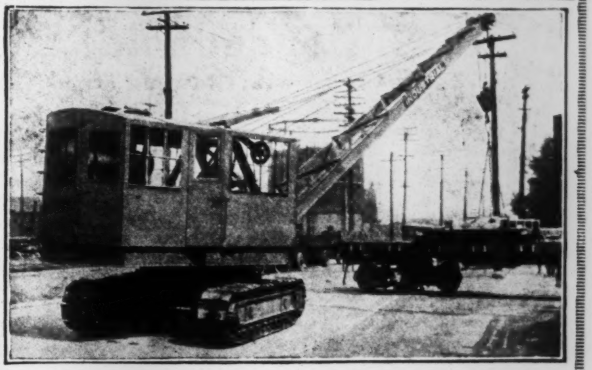

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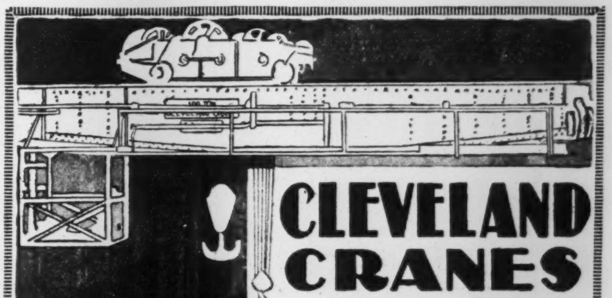

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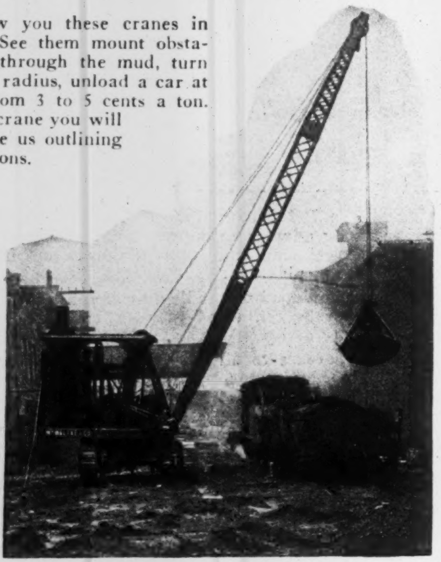

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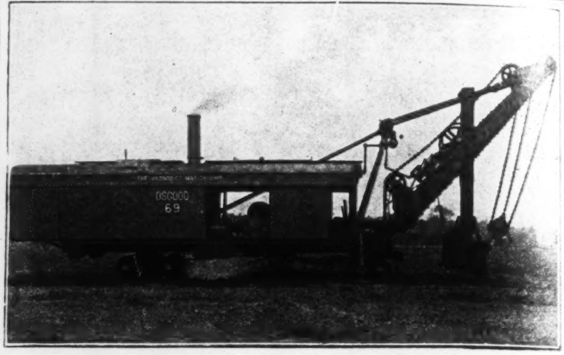

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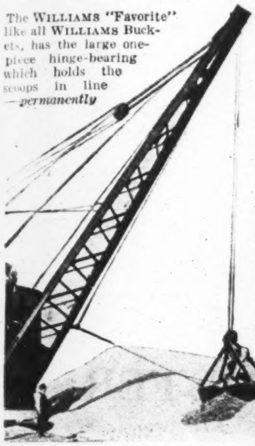

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This WILLIAMS Bucket is still doing good work

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Write for the WILLIAMS Catalog. It shows pictures of WILLIAMS Buckets in rock handling and gravel dredging—work that you never thought any clamshell could do. It gives blue-prints and recommendations for use of every bucket in the complete WILLIAMS line. Ask for Catalog N.

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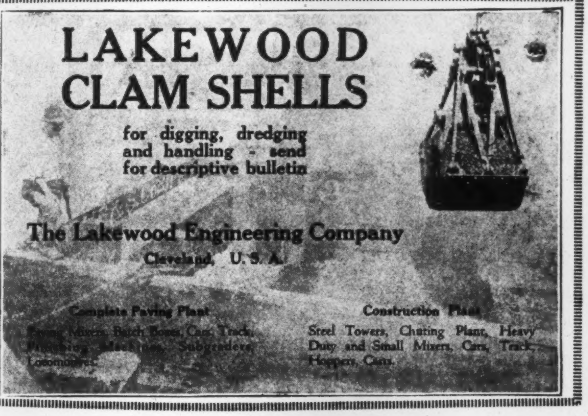

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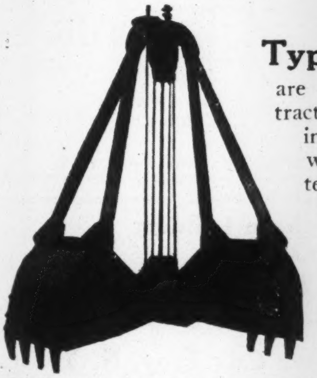

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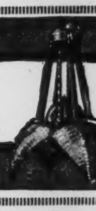

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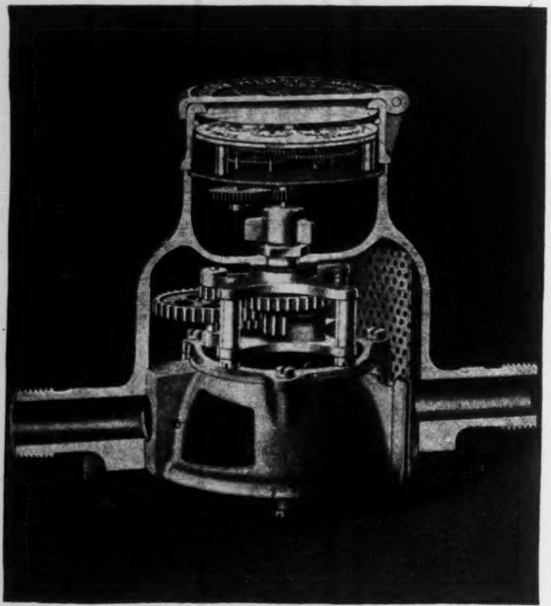

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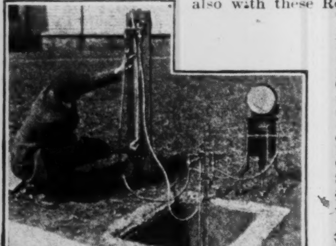

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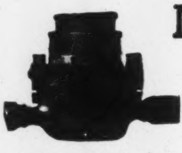

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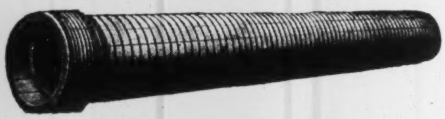

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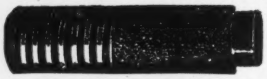

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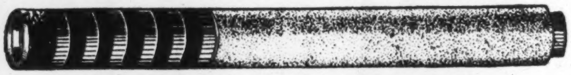

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Will furnish Pipe to suit Conditions.

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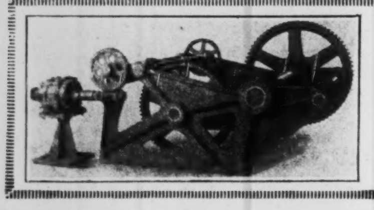

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Standard Capacities up to 60,000 pounds

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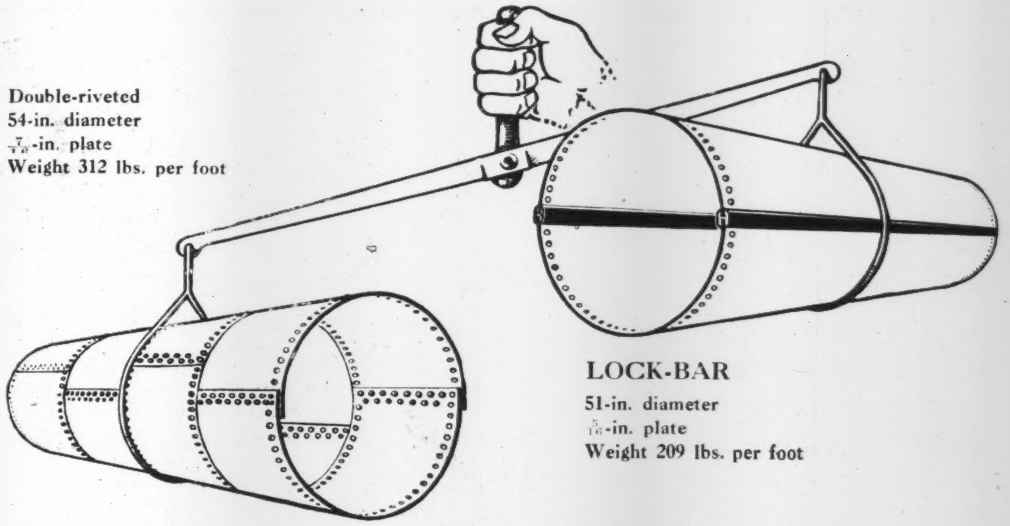

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54-in. diameter
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Weight 312 lbs. per foot

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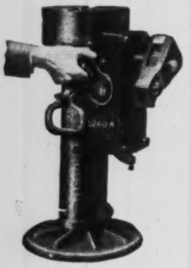

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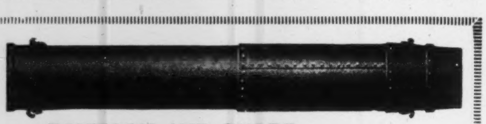

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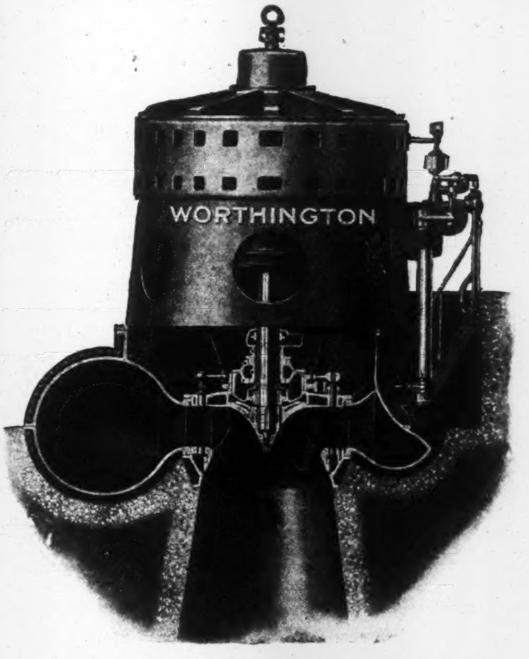

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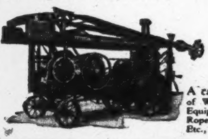

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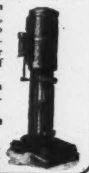

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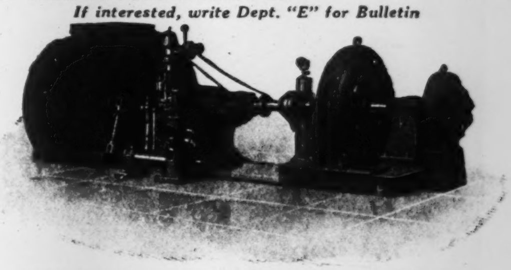

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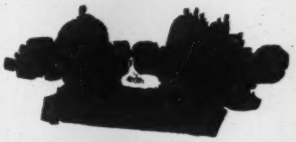

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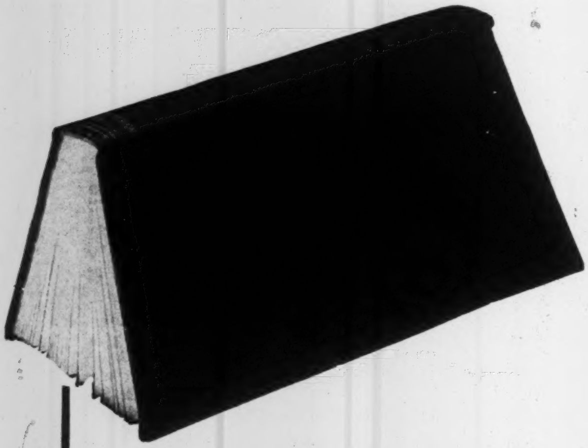

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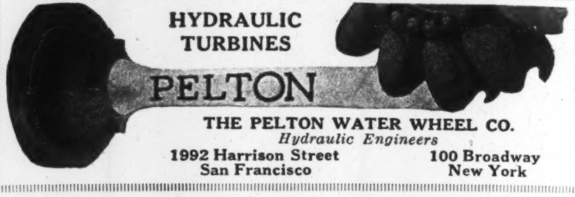

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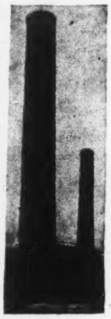

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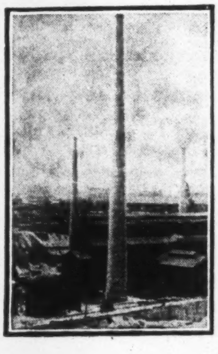

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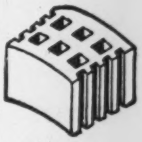

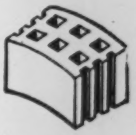

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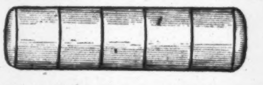

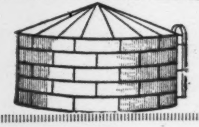

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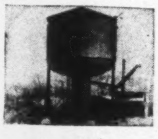

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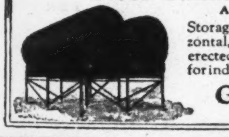

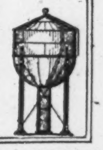

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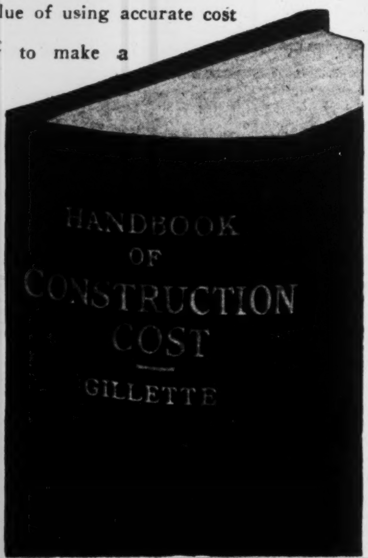

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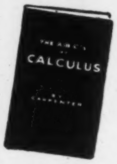

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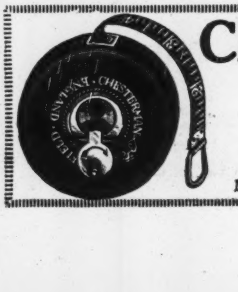

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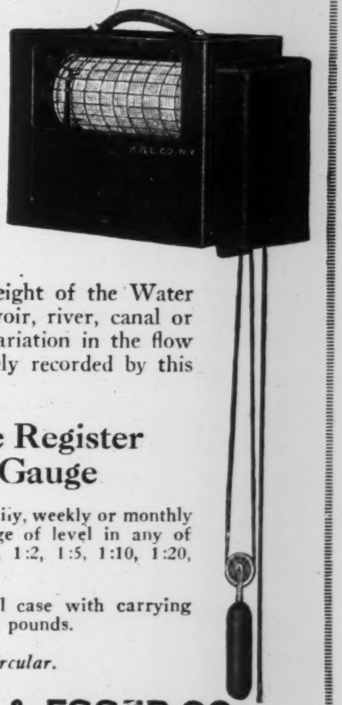

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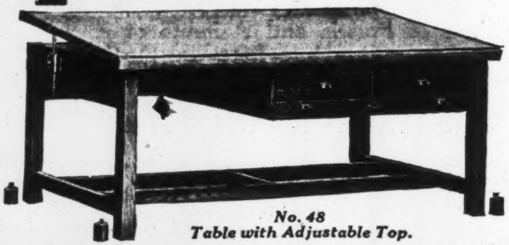

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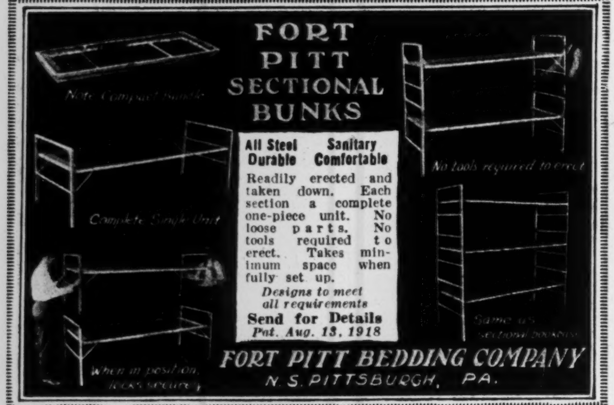
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American Steel & Wire Co.
Berger Mfg. Co.
Bethlehem Steel Co.
Brown Hoisting Machy. Co.
Consolidated Expanded Metal Cos.
Keystone Gypsum Fireproofing Co.
Laclede Steel Co.
Mitchell-Tappen Co.
National Steel Fabric Co.
Northwestern Expanded Metal Co.
Ryerson & Son, Joseph T.
Wickwire-Spencer Steel Corp.

Condensers
Ingersoll-Rand Co.
Manistee Iron Wks.
Worthington Pump & Machy. Corp.

Conveyors, Belt
Brown Hoisting Mchy. Co.
Gifford-Wood Co.
Haiss Mfg. Co., Inc., Geo.
Jeffrey Mfg. Co.
Link-Belt Co.
Portable Machy. Co.
Robins Conveying Belt Co.
Smith Engineering Works
Webster Manufacturing Co.

Conveyors, Bucket
Brown Hoisting Mchy. Co.
Gifford-Wood Co.
Haiss Mfg. Co., Inc., Geo.
Jeffrey Mfg. Co.
Link-Belt Co.
Webster Manufacturing Co.

Corner Bead Metal
Consolidated Expanded Metal Cos.

Cranes, Locomotive
Bay City Dredge Works
Brown Hoisting Machy. Co.
Browning Co.
Byers Mach. Co.
Clyde Iron Works Sales Co.
Erie Steam Shovel Co.
Industrial Works
Link-Belt Co.
McMyler Interstate Co.
Marion Steam Shovel Co.
Moore Bros.
Northwest Engineering Co.
Ohio Locomotive Crane Co.
Orton & Steinbrenner Co.
Osgood Co.
Thew Shovel Co.

Cranes, Traveling
Brown Hoisting Machy Co.
Chesapeake Iron Works
Cleveland Crane & Eng. Co.
Link-Belt Co.
Toledo Crane Co.

Cranes, Wrecking
Industrial Works

Creosoted Blocks, Timber, Poles, Cross-Arms Lumber, etc.
Amer. Creosoting Co. (Ky.)
Amer. Creosoting Co. (N.Y.)
Colonial Creosoting Co.
Eppinger & Russell Co.
Georgia Creosoting Co.
Jennison-Wright Co.
Southern Wood Preserv. Co.
Wyckoff Pipe & Creosoting Co.

Creosoting
Amer. Creosoting Co. (Ky
American Creosote Works
Colonial Creosoting Co.
Eppinger & Russell Co.
Eppinger & Russell Co.
Georgia Creosoting Co.
Jennison-Wright Co.
Wyckoff Pipe & Creosotin Co.

Creosoting Oils
Protexol Corp.

Crushers and Pulverizers
Acme Road Machy. Co.
Allis-Chalmers Mfg. Co.
Austin Mfg. Co.
Austin-Western Road Machy Co.
Brown Hoisting Mchy. Co.
Buchanan Co., Inc., C. G.
Jeffrey Mfg. Co.
Orton & Steinbrenner Co.
Smith Engineering Wks.
Universal Road Machy. Co.

Culverts, Corrugated
Austin-Western Road Mchy. Co.
Canton Culvert & Silo Co.
Newport Culvert Co.

Culverts, Metal
Amer. Sheet & Tin Plate Co.
Armco Culvert & Flume Mfrs. Assn.
Austin-Western Road Mchy. Co.
Newport Culvert Co., Inc.
U. S. Cast Iron Pipe & Foundry Co.

Culverts, Nestable & Riveted Corrugated
Canton Culvert & Silo Co.
Newport Culvert Co.

Cutting Blowpipes, Oxyacetlyne
Air Reduction Sales Co.
Milburn Co., Alexander

Dams
Ambursen Construction Co

Derricks and Derrick Fittings
Byers Mach. Co.
Clyde Iron Wks Sales Co
Dobbie Fdry & Machine Co.
Haiss Mfg. Co., Geo.
Hayward Co.
Insley Manufacturing Co
Lidgerwood Mfg. Co.
McMyler Interstate Co.
Mundy Hoist. Eng. Co., J. S.

Disinfecting Chemicals
Electro Bleaching Gas Co.
Wallace & Tiernan Co., Inc.

Distributors, Pressure Oil
(See Road Oilers, Pressure)

Ditching Machinery
(See Excavators)

Docks and Harbor Work
Parsons, Klapp, Brinkerhoff & Douglass
Snare Corp., Frederick

Drafting Machines
Universal Drafting Mach Co.

Drafting Room Furniture
Dietzgen Co., Eugene
Hamilton Manufacturing Co
Pease Co., C. F.

Draglines
Northwest Engineering Co.

Drawing Materials
Dietzgen Co., Eugene
Hamilton Manufacturing Co
Keuffel & Esser Co.
Weber Co., F.

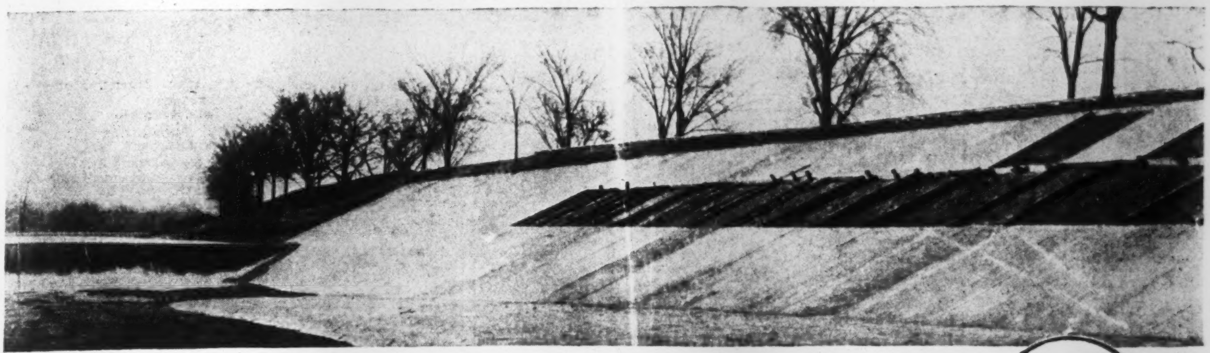
Drawing Tables
(See Tables and Boards, Drawing.)

Dredges
Bay City Dredge Works
Flory Manufacturing Co., S.
Hayward Co.
Lidgerwood Mfg. Co.
Marion Steam Shovel Co.
Osgood Co.

Dredges, Dipper
Austin Machinery Corp.
Erie Steam Shovel Co.
Osgood Co.

Dredges, Hydraulic
Atlantic Gulf & Pacific Co
Marion Steam Shovel Co.
Morris Machine Co.

Drills, Core
Acker Drilling Co.
Ingersoll-Rand Co.
Keystone Driller Co.
McKiernan-Terry Drill Co.
Sullivan Machinery Co.



Elastic used in this riprap work by Miami Conservancy district near Dayton, Ohio.

Full Protection to all kinds of Concrete Work

ANY 100 yard stretch of concrete work will expand or contract approximately 2½ inches when the temperature changes 100 degrees.

This expansion or contraction is unavoidable and unfailing whether the change in temperature takes place in a few hours or a year's time.

Taking a factor of safety of four (4) enough expansion joints should be used to provide for expansion of 4x2½ inches or 10 inches, hence, there should be 20 half-inch expansion joints in every hundred yards.

Carey Elastite used on this basis has been employed in bridges, viaducts, dams, reservoirs, grand stands, and in every instance is successfully protecting the work against buckling and cracking.

It costs little to provide absolute safety from stresses due to inevitable changes in temperature.

Write for sample and full particulars to

The Philip Carey Company

18 Wayne Avenue, Lockland, Cincinnati, Ohio

Carey Elastite NAME REG. U.S. Patent Office

EXPANSION JOINT

5-21

Drills, Rock
Chicago Pneumatic Tool Co.
General Electric Co.
Jeffrey Mfg. Co.
Ingersoll-Rand Co.
McKiernan-Terry Drill Co.
Sullivan Machinery Co.

Drums, Holding
Blaw-Knox Co.
Haiss Mfg. Co., Inc., Geo.
Hayward Co.
Monighan Machine Co.

Dryers
Blaw-Knox Co.

Dryers, Sand and Gravel
Vulcan Iron Works of Wilkes-Barre, Pa.

Elevators, Bucket
Austin Mfg. Co.
Austin-Western Road Mchy. Co.
Brown Hoisting Mchy. Co.
Gifford-Wood Co.
Haiss Mfg. Co., Inc., Geo.
Hendrick Mfg. Co.
Link-Belt Co.
Ohio Locomotive Crane Co.
Smith Engineering Wks.
Webster Manufacturing Co.

Elevators; Contractors' Material
Austin Mfg. Co.
Austin-Western Road Mchy. Co.
Byers Mach. Co.
Haiss Mfg. Co., Inc., Geo.
Insley Manufacturing Co.
Ransome Concrete Mchy Co.
Smith Co., T. L.
Smith Engineering Wks.

Elevators, Factory
Ridgway & Son Co., The Craige

Engineers, Roofing
Federal Cement Tile Co.
Marks Corp., The H. E.

Engineers and Contractors
Atlantic Gulf & Pacific Co.
Cement-Gun Constr. Co.
Parsons, Klapp, Brinckerhoff & Douglass
Raymond Concrete Pile Co.
Spencer, White & Prentis
Terry & Tench Co., Inc.
(See Directory of Engineers)

Engineers' and Draftsmen's Instruments and Supplies
Dietzgen Co., Eugene
Hamilton Manufacturing Co.
Gurley, W. & L. E.
Keuffel & Esser Co.
Lufkin Rule Co.
Monroe Calculating Machine Co.
N. Y. Blue Print Paper Co.
Pease Co., C. F.
White Co., Inc., David
Wiebusch & Hilger, Ltd.

Engines, Gas, Gasoline & Oil
Allis-Chalmers Mfg. Co.
Chicago Pneumatic Tool Co.
Cushman Motor Works
Ingersoll-Rand Co.
National Hoisting Eng. Co.
Smith Co., T. L.
Wisconsin Motor Mfg. Co.
Worthington Pump & Machy Corp.

Engines, High Duty Water-Works
Morris Machine Co.

Engines, Hoisting
(See Hoists)

Engines, Portable
Cushman Motor Works

Engines, Steam
Chicago Pneumatic Tool Co.

Excavators, Cableway
Clyde Iron Wks Sales Co.
Lidgerwood Mfg. Co.
Mundy Hoist. Eng. Co., J. S.
Sauerman Bros.

Excavators, Ditch & Trench
Austin Machinery Corp.
Bay City Dredge Works
Erie Steam Shovel Co.
Keystone Driller Co.
Marion Steam Shovel Co.
Northwest Engineering Co.
Osgood Co.
Parsons Co.
Potter Mfg. Co., The
Thew Shovel Co.

Excavators, Dragline
Austin Machinery Corp.
Bay City Dredge Works
Byers Mach. Co.
Erie Steam Shovel Co.
Hayward Co.
Marion Steam Shovel Co.
Monighan Machine Co.
Northwest Engineering Co.
Osgood Co.
Sauerman Bros.
Smith Co., T. L.

Expanded Metal
Berger Mfg. Co.
Consolidated Expanded Metal Cos.
Northwestern Expanded Metal Co.

Expansion Bolts
National Lead Co.

Filters, Water, Municipal and Industrial
American Water Softener Co.
California Filter Co.
Graver Corporation
International Filter Co.
N. Y. Continental Jewell Filtration Co.
Roberts Filter Mfg. Co.
Simplex Valve & Meter Co.

Fire Clay
Dickey Clay Mfg. Co.

Fireproofing Material & Construction
Berger Mfg. Co.
Marks Corp., H. E.
Robertson Co., H. H.

Floor, Asphalt Mastic
Standard Oil Co. of Ind.
Standard Oil Co. of N. Y.
Texas Company

Floor Hardener, Concrete
(See Concrete Floor Hardener.)

Floor, Wood Block
Jennison-Wright Co.

Flooring, Fireproof
Kerlow Steel Flooring Co.
Irving Iron Works
Marks Corp., H. E.
Universal Safety Tread Co.

Flumes, Iron & Steel
Armco Culvert & Flume Mfrs. Asn.
Blaw-Knox Co.

Forgings
Bethlehem Steel Co.

Form Clamps
Insley Mfg. Co.
Pyle-Rogers Corp.
Universal Form Clamp Co.

Form Tighteners
Marion Malleable Iron Wks.

Forms, Culvert, Road, Sewer, Tunnel, etc.
Blaw-Knox Co.
Foote Concrete Machy. Co.
Heltzel Steel Form & Iron Co.
Metal Forms Corp.

Forms for Curb and Gutter
Blaw-Knox Co.
Metal Forms Corp.

Forms for Walls, Building Construction, etc.
Berger Mfg. Co.
Blaw-Knox Co.
Heltzel Steel Form & Ir. Co.
Metal Forms Corp.

Foundations
MacArthur Concrete Pile & Foundation Co.
New England Fd. Co., Inc.
Raymond Concrete Pile Co.
Spencer, White & Prentis.
Underpinning & Found. Co.

Frogs and Switches, Railway
Bethlehem Steel Co.
Easton Car & Constr. Co.
Ramapo Ajax Corp.

Garbage Disposal Apparatus
Jeffrey Mfg. Co.

Gas, Chlorine
Electro Bleaching Gas Co.

Gas Producers
Blaw-Knox Co.

Gates, Sluice
Coffin Valve Co.
Coldwell-Wilcox Co.
Crane Co.
Ludlow Valve Mfg. Co.

Gauges, Loss of Head
Simplex Valve & Meter Co.

Gauges, Rates of Flow
Simplex Valve & Meter Co.

Gears
Earle Gear & Mach. Co.

Generators, Electric
Allis-Chalmers Mfg. Co.
General Electric Co.

Glass, Fireproof
(See Wire Glass)

Governors, Waterwheel
Woodward Governor Co.
Worthington Pump & Machry. Corp.

Graders, Road
Austin Mfg. Co.
Austin-Western Rd. Mchy Co.
Erie Steam Shovel Co.
Koehring Co.
Smith Co., T. L.
Stroud & Co.
Western Wheeled Scraper Co.

Granite
Granite Paving Block Mfrs.' Assoc. of the U. S., Inc.

Gratings, Subway
Irving Iron Works
Kerlow Steel Flooring Co.
Mitchell-Tappen Co.
Universal Safety Tread Co.

Gravel Washing Plants
Link-Belt Co.
Sauerman Bros.

Gypsum
Keystone Gypsum Fireproofing Co.
Marks Corp., H. E.

Hammers, Pneumatic
Chicago Pneumatic Tool Co.
National Hoisting Eng. Co.

Hammers, Steam Pile
(See Pile Hammers, Steam)

Heaters, Concrete Water
Graver Corporation

Heaters Tar & Asphalt
Honhorst Co., The Jos.
Littleford Bros.

Hoists, Concrete Tower
Insley Manufacturing Co.

Hoists, Contractors' Electric
Allis-Chalmers Mfg. Co.
Bay City Dredge Works
Byers Mach. Co.
Clyde Iron Wks. Sales Co.
Dobbie Foundry & Mach. Co.
Flory Mfg. Co., S.
Lidgerwood Mfg. Co.
Mundy Hoist. Eng. Co., J. S.
Monighan Machine Co.
National Hoisting Eng. Co.
O. K. Clutch & Machy. Co.
Ransome Concrete Mchy Co.
Stroudsburg Engine Works
Vulcan Iron Works of Wilkes-Barre, Pa.

Hoists, Contractors' Gasoline
Lidgerwood Mfg. Co.
Mundy Hoist. Eng. Co., J. S.
National Hoisting Eng. Co.
O. K. Clutch & Machy. Co.
Stroudsburg Engine Works

Hoists, Contractors' Steam
Allis-Chalmers Mfg. Co.
Byers Mach. Co.
Clyde Iron Wks. Sales Co.
Ingersoll-Rand Co.
Lidgerwood Mfg. Co.
Mundy Hoist. Eng. Co., J. S.
National Hoisting Eng. Co.
Stroudsburg Engine Works
Vulcan Iron Wks of Wilkes-Barre, Pa.

Hoists, Electric
Yale & Towne Mfg. Co.

Hoists, Hydraulic Head Gates
Dilts Machine Wks., Inc.

Hoists, Motor, Truck
Wood Hydraulic Hoist & Body Co.

Hoists, Pneumatic
Chicago Pneumatic Tool Co.
Ingersoll-Rand Co.
Stroudsburg Engine Works
Sullivan Machinery Co.

Hoppers, Concrete
Insley Manufacturing Co.
Ransome Concrete Mchy Co.

Hoppers, Steel
Heltzel Steel Form & Iron Co.
Honhorst Co., The Jos.

Hose, Air
Chicago Pneumatic Tool Co.

Hydrants
Ludlow Valve Mfg. Co.
Rensselaer Valve Co.
Smith Mfg. Co., A. P.
Wood & Co., R. D.

Incinerators
Power Specialty Co.

Inspecting Laboratories
(See Directory of Engineers)

Instruments, Drawing
Keuffel & Esser Co.
N. Y. Blue Print Paper Co.

Instruments, Surveying
Ainsworth & Sons, Wm.
Berger & Sons, C. L.
Buff & Buff Mfg. Co.
Gurley, W. & L. E.
Keuffel & Esser Co.
Lietz Co., A.
N. Y. Blue Print Paper Co.
White Co., Inc., David

Insulation, Misc.
Texas Company

Iron Work, Structural and Ornamental
Hendrick Mfg. Co.
Irving Iron Works
Kerlow Steel Flooring Co.
Ryerson & Son Co., Jos.
Snead Architectural Iron Works
Universal Safety Tread Co.

Jacks, Lifting
McKiernan-Terry Drill Co.
Norton, Inc., A. O.

Joints, Expansion Paving
Carey Co., The Philip
Servicised Products Co.
Truscon Steel Co.

Joints, Filler Paving
Servicised Products Co.
Standard Oil Co. of N. Y.

Joints, Flexible Pipe
Central Foundry Co.
Crane Co.
U. S. Cast Iron Pipe & Foundry Co.

Kilns, Rotary
Vulcan Iron Works of Wilkes-Barre, Pa.

Lamps, Arc. & Incandescent
General Electric Co.

Lamps, Flood
General Electric Co.

Lath, Expanded Metal
Armco Culvert & Flume Mfrs. Assn.
Berger Mfg. Co.
Mitchell-Tappen Co.
Northwest'n Exp. Metal Co.
Waring-Underwood Co.

Leadite
Leadite Co., Inc., The

Lights, Contractors'
Carbic Manufacturing Co.
Milburn Co., Alexander

Loaders, Wagon
(See Wagon Loaders)

Locomotives, Compressed Air
Baldwin Locomotive Co.
Porter Co., H. K.

Locomotives, Electric
Baldwin Locomotive Co.
General Electric Co.
Jeffrey Mfg. Co.

Locomotives, Fireless Steam
Porter Co., H. K.

Locomotives, Gasoline
Baldwin Locomotive Co.
Fate Root Heath Co.
Hadfield-Penfield Steel Co
Lakewood Engineering Co.
Milwaukee Loco. Mfg. Co.
Vulcan Iron Wks of Wilkes-Barre, Pa.
Whitcomb Co., Geo. D.

Locomotives, Steam
Baldwin Locomotive Co.
Davenport Locomotive Wks.
Porter Co., H. K.
Vulcan Iron Wks of Wilkes-Barre, Pa.

Locomotives, Storage Battery
General Electric Co.
Whitcomb Co., Geo. D.

Lubricants
Greene, Tweed & Co.
Texas Co.

Lumber
Exchange Sawmills Sales Co.
Lawson & MacMurray

Manhole Covers
Central Foundry Co.

Manometers
Simplex Valve & Meter Co

Meter Boxes
Pittsburgh Meter Co.

Meter Provers
Hersey Mfg. Co.
Pittsburgh Meter Co.

Meters, Boiler Feed Water
Builders Iron Foundry

Meters, Current
General Electric Co.
Gurley, W. & L. E.

Meters, Gas and Steam
Builders Iron Foundry
General Electric Co.
Wallace & Tiernan Co., Inc.

Meters, Venturi
Builders Iron Foundry

Meters, Water, Oil, etc.
Builders Iron Foundry
Gamon Meter Co.
General Electric Co.
Hersey Mfg. Co.
Neptune Meter Co.
Pittsburgh Meter Co.
Simplex Valve & Meter Co.
Worthington Pump & Machry Corp.

Mixers, Asphalt
(See Mixers, Hot)

Mixers, Concrete
Austin Machinery Corp.
Cement-Gun Co.
Foote Concrete Machy. Co.
Koehring Co.
Lakewood Engineering Co
Ransome Concrete Mchy Co.
Smith Co., T. L.

Mixers, Grout
Austin Machinery Corp.
Ransome Concrete Mchy Co
Union Iron Works

Mixers, Hot
Austin Machinery Corp.
Koehring Co.

Mixers, Mortar
Austin Machinery Corp.
Ransome Concrete Mchy Co.

Mixers, Paving
Austin Machinery Corp.
Foote Concrete Machy. Co.
Koehring Co.
Lakewood Engineering Co
Ransome Concrete Mchy Co.
Smith Co., T. L.

Mixers, Pneumatic
Ransome Concrete Mchy Co.

Mortar
Carney Cement Co.

Motors, Electric
Allis-Chalmers Mfg. Co.
General Electric Co.
Westinghouse Traction Brake Co.

Motors, Gasoline
Wisconsin Motor Mfg. Co

Motor-Truck Bodies.
Wood Hydraulic Hoist an
Body Co.

Motor Trucks
(See Trucks, Motor)

Nitrogen
Air Reduction Sales Co.

Oil Lubricating
Texas Co

Oxy-Acetylene Process
Air Reduction Sales Co
Blaw-Knox Co.
Oxweld Acetylene Co.

Oxygen
Air Reduction Sales Co.

Packing, Water Pipe
Greene, Tweed & Co.
Jenkins Bros.

Paints, Graphite
Truscon Laboratories

Paints, Light Reflecting
Cheesman & Elliot Co.
Truscon Laboratories

Paints, Metal Protective
Carey Co., The Philip
Cheesman & Elliot Co.
National Lead Co.
Protexol Corp.
Servicised Products Co.
Truscon Laboratories

Partitions
Keystone Gypsum Fireproo
ing Co.

Paving, Asphalt
Carey Co., Philip
Standard Oil Co of Ind.
Standard Oil Co. of N. Y.
Texas Co.

Paving Blocks, Creosoted Wood
See Creosoted Block Timber, Poles, Cross-Arms, Lumber, etc.

Paving Blocks, Granite
Granite Paving Block Mfr
Assoc. of the U. S., In

Paving Breakers
Ingersoll-Rand Co.

Paving, Cold Patching
Standard Oil Co. of Ind.
Standard Oil Co. of N. Y
Texas Company

Paving Guards, Steel
International Steel Tie Co

Paving Joint Filler
Servicised Products Co.
Texas Co.

Penstocks
Blaw-Knox Co.

Pile Drivers
Industrial Works
McKiernan-Terry Drill Co
McMyler Interstate Co.
Union Iron Works

Pile Hammers, Steam
Industrial Works
McKiernan-Terry Drill Co.
National Hoisting Eng. Co
Union Iron Works
Chicago
Vulcan Iron Works of

Piles, Concrete
MacArthur Concrete Pile & Foundation Co.
New England Fd. Co. Inc
Raymond Concrete Pile Co

Piles, Creosoted Wood
Jennison-Wright Co.

Piling, Interlocking Steel
Bethlehem Steel Co.

Pipe Bends
East Jersey Pipe Co.

Pipe, Cast Iron
Amer. Cast Iron Pipe Co.
Central Foundry Co.
Fox & Co., John
Glamorgan Pipe & Fdry Co
McWane Cast Iron Pipe Co.
U. S. Cast Iron Pipe & Foundry Co.
Warren Fdry. & Mach. Co
Wood & Co., R. D.

Pipe Coils
Superheater Co.

Pipe, Concrete
Independent Conc. Pipe Co
Lock Joint Pipe Co.
Standard Concrete Pipe Co

Pipe, Corrugated
Austin-Western Road Mchy Co.
Canton Culvert & Silo Co.
Newport Culvert Co.

Pipe Covering, Asbestos
Carey Co., The Philip

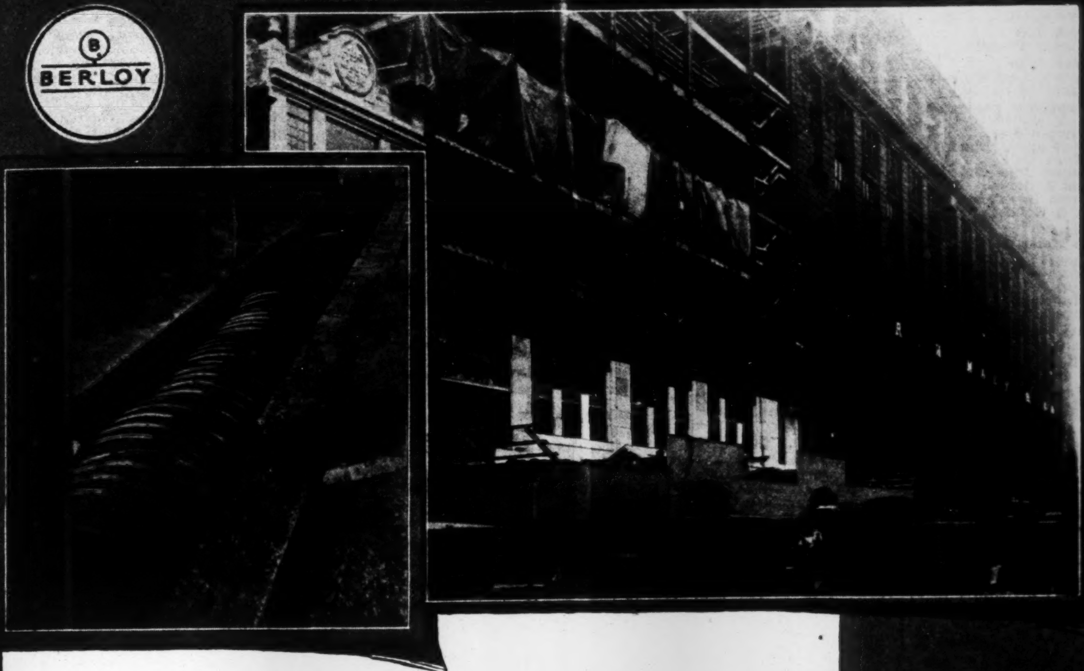
Pipe Covering, Wood
Michigan Pipe Co.
Standard Wood Pipe Co.
Wyckoff & Son Co., A.

Pipe, Dredge
Machold & Riddell

Pipe Fittings
Builders Iron Foundry
Central Foundry Co.

IN THE R. H. MACY ADDITION

BERLOY



50,000 Square Feet
3/4-inch Ribplex Reinforcement

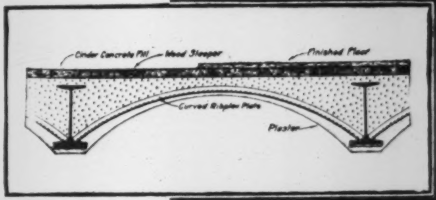
In the addition to the R. H. Macy Store in New York now being erected by Marc. Eidlitz & Son, Inc., Mooney Construction Co. handling the fireproofing, 24-gauge Berloy ¾-in. Ribplex, curved to specifications, is being placed between deep girders, as forms and reinforcement for the concrete.

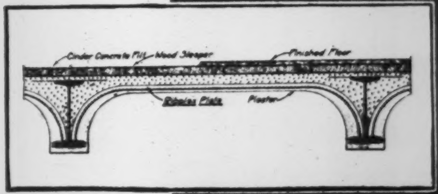
This means a big saving in concrete and dead load, without lessening the efficiency of the slab. The Architect, Robert D. Kohn, is well pleased with the results.

The use of this curved Ribplex concrete floor construction merits careful consideration by every architect, engineer, and contractor.

Ribplex is also used extensively in solid slab construction for roofs and floors.

Write our nearest office for Bulletin K-24 and sample of ¾-in. Riplex.


Cinder Concrete Fill
Wood Sleeper
Finished Floor
Curved Ribplex Plate
Plaster


Cinder Concrete Fill
Wood Sleeper
Finished Floor
Ribplex Plate
Plaster

The Berger Mfg. Co.

Canton, O., Boston, New York, Philadelphia, Chicago, St. Louis, Kansas City,
Minneapolis, San Francisco, Los Angeles, Dallas, Roanoke, Jacksonville.

BERLO[illegible]
Ribplex [illegible]

Pipe Fittings (cont.)
U. S. Cast Iron Pipe & Foundry Co.
Westinghouse Traction Brake Co.

Pipe Joint Compounds (Pressure)
Leadite Co., Inc., The

Pipe, Lock Bar
East Jersey Pipe Co

Pipe, Lock Joint
Independent Con. Pipe Co.
Lock-Joint Pipe Co.

Pipe, Reinforced Concrete
Austin Machinery Corp.

Pipe, Riveted Steel
American Spiral Pipe Wks.
Blaw-Knox Co.
East Jersey Pipe Co.
Machold & Riddell
Petroleum Iron Wks. Co.
Tippett & Wood

Pipe Shoes
Marion Malleable Iron Wks.

Pipe, Spiral
Abendroth & Root Mfg. Co.
American Spiral Pipe Wks.
Blaw-Knox Co.
Robertson Bros. Mfg. Co.

Pipe, Tap Welded
Amercan Spiral Pipe Wks.

Pipe, Vitrified Clay
Dickey Clay Mfg. Co.

Pipe, Wood
American Wood Pipe Co.
Continental Pipe Mfg. Co.
Michigan Pipe Co.
Pacific Tank & Pipe Co.
Standard Wood Pipe Co.
Wyckoff & Son Co., A.

Plaster
Keystone Gypsum Fireproofing Co.

Poles, Creosoted Wood
Amer. Creosoting Co. (Ky.)
Colonial Creosoting Co.
Georgia Creosoting Co.

Poles, Steel Structural
Blaw-Knox Co.

Pressed Steel Products
Berger Mfg. Co.
Blaw-Knox Co.
International Steel Tie Co.

Pulverizers
Jeffrey Mfg. Co.

Pumps, Air Lift
Chicago Pneumatic Tool Co.
Ingersoll-Rand Co.
Sullivan Machinery Co.
Traylor Engr. & Mfg. Co.

Pumps, Boiler Feed, Steam
Earle Gear & Machine Co.
Ingersoll-Rand Co.
Lea-Courtenay Co.

Pumps, Centrifugal and Multi-Stage High Lift
De Laval Steam Turbine Co.
Earle Gear & Machine Co.
Erie Pump & Engine Co.
Ingersoll-Rand Co.
Keystone Driller Co.
Lea-Courtenay Co.
Manistee Iron Works
Morris Machine Works
Smith Co., T. L.

Pumps, Contractors'
Edson Manufacturing Corp.
Ingersoll-Rand Co.
Pulsometer Steam Pump Co.
Smith Co., T. L.

Pumps, Deep Well
Cook, A. D.
Keystone Driller Co.

Pumps, Diaphragm
Boston & Lockport Block Co.
Edson Manufacturing Corp.
Manistee Iron Works
Smith Co., T. L.

Pumps, Dredging and Sand
Erie Pump & Engine Co.
Marion Steam Shovel Co.
Morris Machine Works
Worthington Pump & Machy. Corp.

Pumps, Power
Cook, A. D
Lea-Courtenay Co.
Manistee Iron Works

Pumps, Underwriters' Centrifugal
Allis-Chalmers Mfg. Co.
Earle Gear & Machine Co.
Lea-Courtenay Co.
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Thew Shovel Co.

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Austin Mfg. Co.
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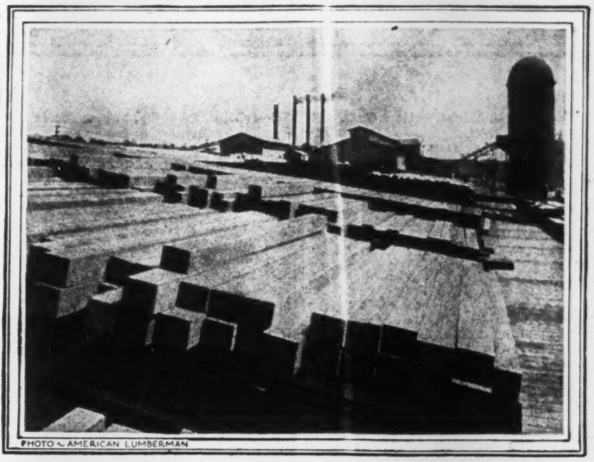
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For Factory Builders—Close Grained Virgin Long Leaf Timbers and heavy lumber for slow combustion construction.

Unquestioned Supremacy

	Long Leaf Pine	Short Leaf Pine	Loblolly Pine	Coast Type Douglas Fir
Strength as beam or post........	100.0	84.0	83.5	85.0
Compressing 1 grain (flatwise)...	100.0	80.0	92.0	88.5
Shearing / / grain..............	100.0	83.0	84.0	85.0
Shock-resisting ability	100.0	90.0	91.0	77.0
Stiffness	100.0	82.0	85.5	100.0
Hardness	100.0	85.5	80.0	78.0
Weight (green)...............	100.0	100.0	108.0	80.0
Weight (air dry)..............	100.0	90.5	90.5	80.0

Summary of results, Testing Laboratories, Department of Civil Engineering, Columbia University.

Industrial users of lumber and timbers are interested in the durability and strength of the products they use and the service these products give. In other words, they demand only the best. Long Leaf Southern Pine demonstrates convincingly its place among the competing woods in the above concise chart.

Add to this, the fact that the holdings of Exchange Sawmills Sales Company are all in that belt in Louisiana where Long Leaf Southern Pine grows to its best; that lumber and timbers for all industrial purposes are special products of our eight mills, made from especially selected trees and subjected to special care at our mills—and the user of ESSCO products knows he is getting the best that can be produced.

"Long Leaf Southern Pine showed a much greater ability to resist shock, which is a required characteristic for car construction material."—Report of Testing Laboratories.

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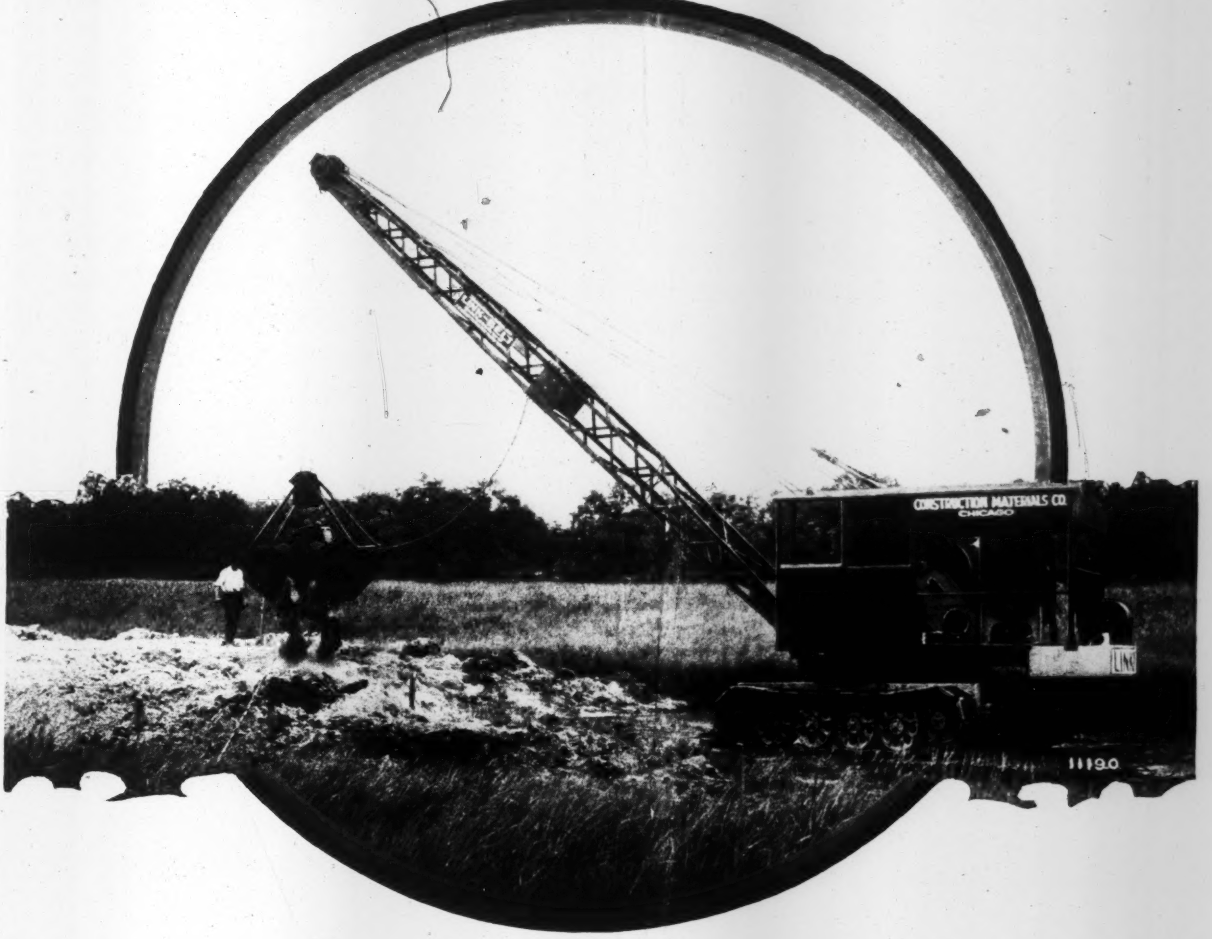

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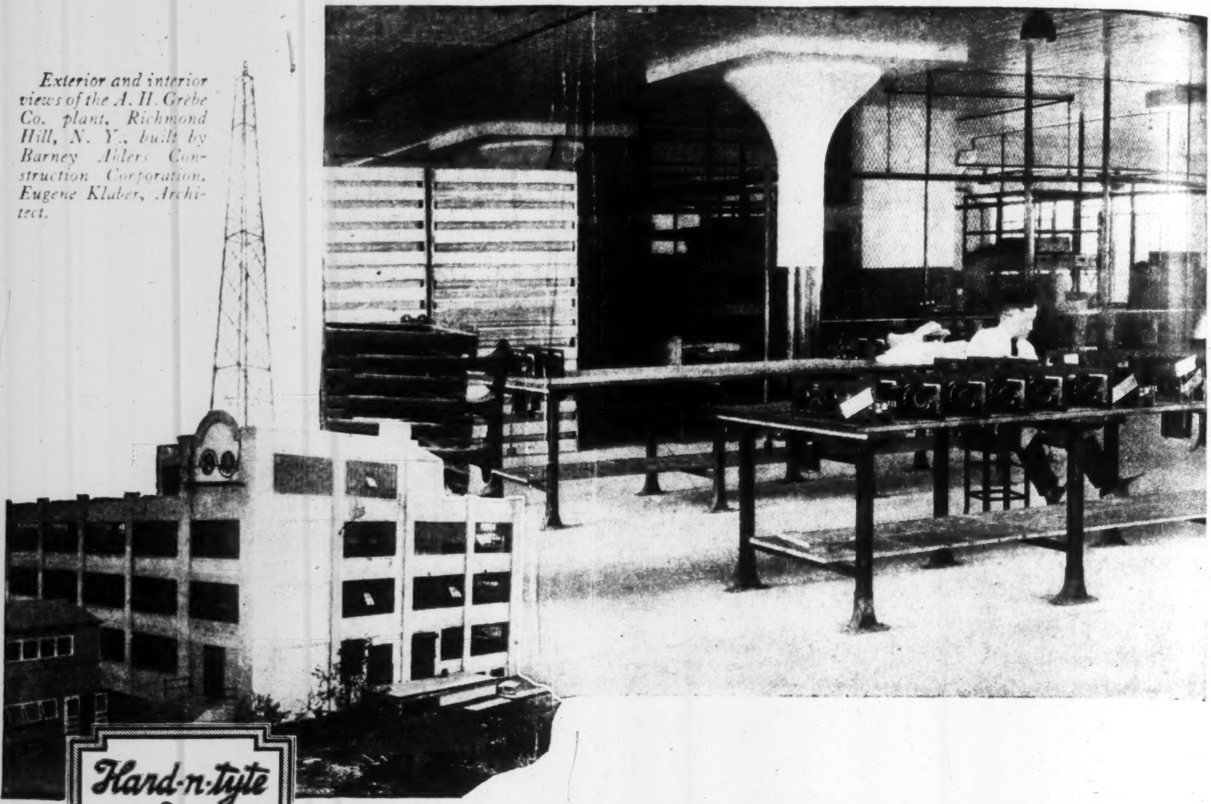

Exterior and interior views of the A. H. Grebe Co. plant, Richmond Hill, N. Y., built by Barney Ahlers Construction Corporation. Eugene Klaber, Architect.

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